

RAILWAY MODELLER

JANUARY 2006

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A HAPPY NEW YEAR TO ALL OUR READERS



MAIDEN LANE
4mm BR East Coast Main Line



**WHITFROROM TO
WHITWORTH** – OO Yorks/Lancs



STOUR LANE
– Southern MPD in 7mm

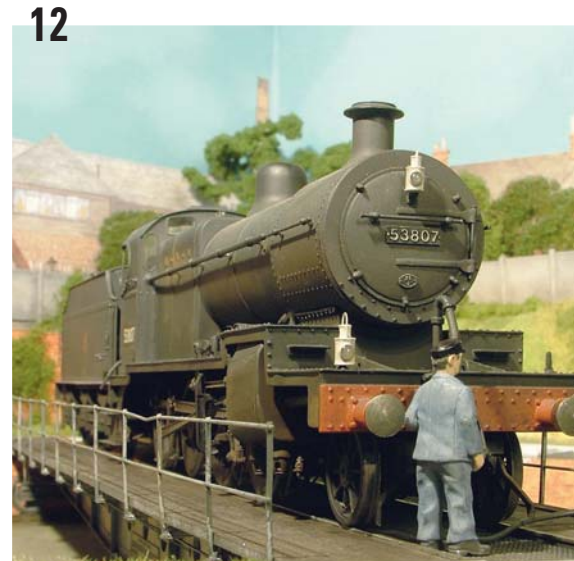


SEATHORPE
– Eastern Counties 4mm layout



AVIEGORM
– Scottish inspired layout idea





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Into 2006

Although this issue of the magazine will appear right at the close of 2005, its position as vanguard for Volume 57 means that we would like to wish all our readers, advertisers and everyone else a happy new year!

Judging by the new model proposals outlined by many of the manufacturers and suppliers in response to our questioning, 2006 looks set to be quite an exciting year: by the time these words are read, the Warley Show 2005 will have happened, doubtless bringing with it further glad tidings for the modeller. See the February issue (out 19 January) for full details of the UK's premier show.

Going round and round...

A gentle theme running through this issue is turntables, and specifically those of modest dimensions. If a depot is a strong attraction for modellers – and surely it is – then the turntable is its centrepiece. On it, locomotives can be admired as they rotate slowly, for shedding or dispersal. Indeed, the slow movement inherent in shed areas (for obvious reasons) allows such intricacies as outside valve gear to be appreciated fully.

Turntables are not, of course, just for steamers. We can cite St. Blazey (outside) and Barrow Hill (inside) as examples of modern traction turners, the latter now of course a major attraction in its own right. Diesels only really need 'tables to access roundhouses, as indeed both these examples are.

In model form, turntables tend to be rather large affairs – 70' diameter or so. That this is the case is down to the modeller's love of large engines; Pacifics of course, plus eight- and 10-coupled freighters and, in the modern scene, Classes 40, 50, 52, 55 and 66. Proprietary 'tables have to accommodate these long locomotives or they would not sell. Use of 'extension bars', to allow a locomotive longer than the deck to be turned, would be as unsatisfactory in model form as they were cumbersome in reality.

Two of our correspondents have tackled the production of a short-diameter turntable in this issue. Bryan Blaxall converted a Heljan N gauge kit to produce a scale 50' diameter turntable for his ex-GER 4mm scale layout – the 'Swedey' had famously short 'tables, meaning its B12s, and the LNER B17s allocated to the region, had tenders with only 12' overall wheelbase. George M. Hoekstra has taken the Peco H0m kit, intended to represent Swiss metre gauge practice, and made a scale 37' example. George also presents advice on powering the turntable, a topic on which John Wilshaw has also alighted.

Cup Competition

On p.65 will be found the entry form and full run-down of rules for the 2005 RAILWAY MODELLER Cup Competition. As is well-known, we are looking for your favourite six articles, in order of preference, plus the 'Right Away' feature that best caught your eye. The choice can be from any of the feature articles we have published in 2005 – not just the 'Railways of the Month' – and, as before, we will welcome the valuable

input such choices give us in terms of popular subject matter.

Don't forget the three prizes in the competition draw, which take the form of vouchers which can be 'spent' with any of the advertisers in the magazine. First prize is £300-worth of vouchers; second £150-worth, and third £50-worth. So there's quite an incentive to formulate your six choices and send the list to us!

Binding and Index

Also in the 'News' section, details of the various binding options are given in order that good care may be taken with Volume 56 now that it is complete. The 2005 index will hopefully be available early February: contact our Technical Advice Bureau with an A4 SAE for a copy in due course.

Cover: Cravens Class 105, a DC Kits model, on a northbound semi-fast to Hitchin, passes Immingham-based 37 018 on a short rake of Salmons on Maiden Lane, our Railway of the Month.

Photograph: Steve Flint, Peco Studio.



RAILWAY MODELLER

Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

General & Advertisement Manager JOHN KING

Advertisement Assistant SUE DAVIS

Classified Advertisements NICOLE CHARLTON

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Editorial Director C. M. PRITCHARD



Maiden Lane

It's the late 1970s and BR is gearing up to electrify the East Coast Main Line

IAIN HUNTER of the *EM Gauge Society* based this 4mm layout around 'The Cross'.

Major works at the Kings Cross throat have closed the famous servicing point there. As the depot at Finsbury Park is also closing, a small servicing point has been squeezed into a corner of the old goods depot site to provide refuelling facilities for the dwindling numbers of diesel locomotives powering the remaining loco hauled services. The result is a constant stream of 'Deltics', 47s and 31s moving in and out of the 'yard' against a backdrop of passenger and freight traffic to and from the North.



▲ HST 254 021 on an Edinburgh service accelerates up the bank past a Class 116 on a stopping service to Welwyn. The near factory is built from one of the American DPM kits with additions from the American Pikestuff range and spares from the European Kibri range.

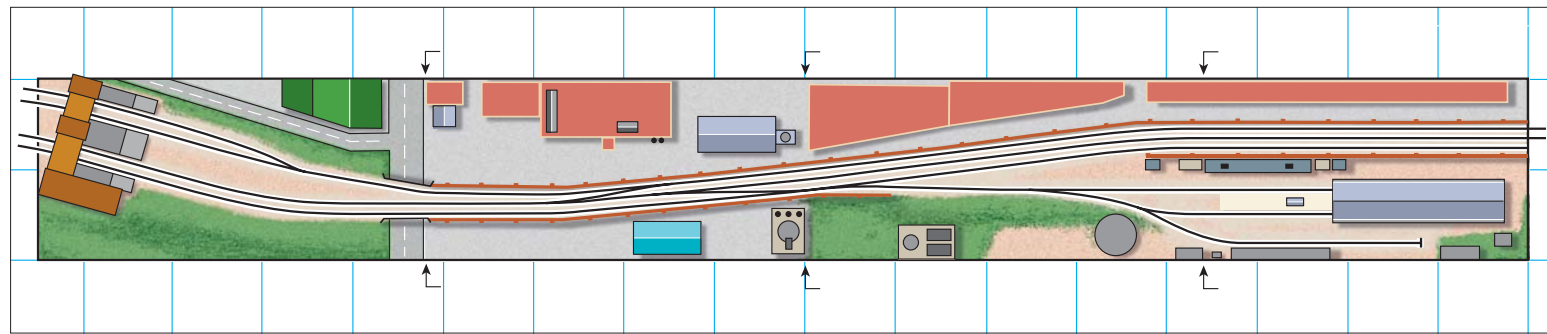
That, at least, is the rationale behind the layout, although considerable liberties have been taken with the location, which is actually more reminiscent of Stratford (where I used to do my train spotting) than the north London it purports to represent. Originally intended to provide the indoor storage facility for my (still) growing collection of locos and rolling stock for a garden railway, it was designed so that the 'shed' was on the Up side of the line with a terminus (Kings Cross) where the through station is now.

The idea was that trains would depart to, and arrive from, the garden on a falling gradient behind the loco shed that would hide the hole in the backscene. In practice, once I was invited to exhibit the layout at Expo EM in 2003, it took on a life of its own and has not only become freestanding with cassette decks at both ends, but has also completely turned around so that it is now the terminus which is off-stage behind the shed, whilst Down trains disappear off-stage past the

Shades of Kings Cross SP – English Electric super-power clustered around the refuelling point as one of the newly introduced HSTs slows on its way into 'The Cross'. 55 018 Ballymoss, closest to the camera, is a heavily modified and stretched Lima 'Deltic' running on Lima Class 37 bogies.

Photographs by Steve Flint, Peco Studio.





MAIDEN LANE

Overall size of layout 16' 3" by 24" (each square represents 1ft) ↑ baseboard joins.

ramps of a suburban station under a Post Office Depot overbridge.

Baseboards

Baseboard construction is mainly from plywood using 12mm for the ends, 6mm for the sides and cross-members, and 9mm for the top surfaces and trackbeds, with the joints reinforced by 25mm square softwood glued and pinned in place. Fascias are 6mm varnished ply, overlaid onto the baseboard fronts and fixed by brass screws and screw cups – I wanted it all to look like a piece of furniture when erected!

Backscenes are also made from 6mm ply, stiffened by a grid of 25mm by 12mm softwood and fixed to the rear of the baseboards by roundhead screws and penny washers. Painted a pale sky blue colour that I had mixed especially, the backscenes stand

Immingham-allocated 37 018 moves onto the road overbridge with its rake of Salmons and Plasser cranes. Industrial buildings behind the train are from continental and American kits.

some 30cm above track level, serving the dual purpose of protecting the buildings and hiding the operators when the layout is exhibited. Individual baseboard sections are bolted together with M8 bolts, alignment being maintained by pattern maker's dowel pins from the EMGS Stores. Track level is roughly 4' off the ground, partly because I like to view the stock from close to eye level and partly because of the method of construction adopted. This method has also rendered legs of any sort unnecessary, which has both lightened the intermediate baseboards and reduced the amount of loose equipment carried.

Being in a job that involves frequent domestic relocation, I wanted something that was light and easy to move, although not necessarily portable, and removal man friendly. The solution I settled upon was to make one baseboard the master unit mounted on castors, and arrange for the others to slide inside it for transport. As the layout has evolved, this system has grown

into two castor-mounted master scenic units, each with a further scenic section stored inside, and two castor-mounted cassette deck units with fold-out extensions. The fascia and backscene boards for each of the intermediate scenic sections are stored in the same master unit as their baseboards, with the fascias for the cassette decks stored in one of the cassette deck master units. The eventual plan is for the stock to be stored in drawers in the second cassette deck unit, giving me a complete layout in the four units with no additional storage requirements.

Although subjected to some modification along the way, the original intention has been achieved successfully. The master scenic units and cassette deck units run on 10cm rubber castors and are light enough to be pushed around easily by one person and lifted in and out of vans by two. Erection of the layout to a workable condition on arrival takes about 45 minutes, although fitting the fascias, backscenes and curtains at exhibitions adds another 30 minutes or so.

Things are quietening down in the shed after the morning rush as one of the earlier customers accelerates up the gradient out of 'The Cross' with an Edinburgh train. An ETH-fitted Class 31 waits quietly at the pump, as one of the early-build 37s, a heavily modified Tri-ang body on a Bachmann chassis, moves up to the release signal and the 08 re-positions the tankers.

Dismantling the layout takes about 45 minutes, and we have generally been on the road about an hour after closedown of the shows we have attended.

Electricity

As designed, power was from an integrally mounted transformer providing 16v AC for the track power and 9v DC, via a power supply card, for the signalling, sound and lighting. This was connected to the mains by a plug-in cable of the 'kettle lead' type, effectively giving a 'plug and play' capability.

In order to satisfy exhibition safety requirements, the transformer has now been moved to a separate power pack that provides two 16v AC supplies to the 'shed' baseboard through multi-way cables and D-type plugs and sockets. Electrical connectivity between the baseboards is via various types of multi-pin plugs and sockets depending on what I had available. Track feeds are generally via heavy-duty versions with large pins – from old radars I think – with signal and lighting feeds via modern D-type versions. All feeds are colour-coded and everything is recorded in a wiring register so that, should a problem occur, it can be easily identified and repaired or replaced. Connections to the hand-held controller are paralleled to DIN



sockets at both front and rear of the shed throat baseboard so that I can play with the layout from either front or back!

The control panel, built into an electrical circuit box, is laid out with the section, turnout and signal switches in rows below a track layout diagram. Originally the only separately carried part of the layout, it connects to the layout by three separate multi-way cables, one each for the track, signalling, and sound and lighting supplies to ease any fault-finding that might be necessary. In use, it clamps to either the front or back of the layout as required, the track diagram being replaceable so that the relevant one for the configuration can be used.

As designed, the layout works very successfully in straight DC mode, but is restricted to 'one engine in steam' operation, despite having three tracks, and locos on

shed can only be parked one to a section. However, having had the opportunity to try out DCC on it with a temporary set-up, I am now busily converting to digital operation so that multiple train and engine movements will be possible and locos will be able to be buffered-up when on shed.

Trackwork

Trackwork is all hand-made using mainly C&L components with 'concrete' sleepers on the running lines and 'wooden timbers' for the turnouts, although the two 'fast' lines have been built using the Peco Pandrol Clip mouldings as the fastenings. Construction was basically in accordance with the C&L instructions, with the sleepers positioned onto templates glued onto the cork sub-bed using double sided tape. The individual clips were then fed onto the rail before wire droppers were soldered into position under the rail foot.

Once the rails were positioned and the droppers fed through pre-drilled holes in the trackbed, the track clips were glued onto the sleepers using 'Butanone' applied from an old paint brush. Initially, everything was positioned using only the C&L roller gauges but, after discovering some problems with gauge narrowing on curves, three-point gauges from the EM Gauge Society Stores were also used to ensure accuracy.

Around the shed, this method of construction has allowed me to replicate the methods used by BR where the track runs over the concrete hard-standings around the shed building. The track clips are glued to small pads of 10thou plastic sheet, which are in turn glued to the 40thou plastic sheet

◀ Trouble at 'The Cross'? As a Class 116 heads north on another all-stations service to Welwyn, Stratford-allocated 47 278 heads south into the terminus with the Stratford Breakdown Train.



representing the hard standings at the refuelling points and fuel unloading points. Within the shed itself, the track clips are similarly glued directly onto the plastic beams that represent the edges of the inspection pits. Once the track was in place, the dropper wires were taken to short lengths of 'chocolate block' connectors, whence the wiring to the control panels was fed in loomed bundles to the inter-baseboard plugs and sockets.

Turnouts are operated by Lemaco point motors through home-made operating mechanisms made from plastic bar and curtain track. The turnout switch rails have 0.5mm phosphor-bronze droppers, which are a loose fit into brass tubes in the sliders of the operating mechanisms. These mechanisms are then connected directly to the operating bar of the point motor by a length of Evergreen plastic bar which has a pivot point calculated to reduce the point motor throw sufficiently just to operate the

50 018 Resolution, on a crew training run from Doncaster, takes on fuel as 08 553 backs away after positioning the fuel tankers. The conversation at the front of the shed continues and Fred has been peering at that lube oil tank gauge for months now!

turnout. Any residual tendency to overdrive the switch rails is compensated for by the inherent flex in the plastic bar! As a system, it has been used by generations of modellers, although most retained an Omega loop somewhere in the drive train. I found that, by using plastic bar for the intermediate lever, I was able to dispense with the loop altogether. The turnout motors also use a common colour coding for wiring via 'chocolate block' connectors so that any failures can be easily replaced.

Once fully laid and tested, the rails were painted with rust coloured paint and then the surfaces cleaned. I have to admit that idleness came into the equation here as well, as the layout can only be seen from the front, and only the visible fronts of the rails have been painted. Once the painting was complete and I was happy with the running, ballasting was commenced. This was done, using small grade granite ballast, in the traditional manner; laid loose, tamped into position and then fixed with dilute PVA but applied from a short length of drinking straw rather than the eye dropper or pipette normally recommended. Attempting to replicate modern machine maintained ballast with high shoulders, I normally expect to do about 2' or 3' in an evening so

this part of the construction was not a fast process! The ballast is mainly Slater's, but also comes from a variety of other sources as I simply bought whatever was available. I have to admit to being more interested in the grade of the chippings than which firm supplied it!

Signalling

With the exception of the Up signals by the station platforms and the ground signals for the trailing crossover on the fast lines, the signals are all from the Roger Murray range. The offset bracket on the Up fast and the shed exit signal were ordered specially, the rest were off-the-shelf. All are manually operated from the control panel, as I wanted to be in control of the signalling rather than simply watching the lights change automatically but, with digitisation of loco control, I suppose automation of the signals can't be far behind!

The junction indicators are controlled by separate on/off switches adjacent to the appropriate signal switches. They are held off by the signal control circuitry whatever the switch position and, like the real things, will not illuminate when the signals are red. The ground signals are from Eckon but have yet to be properly wired in and are currently only cosmetic. The Up platform start signals are based around the Knightwing plastic kits. The slow line signal is one of the three-aspect versions built straight from the kit. The fast line gantry signal uses a three-aspect head only, the gantry itself being scratchbuilt from Evergreen plastic strip to a design that was widely installed on the ECML in the 1950s and 1960s as part of the continuing installation of MAS schemes. These two signals are simply dummies, as they face away from both the potential audience and the operating position, I could see no point in wasting time and energy making them work although, with hindsight, they would make a good indicator to the dispatching cassette deck operator as to which road is set!

Buildings

The buildings are a real mixture of 00 and H0 scales, from a variety of UK, German and US manufacturers. Very few have been built as the manufacturers intended, being used more as a source of parts than as a means of building a particular model. In addition, the full relief buildings have been constructed with plain plastic sheet in place of the rear walls. This has been done primarily because, as the rear walls cannot be seen, I could see no point in modelling them; but it also has the added advantage of giving twice the building for your money. Some kits, like the Airfix water tower, have provided only a few components, the remainder of the structure being scratchbuilt to provide additional height.

The loco shed is perhaps a good example of the procedures used. Based on the Peco kit, all the side panels have been butted together to produce the visible side with the non-visible side being built from long panels of plastic sheet. None of the reinforcing



'Deltics' on shed – *Ballymoss* and *Royal Highland Fusilier* sit in the sun while the shed foreman discusses a job with one of the staff as another load of fuel is manoeuvred into position on the fuel road.

Another HST races north as a London-bound Class 116 DMU, based on the Lima 117 model, leaves the station on its way south. The signals are based on prototypes installed at Hadley Wood in the 1950s during the work to quadruple the ECML. The parcels depot and bridge, like all the steel-clad buildings apart from the engine shed, is from a heavily reworked American Pikestuff kit.



beams provided in the kit were used, so the cladding is continuous along the length of the building, although this does result in a slightly shorter building than following the instructions would have produced.

The roof has been supplemented by panels from a second kit, the whole assembly being slightly shortened to fit between the ends of the extended building. The roof is supported by the kit beams, which have had their legs removed and rest on inner walls made from plastic sheet. The roof access ladders provided in the kit have been replaced by those from the Kibri range (which are also retailed as individual items under the Walthers name through US importers) which incorporate the safety cages required under health and safety regulations after the mid-1970s.

The building that draws most comments is the factory at the back of the layout behind the shed. Based heavily on my memories of the Bryant & May factory at Stratford, it has been built from two Kibri factory kits. As such, it probably constitutes the world's most expensive backscene! In order to increase its presence above the raised track, I added an extra storey, most of which, as it can't be seen, is made out of plain

plastic sheet laid out to match the walls above. The centre section was increased in height by splicing the lower sections of both kits together, top two thirds of one with the bottom two thirds of the other. The lift shafts were increased in height to match by simply adding parts of the rear walls to the fronts.

Scenery

As with everything else on the layout, scenic items come from a variety of sources to fit the requirement. The brick viaduct is from the Wills range, modified so that the piers only occur every fourth arch. As with everything else, the backs of the front parapet are plain plastic, thereby freeing up those parts from the kit to be the visible fronts of the corresponding parapet of the rear wall! The front of the road underbridge is from the Townstreet range, with the wing wall made from a leftover brick infill panel from the Wills viaduct kit and the intermediate and rear girders made from parts of the Wills Vari-Girder kit.

Embankments are carved from the polystyrene sheet packing around electrical goods and then covered in DIY plaster repair paste. Once set and smoothed, the resulting slopes were painted with Woodland Scenics earth cover paint and then coated with PVA glue before being given a coating of foam scatter from the same range. Concrete hardstandings are plastic sheet painted with either a home-made concoction mixed from paints from the Games Workshop range, or the Precision Paints concrete paint and then toned down with Humbrol matt varnish.

08 553, a heavily modified Lima body on a scratchbuilt chassis, waits on shed as yet another of the new HSTs passes on its way into 'The Cross'. The ex-LNER concrete P-way hut is just about the only remnant of the old railway remaining as electrification looms.



All the remaining scenery is based on 2mm photo-mount card fixed directly to the baseboards with pockets cut out to take the buildings. Grassed and gravelled areas are various makes of scatter and ballast, some of indeterminate origin and age, glued down with PVA once the card was coloured with brown poster paint. Pavements are the self-adhesive variety from the Metcalfe range with the roads and car parks painted with Humbrol Panzer Grey paint. Interestingly enough, I have found that the oil-based paints are far more friendly to the card than the water-based paints. Road markings are from the Signs of the Times range, and the vehicles an assortment of EFE and Schuco models selected for their suitability for the period.

Fencing and street lights are from the Ratio, Wills and Knightwing ranges, although I had to scratchbuild the long sloping fence beside the station approach road from embossed sheet and plastic strip and bar.

Stock

Like everything else on the layout, the stock list includes models from almost every source available over the last 40 years and some items even incorporate parts separated by that time difference! The Class 37 for example is a heavily modified Tri-ang body from the 1960s (and one of my first conversions in the 1970s) mounted on a Bachmann chassis of 2003. Interestingly enough, despite the criticism of the outline of the Bachmann model, apart from the cab front windows, all the bits I transferred to the Tri-ang body when I refurbished it fitted very well! A full stock list would fill a complete issue of the magazine but, for those who are interested in those things, a short resumé of the more interesting items other than the Class 37 are:

Class 55 No.55 018 *Ballymoss* – a Lima model stretched to the correct length and

55 019 Royal Highland Fusilier prepares to slow for its descent into 'The Cross' as north-bound DMUs pass in the station. The 116 will stop here before continuing on its way to Welwyn whilst the 105 continues on to its first stop at Hatfield.

mounted on Lima Class 37 bogies with Ultrascale wheels.

Class 47 No.47 401 – a Lima model fitted with an Ultrascale power bogie and driven by a flywheel-fitted Mashima motor mounted under the radiator fans through a cardan shaft. An interesting job to complete, which called for a hole for the shaft to be drilled through the steel weight.

Class 31 No.31 411 – one of two Airfix models with the engine exhaust openings modified to the EE-engined version and converted to EM using Gibson coach wheels and stepped axles from the EM Gauge Society Stores.

Class 08 No.08 553 – a heavily converted Lima 09 running on a Gibson-wheeled scratchbuilt chassis with a small flywheel-equipped Mashima motor and Branchlines 80:1 gearbox. Top speed on full power is about the 20mph of the prototype! As is normally the way of things, I finished the chassis the same week that the Impetus kit was released.

Class 254 HST No.254 021 – Hornby power cars and Jouef coaches, driven from the Buffet car by a Bachmann Class 158 DMU chassis converted using Gibson coach wheels and home-made stepped axles. All the wheels have been fitted with MJT etched brake discs.

Class 116 DMU – a Lima Class 117 model, heavily converted and driven by a flywheel-fitted direct drive Ultrascale power bogie.

Class 105 DMU – a DC Kits model driven by a Black Beetle power bogie.

Diesel Breakdown Crane Unit – a heavily converted Tri-ang Hornby 75-ton steam crane with cab added and jib extended, accompanied by stores and accommodation coaches converted from Replica Mk.IIs and an Ian Kirk Gresley coach kit.

Track Recovery Train – Cambrian Kits Salmon wagons loaded with track panels from C&L Models 'ready-to-lay' P4 track, topped and tailed by Plasser & Theurer hydraulic cranes built from resin castings, sold privately by a DEMU member, and various scratchbuilt components.

Container Train – Tri-ang Hornby 'flats' with bar couplings between wagons and buffer

Stratford-allocated 47 278 slows into 'The Cross' with an Up semi-fast as the 08 seems to have priority over the waiting express power for a clear run out onto the relief line with its train of empties.

beams fitted to the outer vehicles. The containers are a mixture of scratchbuilt and Knightwing kits, with liveries based on those current in the 1970s. Some transfers are of Australian origin and some of American origin as suitable markings were unobtainable in the UK.

All the stock has been superdetailed to varying degrees and fitted with flush glazing, wire handrails, crews (from a wide variety of sources but mostly Preiser sitting passengers!), scale couplings and buffer beam pipework where necessary. Conversion to EM has been carried out using wheelsets from Gibson, Maygib and Branchlines, although some stock continues to run around quite happily on its original wheels but with the back-to-backs opened out to 16.5mm. After trying a number of differing coupling methods over the years, I am now standardising on Kadee® couplings within sets, whether the prototypes were buckeye fitted or not. For the Mk.I and Mk.II rakes, I have also changed to Kadees® on the outer ends and the appropriate locos have been similarly fitted. The No.5 couplings are ideal for Mk.I gangwayed stock with retracted buffers, with No.46 couplings on the outer ends of the end coaches. The DMUs are fitted with paired No.5s and No.46s to maintain clearance between buffer heads on adjacent vehicles, as are the Mk.IIIs in the HST. Locos with Kadee® couplings are fitted with either No.46 couplings or No.30 drag boxes and medium length couplings depending on bogie clearances behind the buffer beam.

Operation

Full exhibition operation calls for three operators, one driver/signalman at the control panel and two cassette deck operators. In DC mode, all movements are signalled and controlled from the control panel by the driver/signalman. Control is



through a Gaugemaster W hand-held controller, which allows the driver to move up and down so that he can see what is happening. The cassette deck operators simply move the cassettes about and make sure that the empty and full cassettes are correctly positioned for the next moves.

In the DCC mode it is intended that all three operators will have controllers and that the cassette operators will not only position the cassettes, but also drive the incoming trains for their end of the layout. The old driver/signalman will still control movements, but his control of trains will be restricted to movements in and out of the shed. This will make life busier for the two cassette operators and easier for the signalman, but it will also make the layout more interesting to watch as up to three movements at a time will be possible with trains passing one another on the running lines.

After an interesting interlude checking through working timetables for the period, I came to the conclusion that replicating even a small part of the actual timetable was an unrealistic ambition. Consequently, the layout is run to a schedule that provides for a representative sample of the trains and movements that would have been seen from the lineside at that time. It currently takes about an hour to cycle through the whole schedule with all stock finishing back in its starting location, ready for the next cycle. There are, however, plans to include a number of additional trains in the schedule which will increase that timescale. Whilst at present, movements can only take place in isolation, in future I hope to see HSTs and 'Deltic'-plus-Mk.II-sets passing at speed on the main lines. This will also have an effect on the schedule time, which may actually be more dependent on the speed and agility of the cassette deck operators than on the number of movements planned!

Acknowledgments

It seems to be traditional at this point of the article to thank all those concerned with the operation of the layout. Thanks are indeed due to those who have helped to run it on the occasions that it has been to shows, but it would be very remiss of me to start without mentioning the support and encouragement of my wife,

Aileen. Throughout its 15-year gestation period (and for most of our married life of twice that), she has patiently put up with bits of layout littering various rooms in our many homes, frequent occasions when she has been denied use of the dining table for lengthy periods, and continental holidays spent trawling the picturesque towns and cities of Germany and Switzerland in search of model shops! Not only that, but she also cheerfully turns out as an operator at shows, although her most important task seems to be keeping the owner under control when stress levels rise, so that he doesn't bother the other operators!

In addition, special thanks are due to my main helper, Richard Clayton; Alan Monk for his advice and encouragement as well as his assistance at exhibitions, Graham Vickery of the EMGS, whose fault it all is, Tim Lovell, Tony Wood and numerous other occasional helpers without whom I could not have exhibited the layout. Finally, especial thanks to Steve Flint for not only making the layout look good, but also running a photography master class whilst he did so.

And finally! A question I am often asked is 'Why Maiden Lane?'. Well, Maiden Lane was the original name of what is now York Way along the east side of Kings Cross station. It was also the name of the temporary station erected by the GNR in the 1850s while Kings Cross was being built. As I don't have the room to build a scale model of Kings Cross, I thought it was a good substitute.



Sanding stone

Creating different effects by modifying Wills coarse stone

DAVID COX explains the procedures involved.

Of the two scenic boards forming my current project, one was to be predominantly countryside whilst the other was to be rather more urban in character. The effect I was aiming for was of an ex-GWR branch terminus situated on the edge of a small market town 'somewhere west of Watford'.

Much of the urban atmosphere would have to be suggested by the backscene as there wasn't enough space for anything else. However, I had allowed for a strip of between 2" and 3" along the rear of the goods yard for some low relief buildings which would help to create the effect I was after.

Ideally, the buildings were to be industrial in nature, slightly run-down, but interesting to look at. This, in turn, meant that they should be constructed from a variety of materials, although for the sake of homogeneity, stone should predominate as almost all of the railway structures I had already made used Wills coarse stone sheets (see March 2003 RM).

Finding suitable prototypes for these low relief buildings proved problematic. I searched through a great many photos in books and elsewhere, but those I came across were either so large that they would dominate the layout or were rather plain and uninteresting. Eventually, I chose a couple of brick-built structures and modelled them in stone!

In most areas where stone is the local building material, it is usually used in a variety of ways. Sometimes, it is laid in regular courses (rather like brickwork), whilst some buildings are constructed of differently sized stones randomly plonked on top of each other with a lot of mortar of varying thickness holding the whole lot together.

The finish of stone buildings can vary, too: some have been carefully planed so that the surface is almost flat, whilst others are quite roughly hewn.

I had intended to use the dressed stone from the Wills range to give the buildings on my layout this kind of variety, but ran into problems. The coarse stone sheets match up at the ends, which makes it possible to use the sheets together with the courses aligning accurately. Unfortunately, the dressed ones don't, or at least, not the ones in the pack that I bought. There was a slight, but noticeable misregister which I wasn't prepared to accept. However, the sheets weren't wasted as I was able, by judicious cutting and pasting, to use them to make a small barn/storage building which was to occupy the rearmost corner of the layout. The prototype of this could be found in Moretonhamstead goods yard.

In the article in March 2003 RM, I mentioned that it was possible to modify the coarse stone sheets by sanding them down so that they appear flatter and more regular. Time was short (is it ever not?), so I opted to use this method.

Adapting the prototypes

The two brick structures which inspired my stone-built models came from widely separated areas. One was from Newcastle Emlyn in West Wales whilst the other was from London; indeed, I have passed it daily over many years whilst commuting into London Bridge station.

The former, which I chose to represent by quite heavily sanded coarse stone sheets, is apparently the only railway building still surviving where it was known as the 'weighing house', presumably because a weighbridge was incorporated within it. With two storeys, it

Below: the model based on the 'weighing house' at Newcastle Emlyn in West Wales used quite heavily sanded sheets of coarse stone which required a fair amount of remedial work to define the courses.

Photographs by the author.

is rather bigger than the normal weighbridge hut, so it was probably also used for storage. Whatever its function used to be, it looked like some kind of warehouse.

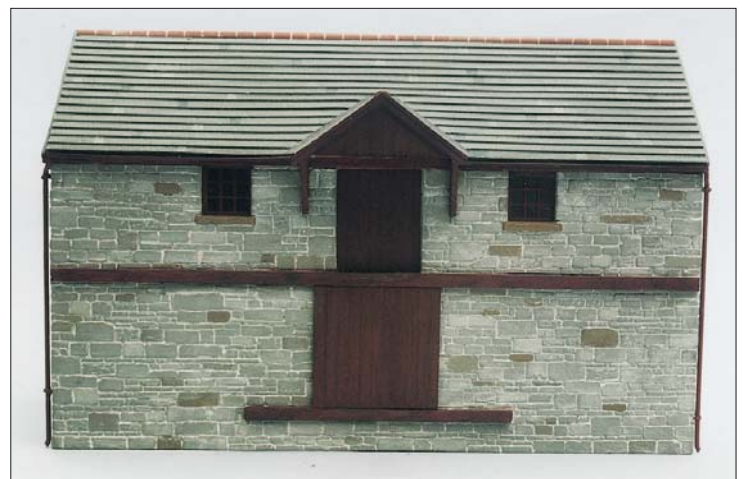
The other prototype also looks as though it was used for storage, although it came from part of the old Sarson's malt vinegar factory situated on the south side of the railway viaducts on the approach to London Bridge station.

Fortunately, I had taken some photographs of the semi-derelict site just after Nestlé (which bought up Sarson's) moved production elsewhere, but before most of the buildings were converted into flats for rent. I used moderately sanded sheets to construct this model.

With only photos to base the models on, and wanting to use proprietary windows and the like, I find it essential to produce a scale drawing, even if it is only a crude outline, as it ensures that the proportions are more or less right. It is helpful to refer to drawings of other buildings as it is much easier to ensure, for example, that the pitch of the roof and the height of individual storeys conform to normal building practice. Amongst others, I consulted the drawings that Peter Goss produced of the buildings on his very attractive layout *Etton* (see RM February 2004). Even if you are producing a freelance-type caricature of a real building, as I was, it helps you to avoid making a model of something that would fall over if built to 12" to 1' scale!

Modifying Wills coarse stone sheets

The sanding was done before construction actually started by means of glasspaper wrapped around a lump of 2" x 1" timber left over from when I was knocking up the baseboards. Obviously, the heavier the sanding, the greater the risk of losing detail, but texture on the stonework was given by using coarse grit glasspaper. On the Newcastle Emlyn model,





there was some loss of courses, but these were reinstated initially by using a scalpel held against a ruler to provide an accurate guide. These lines were then opened out freehand with the point of an old compass. The sheets forming the Sarson's building were not sanded down as heavily, so only the most prominent stones were reduced down and hardly any remedial work to the courses was needed.

Construction

The models were assembled as described in the previous article. To recap briefly: the ends, sides and floor of the buildings were marked out on a sheet of styrene (30 or 40thou) and the door and window apertures cut out. These then formed a template from which the Wills stone sheets were cut to size with lintels and windowsills allowed for.

Above: a few strokes with the sanding block removed some of the more prominent stones on the Wills sheets with hardly any work being required to reinstate lost detail. The result is a model which is subtly different. The prototype came from part of the old Sarson's malt vinegar factory just outside London Bridge station.

Below: the low relief building made using Wills coursed stone sheets. The overlapping wooden shiplap sections also came from the Wills range. The prototype could be found at the rear of the goods yard at Moretonhampstead.

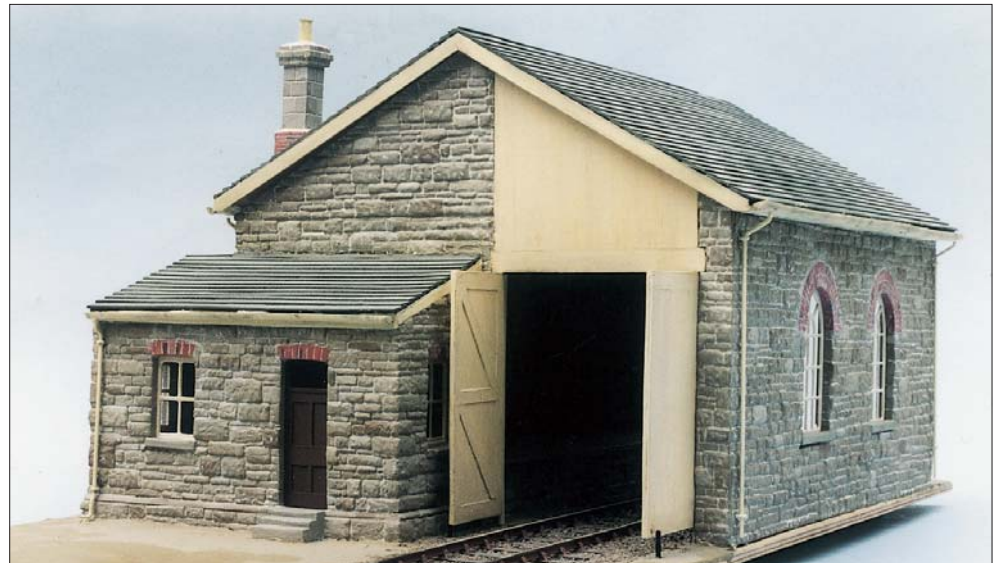
Right: in order to illustrate the difference that sanding makes, this goods shed was built from unmodified Wills coarse stone sheets. Its construction was described in the March 2003 RM.

The styrene template and the Wills stone were cemented together, the ends and sides bevelled (again with glasspaper wrapped around 2" x 1") and then assembled around the base. Brick lintels were cut from Slater's embossed brick sheets and sills added from styrene strip. Doors came from Evergreen scribed sheet whilst the windows came from Wills. The roof on the Sarson's building came from Wills but, as I haven't yet found a way of joining slate sheets together without the seam showing, that on the slightly larger Newcastle Emlyn structure was produced from Slater's embossed slating sheets.

The results

I am rather pleased with these two models. The stonework looks realistic and subtly different on each and neither looks as though it has been built from Wills coarse stone sheets.

This is not to criticise the product at all; it is very useful stuff and, as already stated, I have used it for some of the other buildings on my layout. However, I've also seen it on a great many other layouts as well and its very ubiquity means that there is a certain similarity amongst the models built from it. By sanding the sheets down as outlined above, they can be modified to look very different.





Stour Lane MPD (SR)

An 0 gauge end-to-end Southern shed layout described by Robert Iles

CHRIS HODDINOTT uses his garage layout to display his collection of hand-built models.

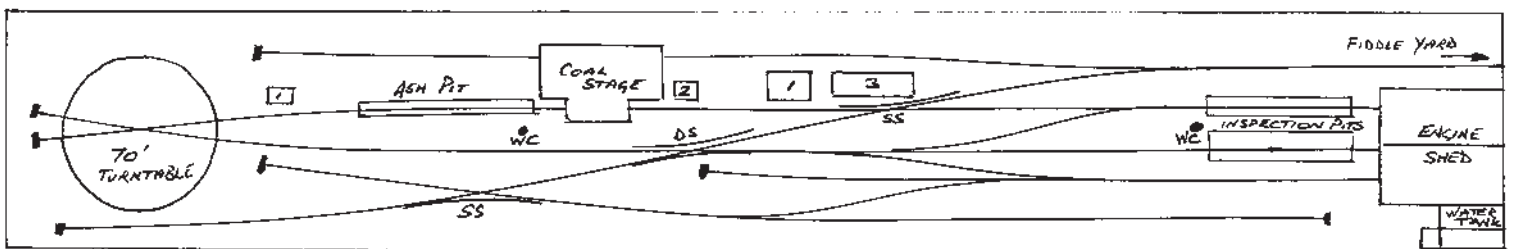
A career in the Merchant Navy as an Engineer/Officer gave Chris Hoddinott a solid background in practical engineering. He had to make sure the ship went from A to B reliably. But, after 10 years, he came ashore and used his expertise inspecting boilers for an insurance company.

Some of his duties were at the Barry scrapyards where so many locos awaited a lingering death; those that were rescued had to be inspected, but Chris's duties went further afield to both the East and West Somerset Railways, taking in traction engines on the way.

In 2003, Chris decided to take early retirement and now lives with his wife and their pet cat in Chard, Somerset. Evidence of Chris's deep affection for both the sea and modelling is apparent in his huge collection of books and magnificent models of ships that are also to be seen.

In his double garage, across the wall opposite the door, is *Stour Lane MPD (SR)*, the chest-high 7mm gauge 0 layout. It is set at this level for two reasons: to create a more realistic effect at eye-level when viewing along the track and to allow the bonnet of the car to get nearer to the end wall. This is typical of Chris's pragmatic approach to modelling.

The Southern Region layout is based on a mirror image of the track plan of Gillingham, Kent, but is really an imaginary location. The space in the garage allows for a baseboard of approximately 15' x 2'6". At the right-hand end is a loco shed and, at the opposite end of the layout, is a turntable. In between, many features are incorporated including a coaling





Above: 'Schools' 30906 *Sherborne* at the coal stage, which is based on the one at Basingstoke and is made from Wills corrugated plastic sheets. The 'Schools' is a DJB kit with Alan Harris wheels and working motion and valve gear for the inside cylinder.

stage, water crane and lineside huts. The backscene consists of anonymous industrial buildings in the central part of the vista with more residential and shop properties at the ends behind the turntable and shed. The buildings on the backscene are a mixture of low-relief and painted. The more central buildings are scratchbuilt, modelled in full 3-D.

The garage has strengthening buttresses in the end wall so Chris has taken advantage of these to create the outlines of large industrial buildings. This way, a potential modelling difficulty is turned into useful features that genuinely add to the layout.

The illusion of depth is enhanced using boundary fences in front of the rows of houses and by partially hiding the backscene with trees. These measures create points of reference for the eye at intervals between the front and back of the scene.

Heading: 'Lord Nelson' 30861 *Lord Anson* was built from a Sanspareil kit. It is fitted with wheels turned from Alan Harris castings and has full working motion and valve gear for the two inside cylinders and all cranks set at 135 degrees as per prototype.

Far left: 'Merchant Navy' 35006 *Peninsular & Oriental S.N. Co.*, a Modern Outline kit with an ABC gearbox and Canon motor. Chris said that it is the most enjoyable kit he has built.

Above right: the Stour Lane breakdown crane. It is a D&S kit with its match truck built from a Slater's LNER/BR 20-ton brake van frame and Plastikard body.

Right: the shed is typical of many LSWR designs and based on the one at Basingstoke.

Numbers on plan denote (1) SR concrete hut, (2) corrugated tin shed, (3) brick office/mess.



Apparently neglected corners of the turntable area are drawn to the viewer's eye by the subtle use of weeds and unkempt track ballast.

A more detailed look at the layout shows some of the finer points that make the standard higher. The electricity wires that run between masts are fine enough to be almost unnoticeable, but perform a good scenic func-

tion. Similarly, the cable that keeps the mast upright has a replica threaded tensioner. The rust on the chain of the rail-mounted crane makes it appear to be much-used and, typically, unloved – all nice touches.

The engine shed is constructed to give the effect of a whole building, but the only full-profile part of the structure is the front half where locos are displayed at the mouth of the





Left: E1 31507 is built from a David Andrews kit, and has working inside motion from Shedmaster components.

Centre left: ex-S&DJR 7F 53807, from an Alan Gibson kit, on the 70' turntable at Stour Lane MPD. Note the S&D freight train lamp code.

Bottom left: Bulleid 'West Country' 34107 *Blandford Forum* taking water on the ashpit road. This is a DJB kit with an RG7 motor and gearbox and Slater's wheels.



three-road building. The front wall of the shed is painted on Perspex, leaving the window portions clear. The natural ageing of the Perspex gives a very realistic 'dirty window' effect. The illusion of the back section of the shed is created and blended into the end wall of the layout by the clever use of paintwork.

A concrete hut, a familiar sight on the SR, occupies a place in the yard. These were used to replace the old wooden huts after the second world war. This example bears the inevitable weathering stains, but the effect is not overdone.

The locomotive inspection pit is a centre of activity that must bring back memories to Chris from his boiler-inspecting days. At the coaling stage there is plenty of grit and dust that takes away some of the glamour of the age of steam and reflects the reality. It is scratchbuilt using Wills 4mm scale 'corrugated iron' plastic sheet which provides a surface appearance that seems in realistic proportion for the sides of the building. The result is made to resemble the real thing even more closely by some good weathering, a combined effort by Chris and his son who is also an active modeller. This high standard of weathering is evident on the locos and rolling stock too.

The purpose of the layout is two-fold: to serve as an interesting end-to-end motive power depot/shunting layout and as a setting to display his beautiful locomotives. It is fair to say that the making of the locos and rolling stock gives Chris at least as much pleasure as running the end product on the layout.

On his work desk was a gauge 1 Brighton Atlantic in the early stages of construction, but this is a live steam kit from Barrett Engineering. The 12 gauge 0 locos that Chris has made so far are all electrically powered. He wanted to build a live steam locomotive and was making this kit simply as a change and a challenge to test his skills.

Many of the locos and all of the rolling stock are constructed from good quality kits by companies such as DJB and ABS; Chris uses scratchbuilt components to enhance the final effect. In the garage is some small-scale engineering machinery: a pillar drill, lathe and milling machine. These are used to produce more accurate parts, such as buffers, when the supplied kit item falls short of the best standards.

Occasionally Chris will change a component to suit his taste. For instance, he has modified his West Country Class *Blandford Forum* to have the original high-sided tender instead of that provided with the kit. The workshop tools are also used for non-railway projects such as the building of a model beam engine!





Above: ex-GWR 42xx 4278 on shed after bringing in a coal train from South Wales. It is a David Andrews kit with RG7 motor and gearbox, and Slater's wheels. Built by Chris's son.

Below right: Adams B4 30102 was built from an ABS kit with an ABC gearbox and Maxon motor, sprung hornblocks and split-axle current collection.

Photographs by the builder.

The purpose-built control panel is neatly constructed with a track plan incorporating the turnout indicators in their correct locations as in a typical prototype.

The current-collection system on the locomotives is interesting. This is done solely through the tender which, for this purpose, Chris regards a bit like an 0-6-0 loco. It has split axles for current insulation purposes. There is

one fixed axle, but the remaining axles float. The direct contact between the brass wheelbearings and all the wheels proves to be sufficient to maintain a continuous electricity supply. Wires from the axleboxes pass discreetly along the tender and across the drawbar to the loco. This collection system obviates the need for blade contacts that rub on the inside of the wheels and cause extra friction.

The track is, for the most part, Peco Streamline but with the addition of hand-made turnouts. Three-way turnouts are featured in two locations, and all the turnouts are driven by slow-action motors.

The turntable is constructed on a disc of MDF which is driven from underneath using a tap washer on a spindle as a friction drive. If anything were to obstruct the action of the turntable, there is a degree of controlled slippage that would come into play to prevent damage to the motor or turntable components. There are detent stops at diametrically opposed locations that correspond to the required stopping points for the turntable relative to the fixed track. Microswitches under the MDF disc are always kept depressed in the 'switched-on' mode by the disc, except when they meet indentations in it. These indentations allow the switch to release and therefore stop the current to the turntable motor.

Stour Lane MPD (SR) is both elegant and functional. It depicts a motive power depot that, although imaginary, has all the features of a closely observed real-life prototype. The standard of modelling is exemplary with attention to detail that demonstrates a keen eye, great ability and unstoppable enthusiasm.



Building goods stock in N

Wagons for *Threlkeld & Derwent*

FRANK CLARKE discusses the construction of the freight fleet on his layout (*RM* Sept 2005).

The presence of goods stock on my layout was always intended to be a major feature and sidings were provided to accommodate a fair amount of stock just to be looked at!

Peco, Parkside and N Gauge Society kits provided a start to representing the jumble of types around in the 1950s. Chivers kits provide an interesting variation in wheelbase and body length. Sometimes it has been difficult to source correct branding for kits.

Having a go at building my own was left until I tried a bit of weathering that commenced by criminally de-privatising some Farish wagons bought in a previous life.

Rust and replaced planks required a lot of experiment with a fistful of brushes and a range of pots of Humbrol.

Paint on replaced planks that overran was removed with a small brush dipped in thinner and almost dried out on a tissue.

Painting black patches for branding using masking tape or liquid never resulted in clean edges. Instead, I painted the patch in black gloss as accurately as I could and, when dry, squared up the edges using the body colour and a small brush. After branding, the whole body was varnished matt.

Real coal was ground up with a hammer head on a brick and added to some wagons. A false floor on four legs was fitted and painted black. The crushed coal was graded by shaking it about on a sheet of newspaper and added to the wagon. Dilute PVA was dribbled on the load to retain the profile.

Apart from rivets, there didn't seem to be a lot that couldn't be made above the chassis from materials I had to hand. Prototype information was sourced from various books and old railway magazines. Drawings and dimensions had to be accompanied with photographs and information on running numbers. Articles on rolling stock seem to have been more abundant in railway magazines a few years ago.

I bought a decent illuminated desk magnifier but found it hard to use, probably because I wear spectacles. Trying to focus and locate small parts was aggravated because the target distance was hard to judge.

A smaller, cheaper, magnifier on adjustable arms I find more friendly and can be shuffled around as required.

Working with styrene requires very few basic tools and, in this scale, very little material is needed and is easily worked. For cutting, I use a small Stanley knife with snap-off blades as it is light and has a constantly renewable sharp edge. I have given up on the Exacto type as the blades never stayed in place. Minute pieces of 'furniture' can be picked up using a



section of snap-off blade held between fingers – masking the end avoids cuts and makes it easier to pick up.

'Thous' and things don't mean a lot to me and, as a result, I chose styrene sheet that looked about right for the job.

My first wagon body was built, painted, branded and weathered but showed I must try harder next time! This wagon needed a tarp to hide my shabby work and I found by experiment that the foil from a cigarette packet could be moulded over a load paper side up and would tolerate a lot of tinkering to induce folds. A dummy body was made with a load installed and covered with the tarp. PVA glue was painted on with a stiff brush and, when dry, it could be handled without distortion and created a smooth surface. Painting, branding and heavy varnishing finished the job. The dummy body is reusable for the same purpose.

Crated loads were all made up from styrene

Above: Derwent goods yard, with a J39 0-6-0 sorting things out. One of the Lowfits, studied in greater depth here, is behind the tender.

Photographs by Steve Flint, Peco Studio.

and painted in a timber colour produced by much mixing and pure experiment. Labels are represented using a small rubber stamp. This is simply a tiny square of pencil eraser glued to the end of an old paintbrush, dipped in enamel that is almost dry and 'stamped' in place. This tool also does torn off labels.

Sawn timber loads were sliced from gauge 1 sleepers that are donkey's years old but have a very fine grain and don't need painting! Whilst these were only minor items they provided an apprenticeship to wagon building proper.

Reference to drawings and photographs indicated that compromise would have to be accepted with regard to clasp brakes, vac pipes, couplings and, of course, rivets!

Continued on page 18.



▲ Ex-MR 13T Loco Coal wagon – first attempt at wagon building and built on steel chassis as it was all I had to hand. Scribed planking shows furrows caused by heavy cuts and haste to finish. Load from painted horticultural grit and paint runs evident. Droopy coupling confirms the level of skill available. When finished, they caused me to reconsider constructional methods and spend a bit more time getting things to look right.

▶ Ex-MR 12T and ex-NER 10T cattle wagons – the Midland wagon was another early test of limited skill available and I learned a lot about trying to measure accurately with a steel ruler in this scale. The result, whilst not strictly accurate, provided a bit of variation with the few Peco cattle wagons I have. The NER wagon should have a wooden chassis, but I hadn't got one at the time. Body from styrene with brass rod for the bars in the apertures sandwiched between two layers of styrene grooved out on the door assembly and similarly treated at body ends. Solebars extended at each end with bits of Peco chassis between buffer and coupling assembly that was cut away in one piece and all units then epoxied to thin styrene sheet and similarly braced on the underside. Painted in 'non-railway' Humbrol Red Leather. Transfers on both individual digits.



▲ 42T Bogie Bolster D – styrene body epoxied onto Peco code 80 rail for solebars. Rail mounted upside down to body after filing away some of the web to accentuate bottom 'lip'. Farish bogies pivot on two cut-down gas lighter refill nozzles of appropriate diameter supplied with refilling cans and retained with a plastic washer and small screw. Buffers are small nails passed through plastic sleeve into holes drilled in buffer beam. Stanchions are brass rod with binding chains superglued to them, varnished and positioned before dry. The load binding chains extend across and down the side of the load and appear to be anchored to the stanchion. The load lifts off with the three chains and relocates onto the bolsters by the addition of two small plastic strips fitted under the load below and inboard of the outer chains. Fragile styrene brake gear is reinforced from behind with brass rod. Chain is from N Gauge Society. Transfers are individual digits on painted patches.



▲ 13T Lowfits – Peco chassis with buffer beams cut off to shorten its length. Buffers then cut away retaining the beam behind each buffer to maintain buffer reach and drilled from behind to take a piece of brass rod then fitted to the 'new' beam in a small hole and fixed with superglue. Weathering would disguise this. Body from styrene with securing rings from fine plastic rod wound round a thin nail and parted lengthways with a blade. Transfers from Modelmaster.



◀ 12T fruit vans – lack of planking made these vans appear to be an easy build at first, but they required lots of fiddly bits all round. Corrugated ends I fabricated with plastic rod but found it harder to manage than brass rod I'd used on other models. Weathering will no doubt 'pull out' some of the wagon side detail and disguise the ends a little. The chalk boards should probably be body colour for use with labels.

▼ 16T steel slope-side minerals – another adventure into the 'have something different' department that, surprisingly, presented few problems. The bodies were cut to length minus about 1.5mm to allow for body ends to overlap the sides. The body sides were marked and 'V'-grooved inside with a file to achieve the transition from vertical to slope. Plastic rod was polyed into the groove to stabilise the angle. The flat sides were weighted down and the 'slope' packed out and left to dry. Sides and floor then assembled. This subassembly was used as a template for marking out the ends that were detailed before fixing in place.



▼ 13T Shock open wagon – Peco 10' chassis with styrene body. Corrugated ends from brass rod cut to approximate length with pliers that creates a chamfer. Stuck to masking tape and filed to uniform length. Lightly polyed onto wagon ends then flooded with poly until touch dry. Then placed under an old steel ruler with a piece of 2" x 1" on top and weighted down overnight. 'Shock' stripes were made by painting white enamel onto clear tape stuck to an old steel ruler. The paint layer was cut with a sharp blade and lifted off and 'painted' on the wagon with varnish. Other branding elsewhere from Modelmaster.



Accurate measurements presented a problem as the divisions on a steel ruler are alarmingly wide in this scale. Using thick plastic strip, I marked the required dimensions by

'nicking' with a sharp blade and this became my ruler and was constant for, say, comparing my 'nicked' dimension against a Peco chassis to confirm correct overhang.



▲ Ex-MR 10T outside-framed van – body from proprietary 1mm planked sheet rubbed down to reduce domed effect of moulding and re-grooved with a worn out Exacto blade. The door has been fixed open as this van usually lurks outside the goods shed and replaces an earlier effort that serves as a grounded body.

▼ Ex-LNER 22T grain hopper – built from drawings and photos in *Model Railway Constructor* 2/1976. A Peco 10' chassis was extended by building 'girders' from plastic sheet, after chopping out the



▲ Ex-NER 20T hopper – styrene body modelled inside and out. Axleguards, brake rigging and buffers from an ancient wagon. Lining up the axleguards geometrically was a nightmare and only added when the body was built. With the wagon upside down, I polyed styrene strips across the solebars, where the outer ends of the 'W'-irons should be fixed. Two axleguards with a wheelset held in place were epoxied to the body and butted up to the strips. Repeated for the other end and checked for squareness by spinning the wheels and visually lining up to ensure the axleguards were vertical. The epoxy was tolerant to a bit of adjustment and, when cured, the locating strips were

▼ Ex-LNER 12T van – built from drawings in a now extinct model railway magazine that subsequently announced an error had been made in published body width dimension – after I had built it of course! Fortunately, I had used the Peco chassis as a base line and built upwards from that. 1mm planked sheet was used for the sides and plastic rod to build the corrugated ends. Transfer application was a disaster due to not following the rules about applying on a matt surface. Painted in Humbrol Red Leather.



buffer beams and couplings in one piece. Upside down, the three units were polyed to a piece of thick styrene strip just wide enough so as not to interfere with the bodyshell when fitted. The body was built using reworked 1mm planked sheet and bracing added. All the bracing was pre-assembled and much of it was discarded until I had a collection of bits that looked about the same. Branding from 0.5mm digits onto painted black patches, but the smaller lettering defeated me.

▼ BR 20T coke hopper – an early effort with home-made solebars 'knitted' into two sections of chassis cut from a wagon of unknown heritage. Coke load is a mix of track ballast and finely shredded sponge fixed with dilute PVA and stippled with various shades of silver and black enamel. Buffers are plastic sleeves and small nails filed to shape. Tiebar is brass rod filed flat on outer side with flattened ends superglued between 'W'-irons. Brake levers similarly made. Branding is individual digits on painted black patch.



carved away. Coupling pockets were made up from styrene and brake levers added from brass rod filed flattish. End handrails: stiff wire cut into end stanchions for strength. Transfers from butchered Modelmaster transfers. A free-runner (surprisingly) and quite different.

Open wagon body sides and ends were marked out in one strip, and planking joints drawn on with a sharp pencil and lightly scored with a small Stanley knife. The scored lines were then 'ploughed' out using an Exacto blade drawn backwards held lightly in fingers, sanded and scrubbed out with a toothbrush.

Strapping positions were then marked on and, using thin styrene strips cut from a sheet, verticals were added to sides and ends. Cutting strapping to width from a sheet was pure guesswork and some bits were useless.

Sides and ends were then parted and joined up using a small engineer's square to ensure 90 degree corners. Corner plates were made up from thin sheet scored from behind and lightly filed to facilitate a 90 degree fold. When fixed, the diagonal strapping was added.

A floor was cut to size and fitted inside the body. The Peco chassis needs slight modification to accept a body with a flat floor. Cut the tops off the coupling plugs and replace with just a breath of poly around the top and keep wiggling the coupling in case you've gone too far. Remove the raised ballast keepers. Brass strip epoxied under the chassis replaces the Peco ballast.

Van bodies follow the same basic principles of construction but have the ballast fixed to the floor inside before addition of the roof.

Van roofs were made by the traditional method of binding thin styrene with masking tape around copper pipe. Use two layers as the outer one will be marked by the tape. Place in an empty can in the kitchen sink and fill up with hot water. After a few minutes, flood the lot with cold water and leave it alone until it is safe to handle. The damaged outer layer can be used to reinforce the inner one, but cut about 2mm smaller all round. To deter bowing, add a few strips of styrene lengthways. Unusable long roof sections are ideal for spreading scatter materials.

Before fitting the roof, drill two holes in the van floor to line up with those in the Peco chassis to ensure a bit of circulation for the poly. Small details were picked up with a blade and polyed in place using a cocktail stick to adjust. A light brush of solvent takes away any furry bits.

Painting, weathering and branding disguised many shortcomings and are even less evident when on the layout. Sometimes haste has been my downfall, particularly with regard to fixing transfers on matt surfaces. I found that polishing the transfer location with a wet cocktail stick produced a suitable surface. When the whole body was matt varnished, any shiny bits vanished. The majority of the stock has been lightly varnished matt and that, I feel, gives a more 'worklike' appearance.

Some obvious errors need correction and minor faults become a little embarrassing when photographed!

Building costs have been minimal as the junk box yielded most basic materials hoarded over time or left-overs that I tend to 'squirrel' away to be used on some future unknown project. Now, about that Gresley coach...

Thanks to Steve Flint for his superb photography, and Debi my partner for the typing.



Milstead Halt

An experiment in a new scale

A pioneer of modelling minimum gauge railways in restricted spaces, **CHRIS KRUPA** describes an innovative micro layout which uses 9mm (N) gauge track in 1:35 scale to represent 10¹/₄".

I have always been fascinated by the sub-2' gauges since my first childhood rides on the 10¹/₄" gauge miniature line that ran alongside Radipole Lake in Weymouth. Although many of the lines of this gauge were built as miniatures, that is scale or semi-scale models of standard gauge main lines, it was soon realised by the designers that larger locomotives and coaches would be better able to handle the passenger levels they were attracting.

This trail had already been blazed on 15" gauge by the likes of Sir Arthur Heywood and Henry Greenly who designed or built what were actually small narrow gauge locomotives and stock. In more recent years this trend has continued down the gauges. The Stirlands at the Exmoor Steam Railway, for example, have been busy building trains in many different and mostly sub-2' gauges, most of which are narrow gauge in outline.

Despite this activity in the extra narrow gauges, there have been few models built. Christopher Payne's *Sutton Wharf* is perhaps the best known example, and there have been occasional articles on models of miniature lines using 9mm gauge with gauge 1 accessories, often from Britains. 15" gauge modelling, on the other hand is rapidly gaining momentum, with the introduction of kits in O9 and Gn15.

My own first attempts in modelling the smaller gauges took place soon after the introduction of Märklin Z gauge. This range included two useful six-coupled chassis, one steam, one diesel. 4mm scale bodies were constructed from plastic sheet and a range of rolling stock was scratchbuilt on regauged N gauge

chassis. Although I constructed two small layouts, both of which ran reasonably successfully, I did not pursue this scale and gauge combination – which I had snappily named Z4, and took to represent a scale 18" gauge.

My next attempt was the *Sandsfoot Castle Miniature Railway* which was a 7mm scale line built on Z gauge. This combination scales out to about 11". Now I am not about to quibble about a scale 3/4", or even a scale 1 1/4", so I felt happy to model anything between 10¹/₄" and 12¹/₄". The stock, therefore, came from the Ruislip Lido Railway (12" gauge) whilst the locomotives were based on those running on the Wells Harbour Railway and at Audley End (both 10¹/₄" gauge), all of narrow gauge rather than miniature outline.

After selling *Sandsfoot*, I moved on to the new project which is the main subject of this article. My chief worry about Z gauge had been the relative delicacy of the mechanisms and the limited range of chassis types suitable for miniature modelling. In comparison, the range available in N gauge is much greater and more robust. *Milstead Halt*, therefore, is my first attempt in approximately 1:35 scale to model an approximately 10¹/₄" gauge line.

A bit of philosophy

If that word 'approximately' bothers you then perhaps I should explain a little of my modelling philosophy. The smaller gauges have always been the province of the smaller manufacturer, often one-man businesses, or with a very small workforce. Their products could never be mass produced because there was never the market for great numbers. The

Above: the building and platform are Wills sheet with brick walls from Tamiya. The station name is made up from Slater's lettering in various sizes. The pile of new sleepers implies that permanent way work is about to commence somewhere nearby.

nearest anyone has ever got to mass steam production in these gauges must be Bassett-Lowke with its 'Little Giant' Atlantics and the coaches which were provided for them or H.C.S. Bullock's GWR-style Pacifics. However neither class was produced in very large numbers and most were made to order or for a specific project. It seems to me that, if they had been asked, all the manufacturers of small locomotives would have made alterations to their designs to suit the customer's requirements. Similarly, if no existing design was suitable, any of these builders could have produced custom-made stock. The small gauges are therefore a fertile area for model-makers willing to provide their own designs or to build stock based on, but not exact models of, existing locomotives and stock.

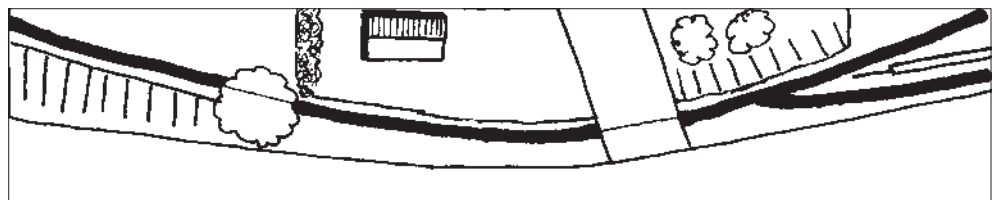
I dislike the word freelance which is applied to models of prototypes which have never existed. I am primarily a designer (and employed as such) and what I model are my own designs. In order to produce them it is necessary to have basic technical railway and engineering knowledge. This can mostly be obtained by simple observation and study of the prototype. It is not necessary to know enough to construct a fully working passenger carrying version but to develop the ability to look and understand what you are seeing.



Milstead Halt

The one thing that I found to be a bit of a problem with using Z gauge was the relative paucity of chassis. A move up a gauge was therefore a fairly logical step. Using N gauge components, the nearest suitable scale would be in the region of 1:35 – popular military modelling scales with lots of available components. In order to try out the idea, I built a coach based on the dimensions of a bogie vehicle used on the Radwell Miniature Railway – a private 10¼" gauge line which once ran on land north of Bedford. I also purchased a set of German soldiers made by Tamiya. These had been intended as a tank crew at rest and most of the figures offered scope for de-militarising and modification. A standing and a sitting figure (locomotive driver) were assembled from the components in the kit.

Satisfied with the way it was all going, I decided to build a simple lightweight diorama. A trip to my local model shop produced a 1 metre by 15mm thick plank of balsa wood for the baseboard surface together with some 25mm square balsa strip for framing. I like



balsa wood for baseboard building. It is easy to work and simple to glue. An hour's work with a razor saw, craft knife, and white woodworking adhesive produced a baseboard to take the one length of Peco 009 track and a point that I proposed for this experiment.

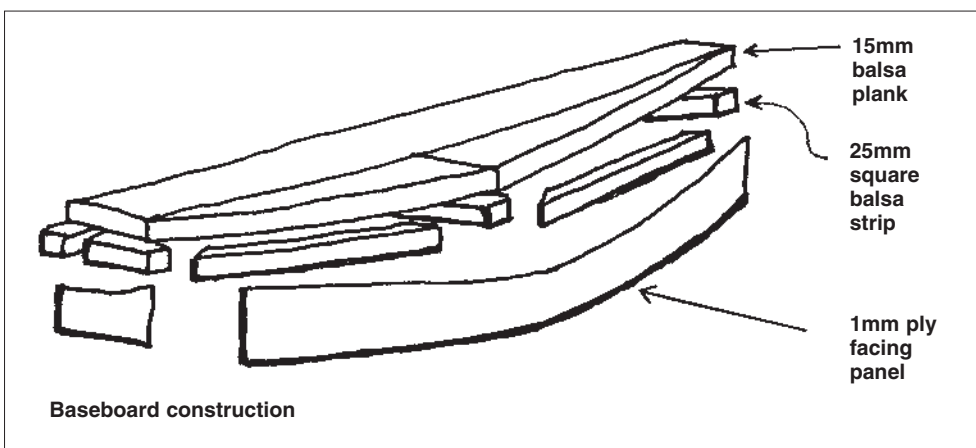
After that, I put a little thought into the track plan. I wanted it to appear that the line went from somewhere to somewhere else. I did not want just a slice out of the countryside. Hidden tracks at both ends would therefore be necessary since the space I had available was insufficient for a terminus. A small intermediate station would also mean that it would not need a large and space-consuming building. Milstead is therefore a small halt on my imaginary 10¼" gauge Catchwood Bay Miniature

Railway, other elements of which may appear in due course.

In order to frame the most important part of the plan (the station) and to provide a little height to what was otherwise going to be a mostly flat baseboard, I installed a footbridge. At the left hand end of the layout, the track disappears behind an embankment and a large tree whilst at the right hand end it disappears behind a wall with an open gate. I think of this as part of a yard of some kind.

The track was pinned down with dressmaker's pins after first drilling the sleepers with a suitable sized bit held in a pin chuck. The balsa holds these pins well and they can be pushed into place with a pair of light pliers. Once the track was down, I ran the one vehicle I had built up and down to make sure all was as it should be and then ballasted the track.

This was accomplished with a mix of Copydex (rubber solution adhesive) and fine ballast. I diluted the glue a little with water and then added ballast until I had a thick paste which was applied with the aid of a small screwdriver. The advantage of this adhesive over the more usual white woodworking glue is that, once dry, the track is held firmly but a little less rigidly and alterations are easier to carry out since the glue and ballast mix can be peeled away. However the hold is sufficiently strong for the layout to be carried to and from exhibitions and handled without damage. When the ballast is dry, the pins holding the track in place can be removed.





Above left: construction of the footbridge is described in the text. Here the diesel sits with the four-wheel Radwell coach but the driver seems to be off on an errand somewhere.

Above: here you can see the whole length of the layout from the yard at this end to the end of the hidden tracks at the other. The tree has had to be cut back to clear the trains.

Photographs by Len Weal, Peco Studio.

Diagrams by the author.

Scenery and structures

Two small embankments (one at each end of the layout) were made from pieces of expanded polystyrene covered with dental plaster pre-coloured with brown powder pigment. Basic vegetation is a mixture of foam and other green powders accumulated over the years from many different suppliers. Hedges are rubberised horsehair cut and pulled into shape, dipped in white glue, and sprinkled with green foam. The large tree came from the model shop ready-made but I have modified it by thickening the lower trunk with a plaster/wood glue mix overpainted with a grey/green trunk colour. It also needed to be well trimmed at the back to clear the trains. Two small conifers at the other end of the layout received the same treatment. Various bits trimmed from the largest tree have found a use as smaller plants.

The station building was made from Wills sheets and Evergreen styrene strip. Although intended for 4mm scale, the Wills sheets are useful in other scales – they simply represent finer originals. The side walls are two thicknesses of sheet glued back-to-back so that there is texture on both surfaces. The back

wall is a single layer placed so that the wall texture may be seen from the front of the layout. The plain rear of the building is not important. The roof is plastic sheet covered in a single thickness of toilet tissue to represent roofing felt with battens and barge boards from styrene strip. The gate was scratchbuilt whilst the brick walls are from another Tamiya military kit with coping stones added from plastic sheet.

The footbridge was constructed from various thicknesses of plastic sheet. A building date was applied with Slater's numerals which also, incidentally, were used to make the station nameboard. Once everything was dry, I painted it with a thick layer of Humbrol paint and sprinkled a thick layer of cheap ground white pepper over it from my local supermarket (just do not sneeze!). I patted this into place with my finger tips and put it to one side to dry. Once hard, I brushed off the surplus with a stiff brush and re-applied paint and pepper to any places which were still a little bald. When I was satisfied with the effect, I painted over everything again with the same Humbrol paint, this time more dilute, and left it to dry for about 24 hours. Finally, I weathered it with dilute acrylic paints.

The yard wall is treated the same way whilst the yard gate is again scratchbuilt.

Stock

At the time of writing, there is only one locomotive, two coaches, and a works train. The diesel locomotive is a scratchbuilt plastic body on an 0-6-0 Arnold chassis. This was built very quickly as a means of trying out the whole idea and will be replaced with a better machine at some point. The two coaches, one bogie and one four-wheeled, are likewise constructed from plastic sheet and strip on Graham Farish diamond frame bogies and a

cut down Peco chassis respectively. The works train is similarly scratchbuilt on proprietary chassis. For the moment I have retained the N gauge standard couplings. Both coaches are based on Radwell prototypes whilst the works train has its origins on the Audley End miniature railway.

A successful experiment?

Well, yes I think so. The much greater range of available N gauge chassis means that a more varied range of prototypes may be built. The chief problem when using components from a small scale in a much larger one is the wheel diameter, which is mostly far too small. However, because several different sizes of wheels are used in N gauge, it is easier to find suitable chassis.

There is a vast range of vehicles, figures, and accessories available in scales around 1:35, more than could possibly be accommodated on a small layout. Modifying the figures is fun and rather easier than in the smaller scales. However, I would like to scotch one common misconception. Working in a larger scale means you have to put in more detail. In 4mm scale a pocket handkerchief can be ignored but in 7mm or larger it becomes a significant object. If you model in the larger scales to the same level of detail acceptable in the smaller scales, models become more toy-like and lack realism in my view. I did not arrive at 1:35 scale via my optician, as some have done!

An appeal

I have assembled a small collection of drawings of interesting 10¹/₄" gauge prototypes but I would like more. If anyone has drawings (of anything between 10¹/₄" and 12¹/₄" gauge), or knows where I can get them, I would like to take copies (at my expense). Please get in touch via the Editor.

The Isle of Man Railway

A modeller's inspiration – 4: Nos.19 & 20, the railcars

*Continuing his occasional series on modelling the 3' gauge Isle of Man Railway, **ROBIN WINTER** looks at the bogie diesel railcars acquired from County Donegal, and how he modelled them.*

For some reason these two railcars have an attraction and fascination which is quite different from any other item on the Isle of Man Railway.

They were built for the County Donegal Railways Joint Committee in 1950 and 1951 respectively. The CDR closed just 10 years later, on 1 January 1960.

The mechanical parts were constructed by Walker Brothers in Wigan, with the bodywork being made by the Great Northern Railway of Ireland.

They were landed in Douglas in May 1961 and entered service later that year in an attempt to win back business from the bus company – which at that time the railway still owned!

The railcars were articulated and came in two quite separate sections: the driver's cab and front end were mounted on the power unit, while the passenger compartment rested on the rear of that unit and was supported at the rear by a non-powered bogie.

When the railcars arrived from Ireland, the CDR couplings were not compatible with the Manx choppers, due to a slight difference in height and shape. During their early days in the 1960s, the railcars were run with a G van sandwiched in the middle to accommodate luggage and goods. A number of vans were fitted with vacuum brake pipes and had the couplings altered to match the railcars. It was to be many years before the couplings were actually changed on the railcars themselves.



The two railcars were worked back to back, which caused some initial problems. The transmissions had only one reverse gear and the Gardner 6LW diesel engines and transmissions could not be controlled from the opposite end (i.e. in true multiple unit fashion) and, consequently, each railcar had to pull the dead weight of the other. On the Port Erin line this caused some severe adhesion problems, so the railcars were used mostly on the Peel and Ramsey routes. A lack of adequate turning

facilities precluded them being used singly.

The railcars never received official painted Isle of Man Railway fleet numbers until more recent years. Consequently they retained their CDR identities of Nos.19 and 20 which, happily, did not conflict with any IMR stock.

There were slight differences in the appearance of the two vehicles, notably the window layout and the livery at the driving ends: No.19 had a triangle painted on the radiator while No.20 had an embossed chevron.

The original red and cream livery was inherited from the CDR but, around 1977, the two railcars were painted in the darker red and cream of the IMR coaches, with a black roof.

By 1988 there was a sharp contrast in livery and appearance. They were painted in the red and white livery of the now nationalised bus operator on the island. This was the only time these units received official fleet numbers.



Above: for many years the railway company owned the buses, but during the 1970s/1980s the tide turned and the authorities that ran the buses also controlled the railways. Consequently, some of the rolling stock was painted in the bus livery of red and white. Looking forlorn and in need of attention, the two former County Donegal railcars are seen in Douglas in the early days of nationalisation.

Left: the Walkers diesel railcars, No.19 (nearest) and No.20, at Port Erin. There were slight differences in the appearance of the two vehicles, notably the window layout and the livery at the cab ends.

With this change of livery came about a change of use, to permanent way duties, in an attempt to lighten the use of the steam fleet. This unfortunately took its toll on what were now historic vehicles. It was not until 1992 when the Schöma diesel was purchased that the railcars were virtually taken out of use in a very poor condition, as they were not suitable for passenger work.

In recent years a restoration project has been started but, unfortunately, with the exception of the running gear and chassis, as the material has deteriorated so much, this would have effectively resulted in replicas. The diesel engines and running gear were to be refurbished by the Steam Packet Co., and the bodies were partially rebuilt in the railway works at Douglas. More recently it has been suggested that the power units could be exchanged for new Cummins engines which would allow for multiple unit operation. However, the restoration has been subject to a pause and they have been put into store.



Top: a view of both railcars at Port Erin, No.20 nearest the camera. Note the differences in the cab ends and the body side window fittings.

Centre: the railcars retained their CDR identities as Nos.19 and 20, which conveniently did not clash with any motive power in the Isle of Man Railway roster. They did not carry official fleet numbers until more recent years. The pair, with No.20 leading, is seen on the Port Erin departure platform at Douglas in 1974. The cream chevron design on the cab of this unit was inherited from the CDR livery.



Below: the cab end of No.20, in the entrance of the old carriage shed at Douglas. Adapted IMR couplings have been fitted. The deterioration is all too clear.

Below right: No.19 in the running shed at Douglas in a very poor condition shortly before the units were dismantled. During this period this unit had a large void in the right-hand cab window frame; it was even used in traffic in this condition. The only time these units received official fleet numbers was when they were painted in the bus livery.





Modelling

I dearly wanted models of the two former County Donegal railcars, Nos.19 and 20, as they are quite suitable for the period I have chosen to model, and would add variety.

I felt that scratchbuilding such complex shapes was not an option for me. Anbrico had produced a whitmetal kit for these units back in the 1960s. Although long out of production, the kits can sometimes be found second-hand. Following the appearance of *Port Foxdale* at Expo Narrow Gauge in 2001, I was able to obtain a couple of unbuilt kits from fellow members of the 009 Society.

The kit made up into a model that was extremely heavy (around 600 grammes the pair) and difficult to get rolling. It also needed a lot of modification and detailing to produce a realistic model of the prototypes, especially as far as the articulation of the chassis was concerned. The units are articulated between the cab and passenger compartments, and these working parts had to be made more practical, and the cast whitmetal corridor connections removed. New compartment ends and folded paper corridor connections were made and fitted.

Above: seen in the now reduced Douglas station, former County Donegal railcar No.20 heads the pair on shunting duties in 1998. Note the sharp contrast in livery and appearance: the units look unloved and in dire need of attention.

I naïvely thought that fitting a Mashima can motor and gearbox to the front axle of each railcar was going to move them: how wrong I was! Very disappointed, I left them on the shelf for some weeks, just looking at them, forlornly waiting for some kind of inspiration.

I was then shown a 12mm gauge self-contained power bogie by the Austrian firm Halling which was intended for trams: it would possibly have worked but would have needed a lot of modification, as the prototype's power bogies have coupling rods linking the driving wheels. I would also have to undo all the remodelling involved in the articulation and change the specially made driver's cab and coach end sheeting with its new flexible corridor connections.

Then I found a photograph taken in 1965 at Castletown showing a G van (G19) sandwiched between the railcars: it was used on occasions to carry passenger luggage or small goods. This was the answer! I could use a G van kit from Branchlines with a Halling bogie. These units have a variable wheelbase which gives the modeller a great deal of scope.

The van kit was built with all the running gear fitted, but less wheels and bearings. The

integral roof was cut away from the cast resin body to allow access.

Motor retaining brackets were made from brass and glued in with Araldite. The motor was then installed with the axles moved to match the wagon running gear. A false interior platform was made within the wagon, above the motor, to enable as much weight as possible to be added for traction. A new plastic planked roof was fitted, with toilet tissue for the torn canvas roof. The wagon was then painted, weathered, and false chopper couplings fixed to the higher than normal position to match the railcars. The actual link is effected with press studs.

The two railcars were coupled to the van, back to back, placed on the track, power applied and – it slipped like skates on an ice rink. Despair! I could not believe that all that power was not moving the railcars. It was not physically possible to add any more weight to the van to improve adhesion. The only thing to do was to create more traction on the wheels themselves, perhaps by adding traction tyres.

The wheels have quite a fine profile and anything too thick would throw the wagon out of alignment, and make the flanges useless. Elastic bands were too thick, rubber masking paint did not stay put, carborundum paper was too thick and inflexible. Then I thought of cutting slices from surgical synthetic rubber gloves, stuck with superglue. The material was found to be thin enough to fit around the wheels without impairing the flange.



Below left: stripped down to the frames, the original passenger section of No.20 is in the front of this view whilst the new hardwood frame for No.19 is behind. The decay discovered during dismantling meant that these were going to be replicas rather than restorations.

Below: 12 months later, the passenger section exterior of No.19 is almost complete. This is, unfortunately, as far as the restoration has been taken and work was halted shortly after. The units now reside in this condition at the rear of the Douglas carriage shed.



These gloves come with a 'non-stick' powder inside, so they were washed, dried, and cut open to make a flat piece of material. The two sides have very different surfaces, one matt and one quite glossy. I stuck the glossy side to the tread of the wheel with double-sided tape, avoiding the flange. How long this will last has yet to be seen, but at least it has enabled the railcars to move, and the remedy can be replicated if required. However, in the exhibition environment this still causes problems, so it is not the final answer. I am having two power bogies made, compensated, and complete with the prototypical coupling rods by Mike Chinery, who offers a custom 12mm gauge chassis building service. He has developed a unit which suits the Worsley Works 'scratch aid' etched brass kit, a much better option than the old whitemetal castings. As supplied the kit requires a drive unit, although some chassis components are included.

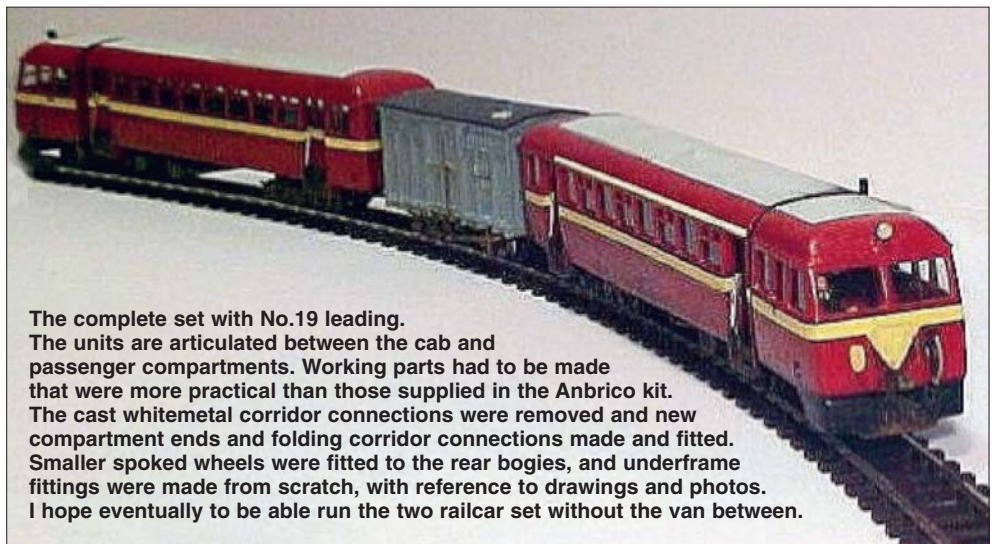
Sources and contacts

Isle of Man Steam Railway Supporters' Association *Manx Steam Railway News*. Scale drawings by Ian Beattie in RAILWAY MODELLER January 1988 and repeated in *Modelling the Irish Narrow Gauge* by David Lloyd, Peco Publications, 1989. Worsley Works NG, 19 Douglas Road, Worsley, M28 2SR. www.worsleyworks.co.uk Mike Chinery, 'Pennant', Upper Downing Road, Whitford, Holywell, Flintshire CH8 9AJ.

Left: the Halling tram motor unit, which gives very smooth slow running. Similar products come from several sources and manufacturers, in a choice of gauges, some with adjustable wheelbase.

Below: the modified Branchlines G van. Note the vacuum brake, which was fitted only to vehicles that worked between the railcars. The higher couplings can also be seen. G19 was not the only van so fitted.

Below right: press studs soldered to a piece of firm wire are used to couple all three vehicles – an old-fashioned method of coupling, but useful in difficult curved layout situations.



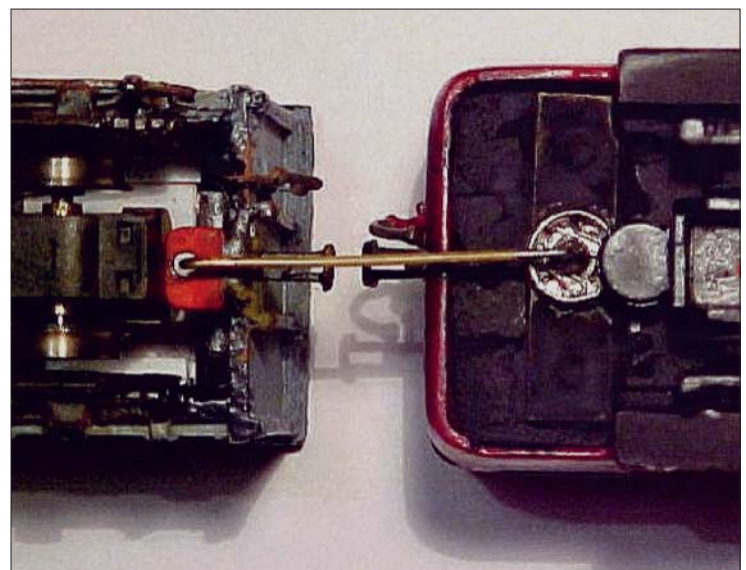
The complete set with No.19 leading. The units are articulated between the cab and passenger compartments. Working parts had to be made that were more practical than those supplied in the Anbrico kit. The cast whitemetal corridor connections were removed and new compartment ends and folding corridor connections made and fitted. Smaller spoked wheels were fitted to the rear bogies, and underframe fittings were made from scratch, with reference to drawings and photos. I hope eventually to be able run the two railcar set without the van between.



Above: the railcar set leaving Port Foxdale. The red flag attached to the rear of No.20 is one of those practices characteristic of the IMR – in Robert Robotham's *Isle of Man Classic Steam* there is a photograph of the railcars at Union Mills that shows this makeshift rear signal 'light': it had to be included on my model!

All photographs by the author.

Port Foxdale will be at the Egham & Staines MRS exhibition on Saturday, 28 January. See Societies & Clubs for more details.





The Seathorpe Branch

A really useful retirement

BRYAN BLAXALL returns to Suffolk, summer 1956. 4mm scale, 14' x 8'.

A welcome early retirement allowed me to realise a long-deferred ambition to build a model railway. Some experience had been gained many years ago when my sons were young, but nothing since. Time was now available, as also was a space of some 14' x 8' – the result of some forward planning. So, on to some serious modelling.

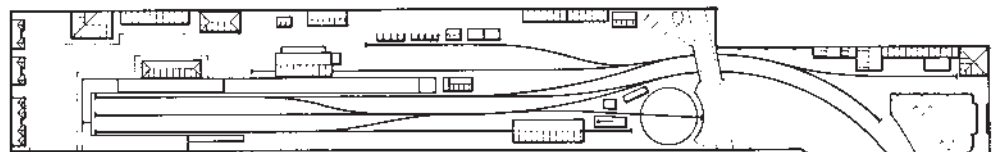
As an East Anglian born and bred, that was clearly where the model would be set. It would be a seaside branch because of the scope for greater traffic variety, and terminus to fiddle-yard.

But, although there were many coastal branches in East Anglia (there is a lot of coastline), no prototype really fitted the bill. I therefore decided that a fiction would be the answer, but in an identifiable location. Hence Seathorpe, which is supposedly a small Suffolk seaside town, served by a branch from the main London to Yarmouth line. The harbour supports a number of inshore fishing boats and the major local industry is a renowned brewer of Suffolk Ales, Adlards. To those who know Suffolk, this may seem rather reminiscent of Southwold – intentionally – but Southwold only had a somewhat idiosyncratic narrow gauge line, whereas Seathorpe has the benefit of a standard gauge link.

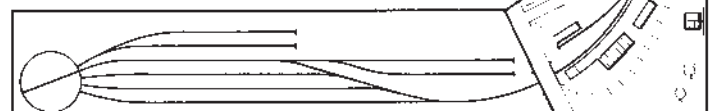
Design and construction

The branch terminus track plan copies Aldeburgh, also on the Suffolk coast, albeit with some additions like a turntable, a parcels/fish bay, and a branch to the maltings

and brewery, and the harbour. There is an intermediate halt-style station at Walbeach, an attractive village across the river from Seathorpe. Details are shown on the track plan below.



Above: B17 'Sandringham' 4-6-0 No.61640 **Somerleyton Hall** prepares to leave with the **Suffolk Coast Express**.



Left: one of the GE Section's two dedicated 'Royal Clauds', No.62618 of Cambridge shed (31A), takes a turn on the 'table' at Seathorpe mpd. It and sister No.62614 of King's Lynn (31C) were kept in tip-top condition for Royal Train duties. Although it was lined black by 1956, green is preferred on the model.

This page: The scratchbuilt station building is based on the typical East Suffolk Railway style; a view across the station approach to the goods yard entrance; a spritsail barge is moored at the quayside; lighter vessels crowd the fish dock.

Photographs by Jas Millham.

Baseboards were built, and topped with 12mm mdf. The layout was never intended for exhibition, so all was plugged solidly to the wall. On top of the mdf was a covering of good quality mounting card, with a further layer where the tracks were to run. This helped sound deadening, as well as allowing buildings to be recessed so you 'can't see the join'.

Track is SMP Scaleway 00, set into a ballast and ash mixture. Points are by Marcway, operated by wire-in-tube. They are well made, and this has proved a robust and effective system. The code 75 rail helps reduce any out-of-scale appearance.

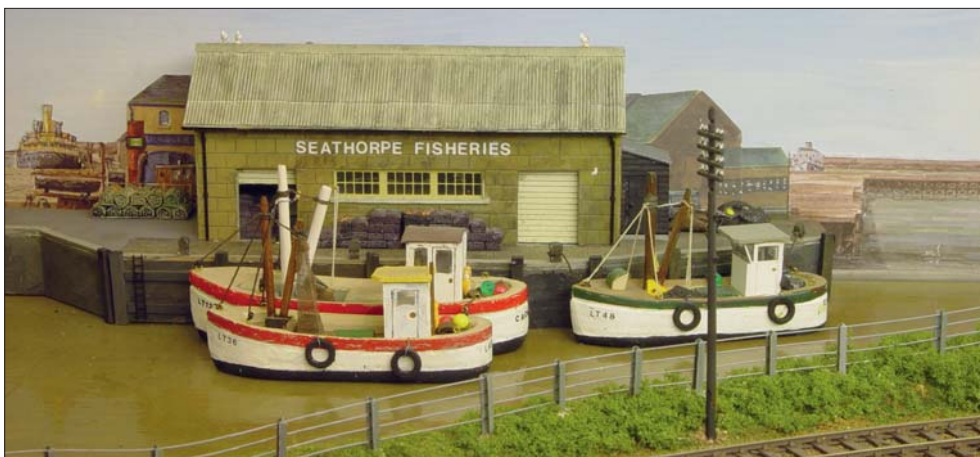
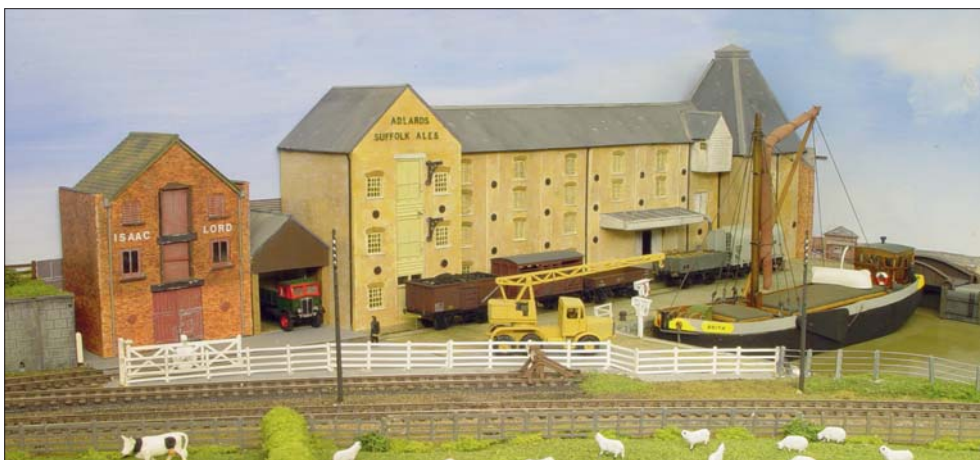
The fiddle-yard is in Peco track, terminating in a very efficient Fleischmann turntable. Tracklaying was done with care, all flat and level, with no curve less than 3', and greater if possible on transition curves. The turntable at Seathorpe was much modified from a Heljan N gauge kit, which scales up to an appropriate 50' diameter in 4mm. It is powered by Meccano gears and aligned by Mk.I eyeball.

There are two control points for the layout, one for the terminus and one for the fiddle-yard, with a form of cab control which allows either, or both, to be used as necessary. The Gaugemaster controllers I use provide a smooth DC output well suited to the Portescaps which power most of my locomotives. Auxiliary feeds look after the fiddle-yard turntable and a 'rolling road' which is invaluable when there is no continuous run.

Buildings

I particularly enjoy modelling buildings. The station building and goods shed on *Seathorpe* are scratchbuilt and follow the prototype East Suffolk Railway 'house style'. The separate Stationmaster's House copies the building at Snape, still standing opposite the maltings complex there. These structures are made from ply or double-thickness mounting card, faced with Howard Scenics brick card or Slater's Plastikard, all dry-brush painted and weathered.

The townscape of Seathorpe, around the station, is a mix of Hornby plastic and Metcalfe card kits, some much modified. Suitably weathered, they all blend in quite well. The substantial maltings and brewery at the harbour was scaled from an East Anglian original, and makes much use of the excellent Langley fittings. An East Coast spritsail barge from a Dutch kit is moored at the quay. The Walbeach halt is luxuriously equipped with a repainted Hornby waiting shelter.





Above: J17 No.65567, modelled on the sole preserved example of these Holden 0-6-0s, crosses the river bridge with a mixed freight.

Right: Walbeach station, amidst the gorse.

Below: a Derby Lightweight DMU (a converted Hornby Class 110) arrives at Walbeach.



Scenery

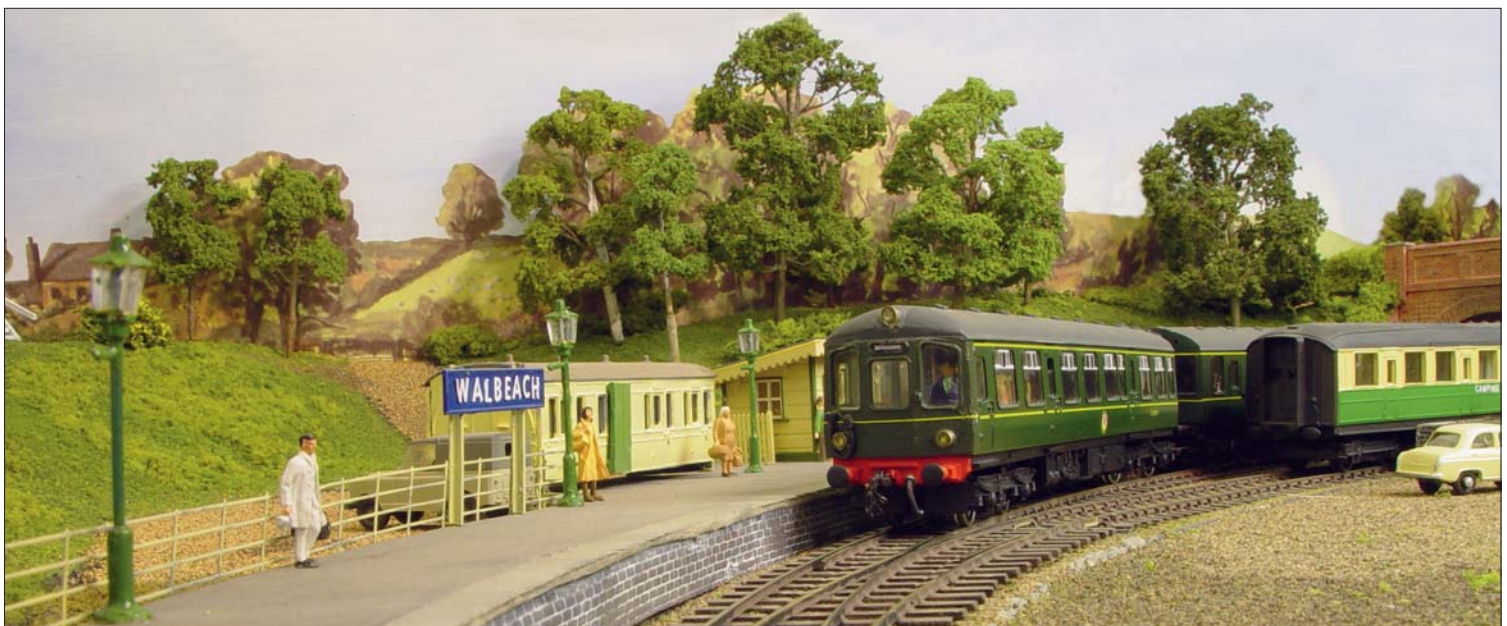
Contours are fibreboard formers, covered in rug backing and plaster bandage, supported by scrunched up newspaper, and dressed with appropriate Woodland Scenics or Green Scene scatter. The country area around Walbeach seeks to represent the gorse-strewn heathland of this part of Suffolk. I firmly believe that trees, while essential, need not be numerous, but should be good. Hence, and to save time, many of mine are from City Models EC1, a firm of architectural modellers which produces a variety of excellent ready-made trees. The water areas are a suitably painted recessed plywood base, treated with many coats of polyurethane varnish.

Operation

The time is the mid-1950s – the summer of 1956 to be exact, as I have the working

timetable for the East Suffolk line for that period – and I have tailored the traffic on the branch to fit. The shuttle connecting with the main line is one of the then-brand-new DMUs, and there are goods, local passenger and through-coach workings. The harbour gives rise to regular fish traffic. The fictional setting permits the *Suffolk Coast Express* from Liverpool St., conveying a portion for Felixstowe, with a

buffet car working through to Seathorpe. The special locomotive headboard was made by the obliging firm of 247 Developments of Leicester. Standard gauge has clearly led to a fairly busy branch. All movements are indicated on a flip-over card index (without which, chaos would reign), and the line is operated by sequence rather than to time, just like the real thing.





Locomotives and rolling stock

The locomotive roster numbers nine, more than necessary but I can ring the changes with most types that would have been seen in Suffolk at that time. Two locomotives, a B17 'Sandringham' 4-6-0, and one of the Royal Train – dedicated 'Claud Hamilton' D16 4-4-0s were built for me by that master craftsman, Steve Barnfield. The J15 maid-of-all-work was built from a Nu-cast kit by Dale Smith of Spalding and, with tender and loco pick-ups, it has superb control down to a crawl. A B12 4-6-0 was a prototype Crownline conversion from the Hornby model.

Other locos are modified proprietary or have been kit-built by myself over the years. The DMU is a Hornby 110 somewhat altered to bear a passable resemblance to an early Derby Lightweight, with replacement Ultra-scale wheels and extra pick-ups.

Coaches are a mixture of original 'blood and custard' Hornby Gresleys, with replacement Gibson wheelsets, and Bachmann Thompsons. The Liverpool St. through coaches are a couple of Replica Mk.1s. One of the splendid new Hornby Gresley buffet cars is part of the *Suffolk Coast Express* set, displacing a kit-built Kirk. Sadly, the fiddle-yard cannot accommodate a replacement rake of the newer Gresleys.

Goods wagons are mainly Bachmann, weathered to make them appear more care-

worn. Loads such as coal are removable to allow full wagons in, and empty out. Couplings on coaches and wagons are the very effective Sprat & Winkle although, in the middle of rakes, commercial tension locks are retained.

This page: the 'Royal Claud' departs for the South; two 4-6-0s on the roster are Thompson B1 No.61056 and a B12 (converted Hornby).



Road vehicles and population

Private cars were not particularly numerous in the 1950s, but I have tried to ensure that those which do appear, and the commercial vehicles, are of the appropriate type and age. Indeed, on the entire model I have made a point of aiming for consistency of time and place. The vehicles are from a wide variety of sources, both kit-built and off-the-shelf.

The 'little people' are in static poses and there are sufficient to make the place look 'alive' while not rivalling Oxford Street. All locomotives are crewed.

Finale

The layout is now pretty well complete, although, as ever, there is still detailing to be done. Am I satisfied with it? Well, yes. It doesn't pretend to be 'high tech' but, to me at least it gives the atmosphere of a Suffolk railway in the 1950s (which I do remember), and it runs well. It has taken about twice as long as I expected to reach this stage as I badly underestimated the time it would take to build a relatively simple model railway single-handedly, as well as making no allowance for the other distractions of retirement. But that has been no hardship.

My thanks are due to many. My wife, of course, for her forbearance, provided duty domestic chores are attended to. And my local model shop, John Dutfield, for invariably meeting my requirements and dispensing useful advice at the same time. Where I have mentioned manufacturers it is only as a satisfied customer – I have no other interest.

Then there is the Great Eastern Railway Society, which publishes a treasure trove of information about East Anglian railways. Its Membership Secretary is Jim Tant, 9 Clare Road, Leytonstone, London E11 1JU and the website is www.gersociety.org.uk. I am also indebted to Jas Millham, who is not only a renowned modeller (*Yaxbury*) but whose skill with a digital camera has provided a flattering record of my endeavours. And last, but by no means least, RAILWAY MODELLER, which has given me much rewarding reading over more years than I care to remember and which, with the likes of *Buckingham* and *Charford*, helped to inspire this lasting enthusiasm.

Rowlands Castle

On the 'Portsmouth Direct', c.1944 in 4mm scale

PETER GOSS introduces his latest project, and presents plans of the village chapel.

Before commencing with descriptions of buildings on the new 1944-period *Rowlands Castle* model railway project, I thought it prudent to explain how the project came about.

After several years of successfully modelling and exhibiting my *Etton* layout, together with several RAILWAY MODELLER magazine articles, attention turned to what to do next. I should think most, if not all, layouts that travel the country to shows require some level of regular maintenance and continuous improvement. *Etton* is no exception. Improvement peaked with the village extension two years ago and has now waned to replacing signals. Continuous maintenance involves keeping a careful note in a little A5 book at each show of any minor damage that can be remedied and so on. It is still very much a joy to run and the public's comments are still as fresh as they were four or five years ago which is really very good and probably a true test of layout longevity. RAILWAY MODELLER articles are continuously quoted to me at shows together with the original CD-ROM produced for the November 2001 Peco Gold Title Celebration edition. Fantastic.

No hand-fiddling of stock!

I mentioned to a few friends and family that a new project was evolving. Since then, their enthusiasm has grown to include offers of assistance in the research of the topic. Particularly as it has important historical connotations, as will be revealed.

So please bear with me as we journey on the next adventure into a little world of models and creation which, I hope, will inspire others to follow suit. This new model railway project partly evolved by taking into account actual experience gained on the *Etton* model, and adding to it a list of new requirements, which in this case would include:

1. No hand-fiddling of stock off stage at all. This has been the most damaging of all issues for the stock on *Etton*; buffer, coupling and handrail damage together with grime from constant handling. An end-to-end layout such as *Etton* really needs cassettes or trays to avoid the constant handling of stock.
2. Double track required, with two trains running all the time. This would probably mean a semi- or fully continuous circuit of some kind.
3. Semi-automatic powering and operating. Minimum individual control would avoid



constant craning over switches and dials and provide more time to talk to people. Any long distraction on *Etton*, whilst very welcome, nearly always involved everything eventually coming to a stop while the operator tried to work out where everything was. After a while, the schedule became familiar and usually there is another operator to take over while details of a model tree or plant are discussed in some length.

4. Very scenic. Lots of buildings required. And the dreaded trees of course... in abundance this time.
5. Minimum, but historically correct, track layout. Maximum scenery relative to the scenario. Level track but graded scenery.
6. Control panels built in as much as possible. All signals fully operational. One or two people to operate. Absolute max three.
7. Maximum communication and exposure with visitors. Large display boards of pictures and diagrams.
8. Manageable board sizes, not too heavy, not too large and, other than small van size dimensions, the actual number of boards would be irrelevant.

Previous thoughts had concentrated on the period to be modelled, stock availability, location and even scale. Some of the *Etton* stock is very old and my modelling techniques have

changed over the years. So a fresh start, with new ideas was thought best.

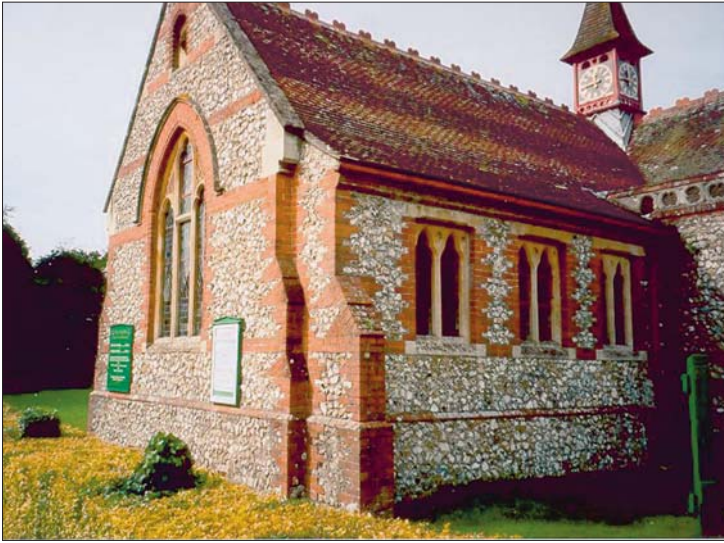
Train of thoughts

The train of thoughts now split in two directions and eventually, thankfully, came back together again.

On the one hand, I reflected on the original wish to recreate Southern EMUs in some form or other. Exposure to these trains during school summer holidays whilst staying with grandparents in London has etched images on me that would be forever difficult to remove. Stations such as Crofton Park to Blackfriars, and Honor Oak Park to London Bridge spring instantly to mind; all stations between had been memorised but maybe since forgotten.

On the other hand, a second string of interest for me is late second world war military modelling and vehicles. Now, for thoroughbred rail enthusiasts only: you will need to forgive me for mentioning this but military references from this point on may creep in for this is a period piece of work, all right? M4A4 Sherman tanks and M3 half-tracks will be mentioned from time to time but only in context and when relevant.

A possible link could be D-Day 1944 or a military railway of some sort. Most concentrated military movements during 1944 occurred



in the South. So this led to the Southern Railway era during 1944.

Internet attack

My wife, Julie, then picked up the gauntlet and, during a period of time between work jobs, set about assailing the internet for information and getting general ideas for options for locality in some detail.

Very quickly we discovered that the route to a new model would divide again into several subjects. First, the Southern Railway books, locations, locomotives, stock, history. Second, military railways, rolling stock, availability of models and kits. A booklet titled *All Tanked Up* looked promising. It is based on accounts of the locals in the village of Headley in Surrey during the war. It captures wartime tank unit training in the village with vehicles described parked up and moving to nearby training grounds daily. The units involved were Canadian armoured units training initially for the Dieppe raid and later for the period up to and including 1943. The book covers a lot of detail, ideal for modelling. Even OS plans are shown with various actual buildings highlighted and their military use identified. But no railway. The nearest was not really near enough to warrant a modelling connection in any form. The book is a very entertaining read and very well put together.

Next, and further south, we looked at Liss, on the Waterloo-Portsmouth line. It has a station and also an adjacent military railway spur connection into a vast military engineer railway training area. Old rolling stock of all sorts was acquired for the military line. Engineers were trained to build track and operate railways: so much so that siding after siding was built into a vast field network. This is definitely a subject all on its own. The Longmoor Military Railway would dominate a model in this area. Nice, but maybe not quite what I had in mind.

Several other military railway types were looked at, from ammunition tunnel dumps to training camps and vast American stores sidings hidden in forests; also Netley Hospital, which was a vast place with long historical and military connections. It had a rail link as well. Gosport had naval trains with ammunition supplies arriving.

After this, the searching started to mushroom out further into open space with no particular clear vision ahead. Larger towns were looked at. Splitting subjects up and joining parts of one with another was thought feasible but would probably appear very confusing. Something simple must be adhered to because, whatever happens, it was bound to become complicated without trying.

Trip to Portsmouth

There was only one thing to do now. Get in the car and take a trip down South to have a look at these places and get to grips with it.

Two weeks off work initially involved re-grouting the bathroom shower and a bit of painting on walls as a start to general domestic re-decoration. We very quickly had enough of that, so Julie and I organised a few days South. After a few phone calls to establish locations and places definitely to visit, it became apparent that archive material, or at least some prime source material, would be required to make sense of what I was trying to achieve. The managers at the D-Day Museum, Portsmouth City Museum search room and Portsmouth Central Library were all extremely knowledgeable and very helpful. I would like to thank them for their help in pointing me to related source material.

The general aim was to visit the D-Day Museum in Portsmouth and make that the starting point. Detailed information of most sorts was bound to be available in and around the Portsmouth area that would not generally be available elsewhere.

The plan was then to work back up the Portsmouth-Waterloo line by road through Petersfield towards Guildford, and then to look at Headley on the way back up later in the week. (In the event we didn't even make it to Headley... another time maybe.)

The trip down to Portsmouth deviated from the M3 and A3 into the country beginning at Haslemere: quickly finding the Waterloo-Portsmouth line, we started to follow it south. Haslemere had plenty of modelling potential, with lovely town centre period buildings several storeys tall. But they would be difficult to model individually, unless the whole centre was included.

D-Day Tapestry

The Portsmouth D-Day Museum proved an excellent starting point. A very large hand-embroidered piece of artwork lined the inside of a huge room. The tapestry depicts embarkation, assault and aftermath of the D-Day landings in Normandy during June 1944. Together with the displayed original artefacts inside and out, the museum is well worth a visit.

The bookshop proved even more useful as we purchased *Hampshire and D-Day*, edited by Martin Doughty. The book included detailed maps of pre-embarkation camps, de-training railway stations and plans of troop movements to the ports of Portsmouth and Southampton etc. Running our eye up the line from Portsmouth, a de-training station in Area X Camp A1 marked itself as Rowlands Castle. That was the moment of final location decision. We had travelled through this place on the way down and had made a mental note to re-visit.

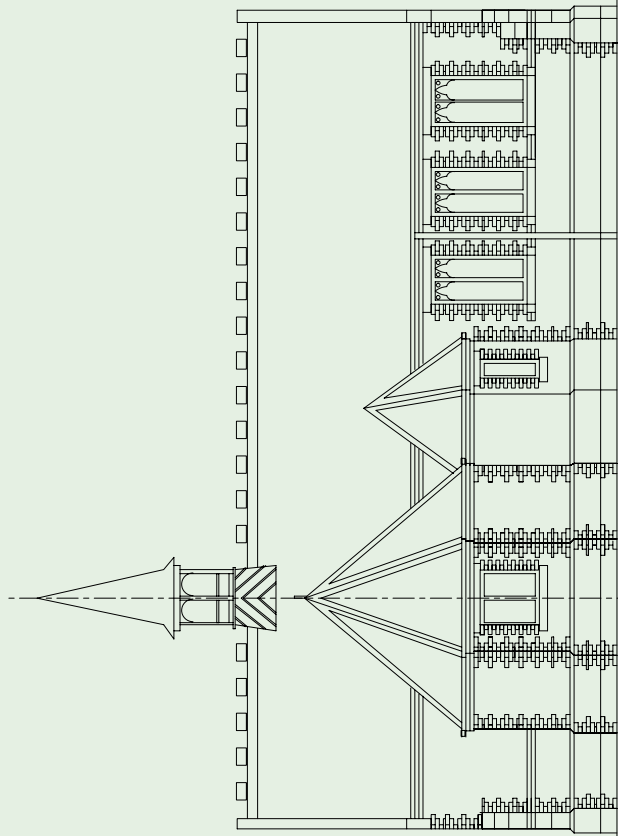
Bringing together all the earlier requirements for a model, along with the intended military overtones, Rowlands Castle would be an ideal modelling location and very interesting place to re-visit.

Portsmouth Central Library was the next place to visit and in particular the local history section. A wealth of information was available here and we spent hours and hours going through piles of books and papers and copying relevant pages and making careful notes of titles for later reference.

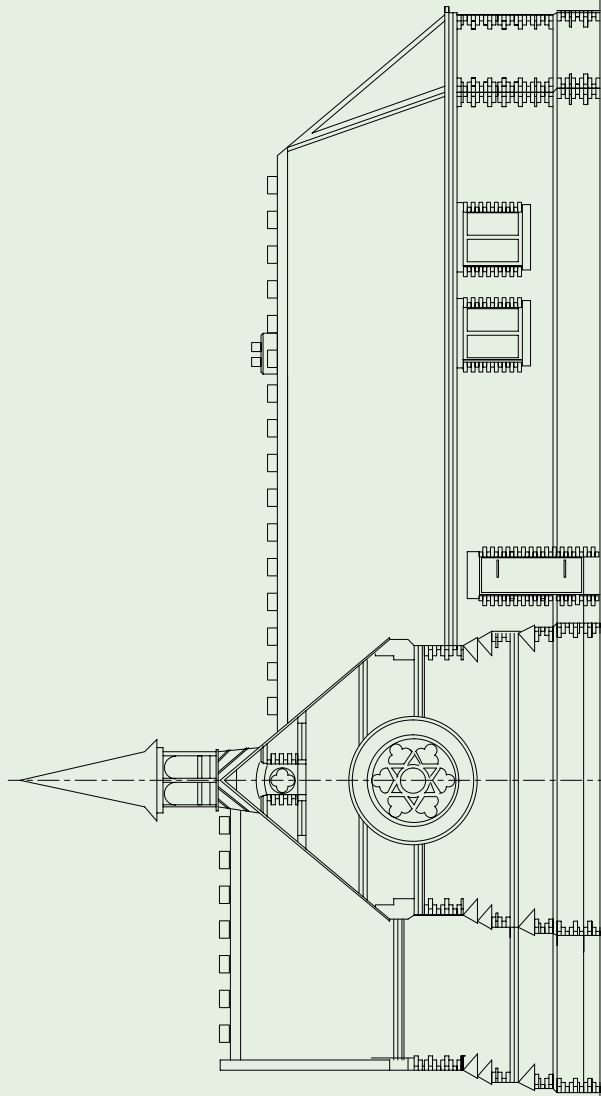
Rowlands Castle

Rowlands Castle itself is about 8½ miles south of Petersfield. The village is almost a suburb not only of Portsmouth but also of Havant, yet still maintains a country atmosphere. Like all the other small stations on the line from Woking, Rowlands Castle had a small goods yard. It also had two additional sidings on the south side of the station, one on the Up side and one on the Down side. The Associated Brick and Tile Company had two small gated sidings as well just before the station on the Up side.

The brickyards started to shine out as a main topic to be included on the model. I later dismissed this as it would be too large and would probably detract from the scene

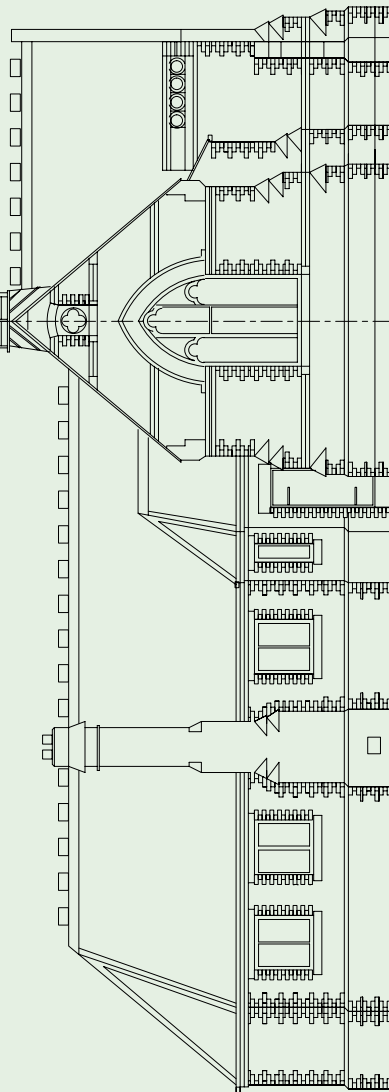


South West Elevation



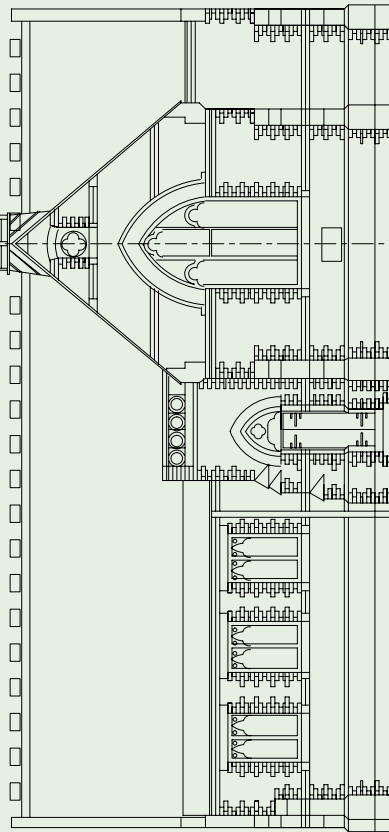
North West Elevation

First Gable



South East Elevation

Second Gable



North East Elevation

Third Gable

intended. It almost warrants a model of just itself in any case. Another three miles further south, all either on a falling gradient or level, the railway reaches Havant. The track then meets the old London, Brighton & South Coast Railway (LBSCR) at a point 66¼ miles from Waterloo, then turns west into Portsmouth and down to Portsmouth Harbour.

Giants plundering the land

Tales of giants plundering the countryside, smugglers and highwaymen await those who keep with me for these articles on Rowlands Castle; an absolute plethora of interesting anecdotes and scary stories to keep you awake at night.

Rowlands Castle has a large village green running on plan near east to west and dropping down at the western end towards the south. Pleasant and conserved buildings surround it. A chapel dominates the south end of The Green and forms the basis of the drawings illustrated. Next to it is No.1 Links Lane cottage which has been built using similar materials. The railway runs north to south at the east end of The Green with the station accessed from a road running off The Green in the north-east corner. The double track railway crosses the road at right angles on a double-arch bridge

with very ornate brick and flint detailed retaining and bridge walls. The long south side of The Green has a near-continuous wall with occasional properties set well behind. The northern side has an almost-continuous building line running east to west from the chapel and beyond right up to the railway bridge.

I have copies of picture postcards copied from *Rowlands Castle and District in old Picture Postcards* which, whilst a source of great entertainment, has some extremely useful building pictures in historical context from the early 20th century. I hope to refer to these in more detail later on as more buildings are revealed.

In order to recreate a 1944 scene, I would need to know which buildings were present at or before that time: there was no need to look at very modern buildings, obviously. But this would create two problems straight away – no... no such thing as a problem, just a situation to overcome. How do I know which buildings were older than 1944 and, of those, have they changed much since?

During my visit to Havant Library, I obtained a copy of a 1932 Ordnance Survey plan of the centre of the village. This immediately identified buildings that were therefore built at or before this date. Those that remain today were marked off on a modern Ordnance Survey

plan. These would form the basis of the village scene to be created: 20-odd buildings altogether, stretching from the Parish Hall right up to 'The Arches' railway bridge and beyond onto Finchdean Road.

The chapel

A sign outside the chapel building declared Ken White to be in charge of the building today and, after a telephone call to Ken there and then, I had permission to take a few measurements and photographs. Next door at 1 Links Lane, Martin Roebuck, the Parish Clerk, assisted with more information and permission to measure up No.1 Links Lane. It is a delightfully quaint brick and flint structure, although substantially extended and altered but retaining the original front elevation. Many thanks to both gentlemen.

The chapel is a detached structure on a relatively small piece of ground. There is no graveyard. Inside is the main worship hall and a little prayer meeting room in the main area. Other parts of the building include a function room, kitchen and toilets.

The main axis of the building runs northwest to southeast with large gables at each end. A third gable protrudes at right angles facing northeast. The fourth side has a lower level wing. The roof has plain dark red tiles with patterned bands on the main elevations. Second and third gables feature very large pointed arch windows with Gothic tracery. The first gable is now hidden by trees and the gable of next door's extension. Examining early pictures, I have spotted the gable to have a large circular window, presumably the same width as the pointed arched windows.

Large decorative ridge tiles adorn the ridge, along every ridge in fact. Stone edging on top of the raised parapet gable walls run parallel to the roof slope, which is about 50 degrees. At the eaves level of each gable parapet wall sits a large, shaped base stone.

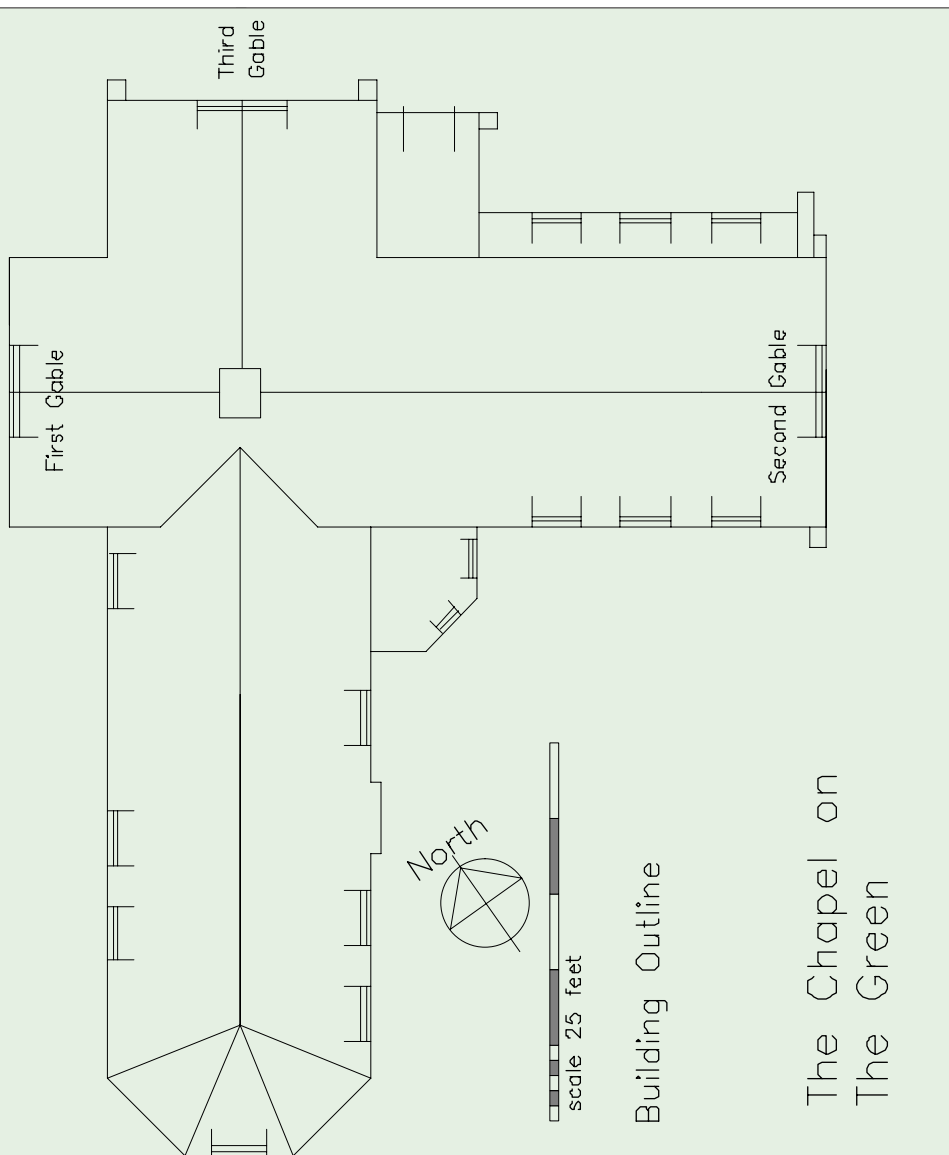
The walls are all flint stone faced with smooth red brick corners, details and aperture surrounds. The actual detail involved is tremendous and probably too excessive for small scale models in N and 00. If built in 0 gauge it would look fantastic, of course, but would probably take two years to complete.

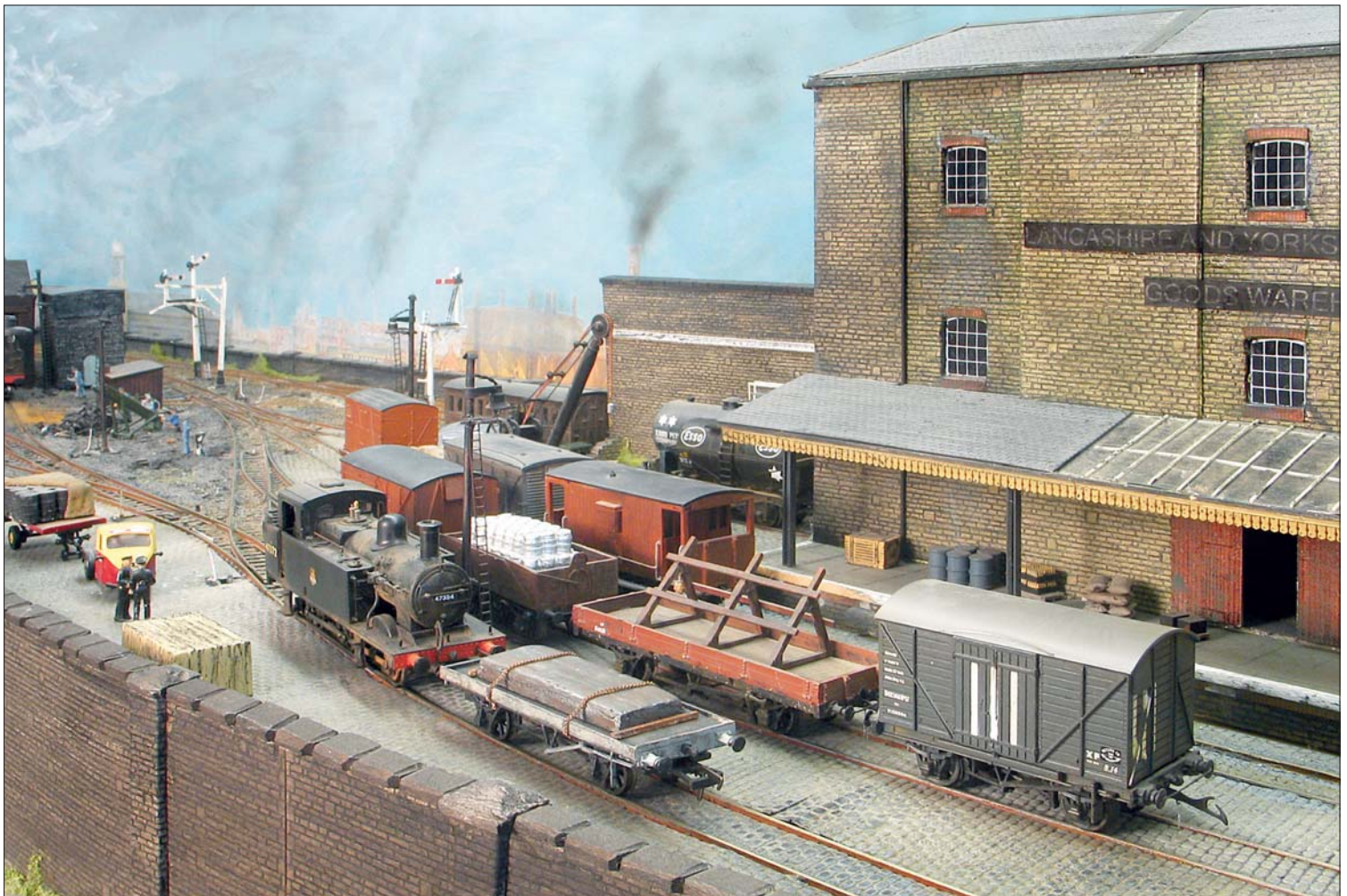
I am thinking of making my 4mm scale model with about 80 per cent detail. It will still look very fine, I hope. I envisage the brick detail being added to a card base using, perhaps, embossed plasticard and then to use actual fine stone flint stuck straight onto the card between the brick bits. I am experimenting at the moment, though.

Brick quoin-work appears at every internal and external wall corner, every pier buttress and window surround and in several horizontal bands around the building. Photographs are absolutely essential.

The other item of note is the protruding wall faces, plinths and pier buttresses. These will need to be built up in layers to each wall face. The clock tower on the roof is a year 2000 addition and covers two facets of the four original tower faces.

Photographs and drawings by the author.





Whitfrorom to Whitworth

A 4mm freelance West Riding through the hills to Lancashire, mainly steam, railway

PETER WHITWORTH engineered a layout around an interesting track plan, in a front room.

I am a member of Dewsbury MRC and have always had an interest in steam trains, being into spotting in the 50s and 60s of the last century. I had worked on various layouts in the clubrooms, but you always hanker after one of your own so, when a change of domestic circumstances gave us a large empty room, I mentioned the idea of doing a temporary layout just down one wall of the room and, to my surprise, got a 'yes'. This immediately caused panic, as I knew that I would have to get something moving fast, before Sylvia, my wife, went off the boil, so to say, about my layout building ideas.

I got the wood and mdf and banged two 4' x 2' boards together, so that there was something to see, still not really sure as to what or where I was going to depict. I only knew it would be in the steam era.

It's a funny thing in life, as just at the right time something can come along to help. In this case, I came across, in a charity shop, a

Wild Swan publication of Iain Rice's *Layout Designs*, which I found had some good tips and ideas in it, and got me thinking.

I decided I wanted to incorporate things and try to capture the feel that I remembered from around the old West Riding towards the Pennines side. You know what I mean, mucky mill towns that you were soon out of and into glorious countryside, so plenty of stone buildings, warehouses, mills, pubs, houses and walls, especially high support walls with arches in them; get the idea?

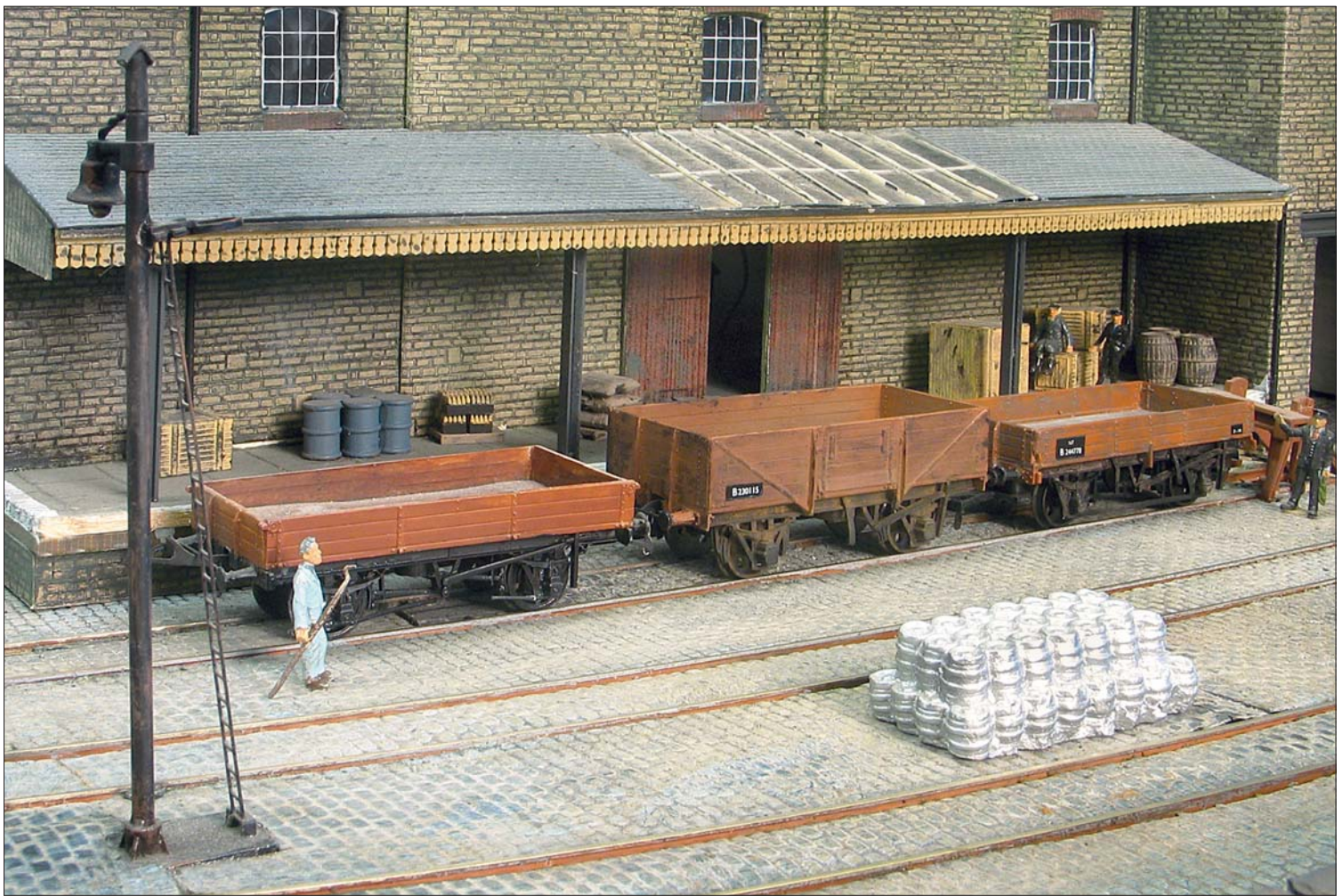
I had worked a track plan out and also approximately where the buildings were going to go. I opted for a board height of 43" so that you could get an eye level view easily. I put the boards up and then realised that the plan was to have the railway above ground level, with a high arched parapet wall, which gave it another 5" of height to rail level and 5 1/2" – or 140mm – to the top of wall, which scales out at 35'. After a ponder, I decided to leave it at this

height and built another board, albeit a bit smaller, on top of the existing board in case I changed my mind.

I had started to build the parapet walls using Townscene brick walling card kits, but I covered them with Metcalfe random stone wall sheets and topped them with balsa copings.

The layout was just going to be an end-to-end, with a fiddle-yard at each end. One end has the railway disappearing behind the warehouse and this did get a turntable fiddle-yard. The other end goes into a tunnel: by the time I had modelled my way across the boards towards it, I had started to think that it would be nice to have the railway going somewhere, perhaps with a loop to make it an out-and-back, and to move the boards so that I would have the two other walls to build down, making the layout 'U'-shaped.

As I mulled this idea over – keeping it to myself, naturally – I had been scratch building various-shaped buildings and structures as I



Left: a 'Jinty' does the morning shunt in Whitfrom Exchange goods yard.

Above: the shunter awaits with his pole whilst the guard beckons the loco to come on to the wagons.

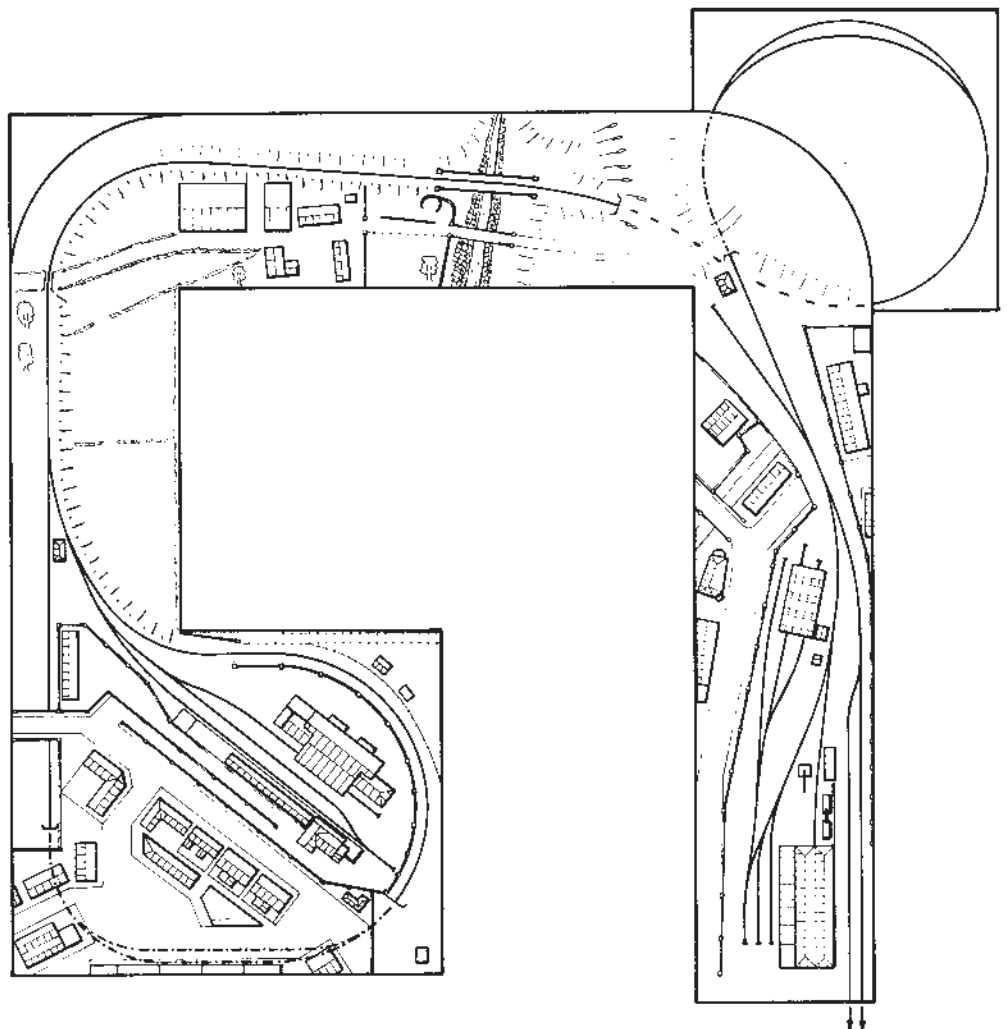
Photographs by Steve Flint, Peco Studio.

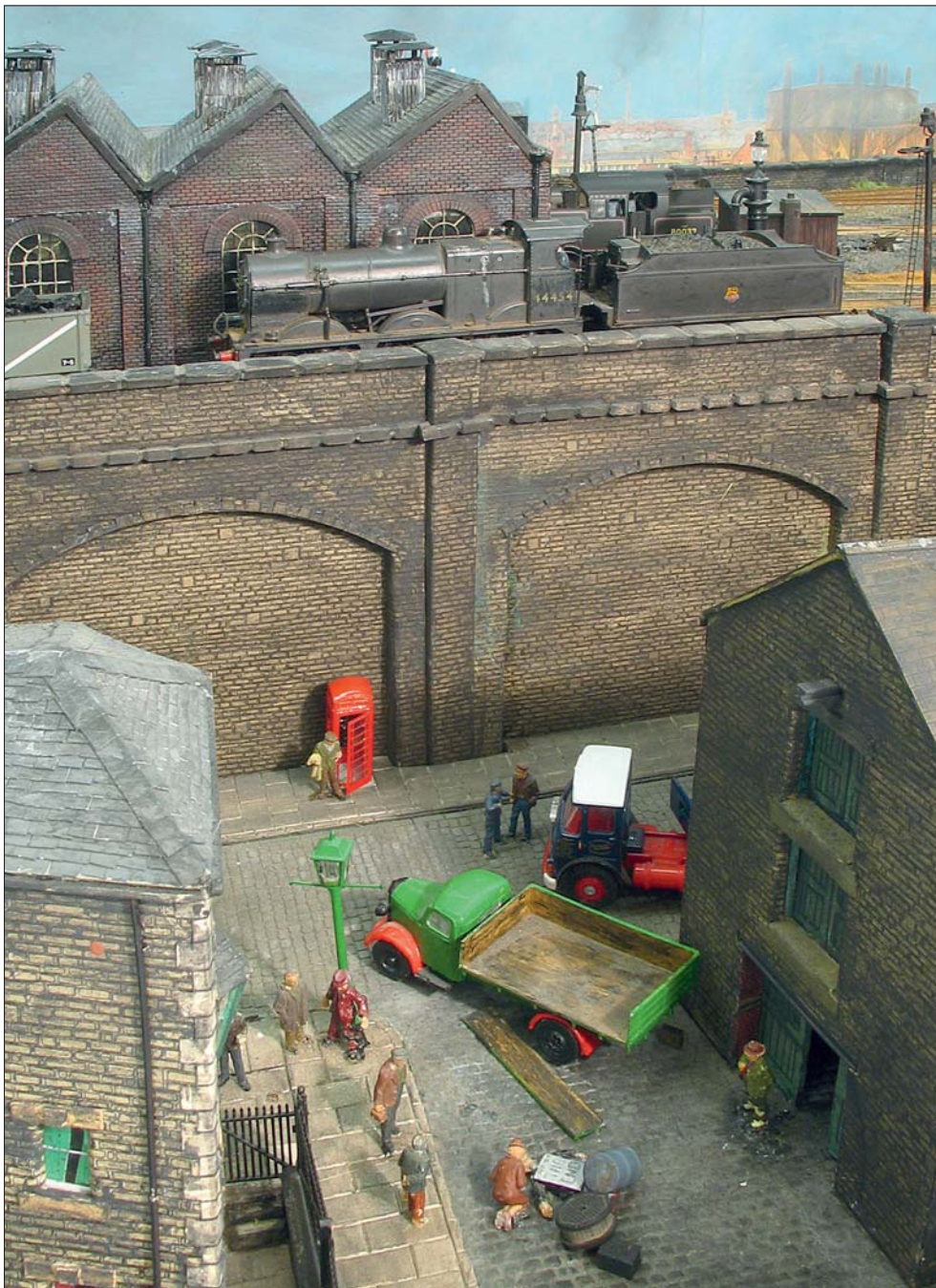
remembered them. The first building was the exchange warehouse. After I had laid all the track – which is all Peco code 75 with Peco insulfrog points on 3mm cork underlay – I positioned the warehouse and decided to cobble the goods yard.

Having considered my choices of cobbling such a large area, I started going off the idea but then, at an exhibition, I came across some large sheets of vac-formed plastic cobbling that the stallholder was selling off. This made my mind up: I bought the lot, and I have never seen the like of them again, anywhere. Actually fitting it was another story, as it called for paper patterns to be made to get the most out of the sheets I had, but it was worth it, as most of the joints are hidden.

The other buildings that I had to have consist of an odd-shaped, tapering, stone-built rag sorting warehouse – what we called 'rag oyls' – a big pub with a rounded end, a large mill with a tall chimney, a corrugated asbestos engineering shop, a terrace of houses backing onto a beck with iron fencing so people did not fall in and, last but not least, a chippy.

All these are built from card and covered in Metcalfe random stone, apart from the terrace





of houses, which is built using Slater's Plastikard. The only proprietary buildings are the engine shed (Ratio) and the signal box by the tunnel entrance.

At this stage, fate intervened in the form of a spell in hospital which enabled me to get the 'Well all right then, but not too big' sympathy vote when I raised the idea of enlarging the layout once I was back home again.

After recruiting some mates to help me move the layout, I decided that the rail level would have to come down nearer to board level, but how to do it without losing too much space? We had repositioned the layout along the wall which had a fireplace with alcoves either side, so I ended up building a frame into the alcove at the tunnel end of the layout, thereby creating a spiral at the largest radius I could get into the space; about 21".

I then had more 4' x 2' boards to make, to go across the back wall of the room and on to the other side of the 'U'. I hid the spiral behind and under the moorland and had the line emerging 3 1/2" lower onto the new boards out of a tunnel and over a bridge above a stony river bed, onto an embankment, and running past a small dairy farm, out in the countryside.

Buildings

It was about now that I found, on the members' stall at a Wakefield MRC exhibition, a boxed card kit by Diorama, which contained materials to make five Victorian brick terraced houses. I do not think they are made anymore. I bought them because they were cheap, not really wanting brick houses, as the area I live in was predominately stone.

Then I thought that, as my railway was getting bigger, and should be going somewhere, and as it had gone under the hills, the destination had to be Lancashire. There seems, to my eye anyway, to be more brick buildings over that side, so the Diorama kit turned out to be a good buy. I made my mind up to model a fictional Lancashire town scene.

The town had to have a station, which I situated on a spur off the main line, which I have made as loop, so it is round and back the way you came, as I had intended it to be. I have incorporated a passing loop under the hidden section, so you can run a train in at one end, park it for a while and then run it out the other end, so that it appears as if it has been somewhere, or run something past it as it is parked, and so on.

Above: looks as if there could be some fisticuffs between the lorry drivers at the scene of this nasty little accident. A Fowler 4F draws up to the water crane at the shed above.

Left: a good close-up shot showing beams under the canopy and the Sprat & Winkle coupler on the wagon.

Above right: Ivatt tank on local stopper rolls over 'chippy bridge', as it is known locally. The still-infant River Calder gurgles past the Railway Hotel.

Right: the muck spreader comes back to the farm for reload. The early morning workers' train, behind an Ivatt tank, rumbles over the occupation bridge as the farmer returns home.

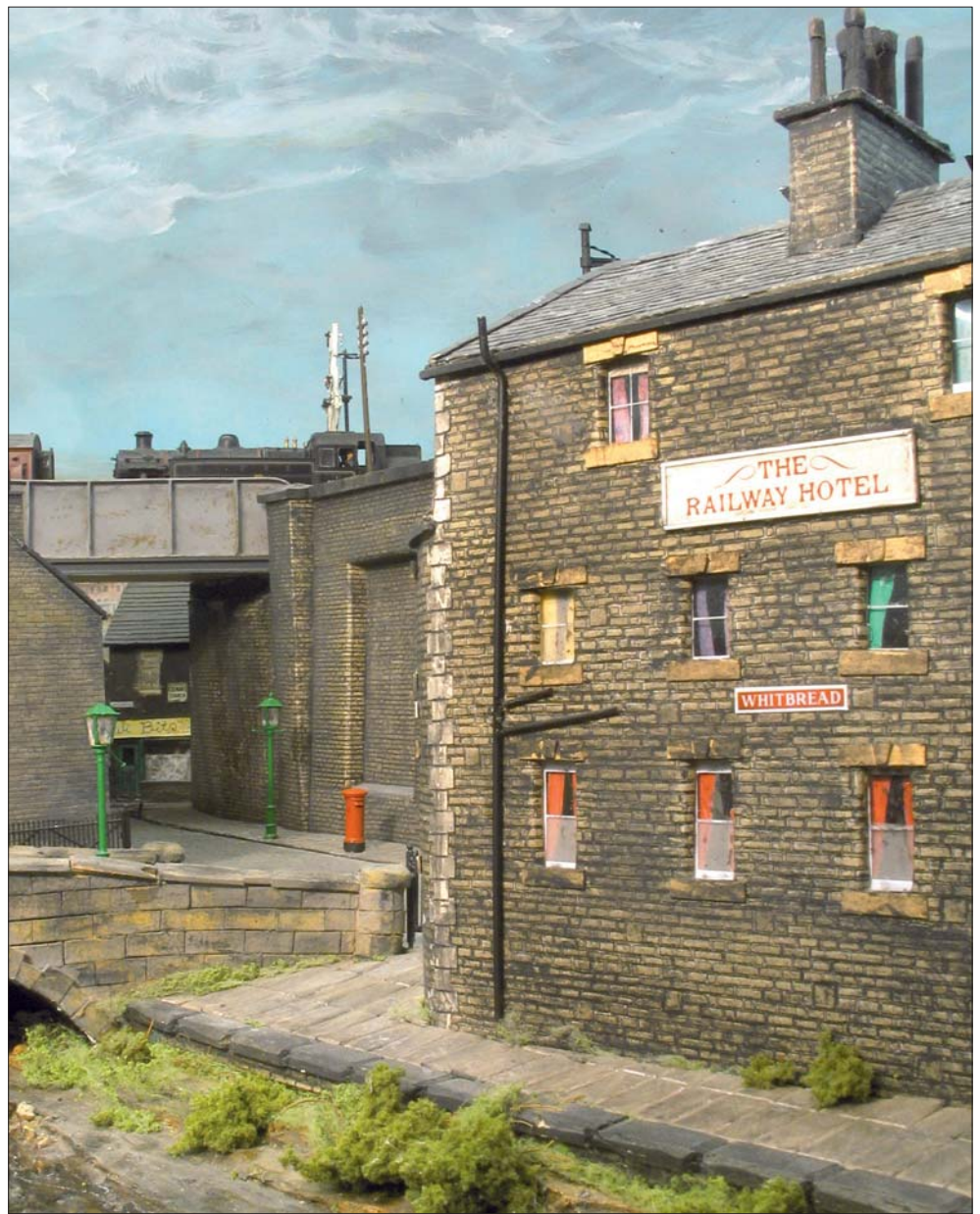
The station building is a Wills kit and the canopy is made up of bits of Ratio & Wills kits. The goods shed opposite is of my own design. I had noticed at exhibitions that you do not realise how much a part interesting roofs play in making a layout look effective. If you haven't noticed this yourself, have a look at the next show you attend. So I have given quite a bit of time to my roofs.

Most of the buildings in the town are card kits; Diorama, Metcalfe, and Prototype. The ironmongers/post office is scratchbuilt, as is the bus stop/toilets building. The church and garage bungalow are bashed Heljan kits and the garage sheds are Wills. Most of the buildings are internally lit with 12v grain of wheat bulbs, as are the lampposts. I am still trying to justify to myself that it will be worth the expense to buy some proprietary sodium-type lamp standards for the main road, or to have a go at making some myself. There is always something to do or improve on a layout and you sometimes do not seem to have any time to run it, but ample pleasure is gained, I find, in either modelling or operating.

The layout is divided into two halves for operating, each half having its own controller, so that train movements can take place in either half up to the divide, where they are passed from one control to the other. The Yorkshire side has a double Gaugemaster controller. One side runs the engine shed lines, the other runs the goods yard and main line.

The points are all electrically controlled from a panel showing all the relevant track, and which has push-to-make buttons for each set of points. LEDs at relevant places on the panel indicate their setting.

The Lancashire side is operated in the same manner, the only difference being the controller, which is a Gaugemaster hand-held. The layout is thus easier to run single-handed from the Yorks side.





The engines that I run are all work-horses – no pedigree high-steppers just a DJH ‘Crab’, a Hornby ‘Black Five’, and a Bachmann ‘Jinty’. The layout sees an occasional visit from a Bachmann WD ‘Nozzie’, as we called them, plus an Ivatt tank and a Standard 4 tank of the same make.

There are a couple of Airfix Fowler 4Fs, and two more 4Fs that I have found at swapmeets in kit form, and made up. I also run ‘Lanky’ Class A (3F) No.52121, made from a Craftsman kit, as this was the first loco on which I had a footplate ride, albeit for about half a mile into Dewsbury goods yard. I have a DJH ‘Big 8’ but

there are a couple of curves that are a little tight for it, so that does not visit very often.

My stock consists of mainly goods wagons, about 50/50 proprietary and kit-built. The kit-built ones are all fitted with Sprat & Winkle couplings from Model Signal Engineering, which I use in the goods yard for shunting. I have found this system excellent for hands-free shunting operations and my record for a non-stop hands-free shunt is half an hour.

Just in case you wonder where Whitfromm is in West Yorks; it isn't. It stands for Whitworth's front room and, with my surname, where else in Lancashire could the railway go to but

Above left: a ‘Crab’ stands by the water crane, the ‘Black Five’ looks as if it’s in need of some coal. An Ivatt tank, with its front end just in the shed, simmers away waiting for its next train.

Above: an old L&Y Class 27 shunts wagons into Whitfromm goods warehouse.

Whitworth? I hope that, by looking at the pictures of my layout, you can get a feel of either of the areas I have depicted, and also that it gives you a bit of the pleasure that I have had from building it. Sappy bit: thanks Sylvia, I owe you a room.





Above right: small mid-week market in Whitworth.

Right: grimy Standard Class 4 tank engine No.80032, no doubt with wheels squealing on the sharp curve, passes Whitworth Goods with a van train.



Below left: the Ivatt tank is seen here at the Whitworth terminus, before running round its single-coach train for the return journey.

Below: only the cows take any notice as Aspinall L&Y Class 27 No.52121 on a short freight train crosses the bridge spanning the infant River Calder.



Aviegorm

An unusual combination of railway prototypes in this 10' x 7' layout plan

ALAN PIKE considers a scenario based on Aviemore and the Cairngorm Funicular.

This idea came to me after travelling on the Cairngorm Funicular Railway in late December last year. Funiculars feature on some model layouts based on European mainland tourist areas but, in Great Britain, there are only a few funicular railways linked significantly with tourist transport. The Cairngorm Funicular is one such example and, although some miles from the railway, visitors will almost certainly use it for winter skiing or enjoying the magnificent panorama which can be seen on a journey penetrating high into the mountain range.

It was opened to traffic on 24 December 2001 and has the widest gauge of any funicular in the world; 2 metres. The two carriages, 3.2 metres wide and 10.5 metres long, are capable of carrying 120 skiers and snowboarders in winter but, in summer, seating is provided for 48 passengers with another 30 allowed to stand.

The wide gauge enables the line to be operated safely in the notoriously strong winds of the region, even up to 85mph, although company policy is to close the line when the wind speed is around 60mph.

The line is 1950 metres long, the top 247 metres of which are in a tunnel. It is supported on columns of Irish aggregate to match the local granite. The steepest grade is quoted as '22 degrees' which I assume is about 1:4 and the top speed of 36km/hr is relatively fast for a funicular railway. The only other one I know capable of such a speed is that from Saas-Fee to Mt. Allalin in Switzerland.

I have much more data on the railway, but I think that there is enough here to whet your appetite and perhaps appreciate my reasons for this layout proposal.

Firstly, Aviemore is an established leisure resort in the Highlands of Scotland some 30 miles south of Inverness. It grew in importance, mainly in the railway sense, when the direct Highland Railway line via Carr Bridge opened to Inverness in 1898. The impressive station buildings now served a new junction station with the original main line via Forres becoming a branch. Just over five miles down the old line, Boat of Garten (opened in 1866) was the junction for the Great North of Scotland route to Elgin, which brings me to my second point – the Strathspey Railway. This preserved line was established in 1971 on the former tracks of the old Forres branch and now operates trains from Aviemore, through Boat of Garten to Broomhill, which is en route



to the railway's eventual objective of running services to Granttown-on-Spey. The line was described in the August 1994 issue of RAILWAY MODELLER, pages 366-367.

Steam locomotives that work into Aviemore station on the Strathspey platform range from an ex-LMS 'Black Five' and the beautiful ex-Caledonian 812 Class 0-6-0 No.828, resplendent in Caley blue livery, to a selection of industrial 0-6-0Ts. A growing number of diesel

Above: former Caledonian Railway Class 812 0-6-0, No.828 photographed in 1996 at the original terminus of the Strathspey Railway which was a few hundred yards to the north.

Below: all trains now run in to the bay platform at Aviemore Station as shown here and as depicted on the plan. Ex-LMS 2-6-0 No.46512 runs around its train on another snowy day in December 2004.

Photographs by the author.





examples, including various ex-BR Type 2s and an industrial 0-6-0DH are available. A two-car Derby-built Class 107 DMU is in service, too.

Finally on the main line in a modern day scenario, one can operate HSTs, 158s, 170s, 37s, 66s and whatever else First Scotrail and EWS use over the line today.

For the layout, the topography has to be heavily massaged to bring a funicular station in concrete functional style alongside the main line station. It could have a non-working representation of the Cairngorm Funicular easing out of the station to climb into the inevitable tunnel. Or of course, intrepid modellers might make an operating version,

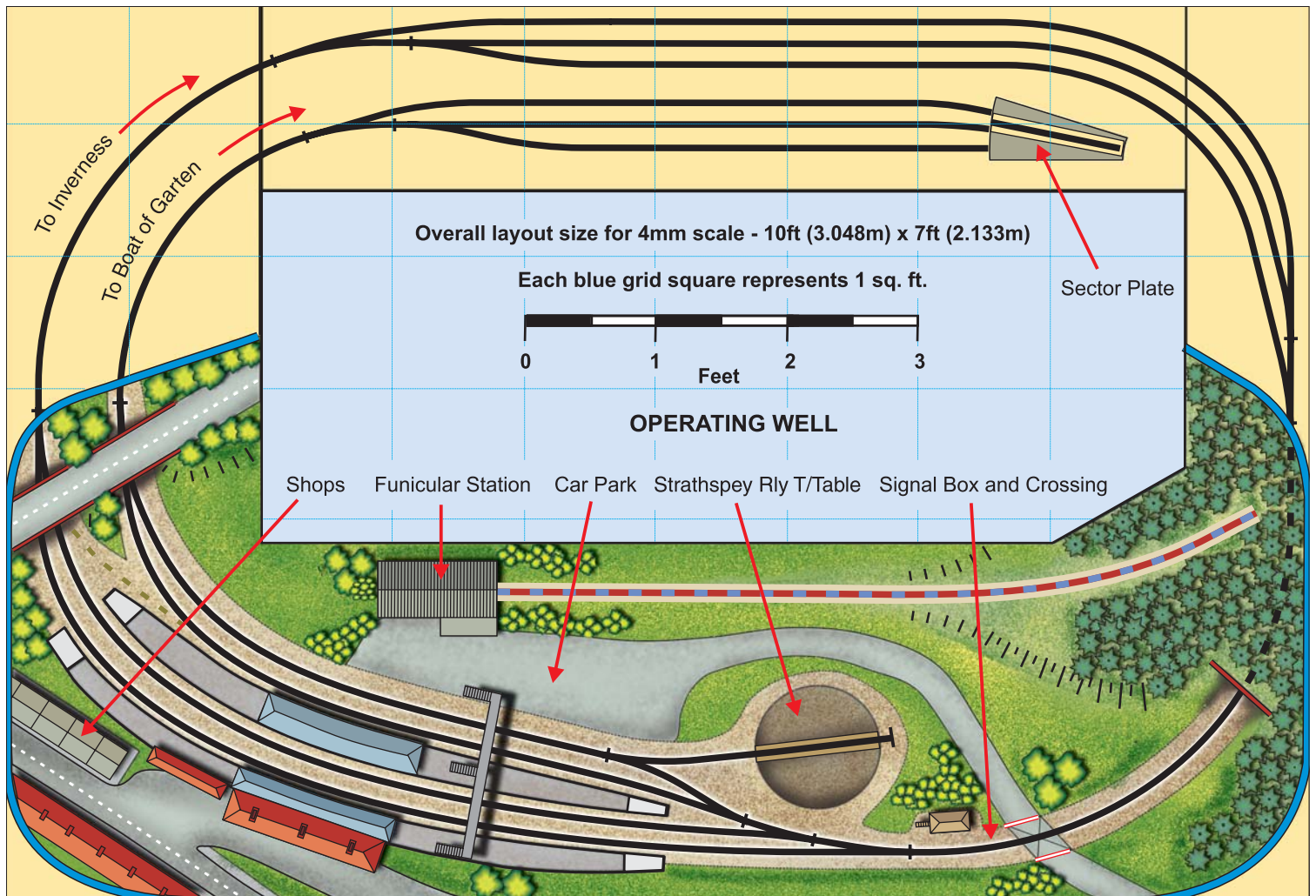
and what a 'first' that would be. The plan shows the line disappearing into the forestry, the trees acting as a scenic break hiding the 'fiddle-siding'. The plan also follows the standard gauge rail formation at Aviemore reasonably well, but the model scenery bears little resemblance to the local terrain, principally because the usual scenic breaks have been introduced; a tunnel to the south and a road overbridge to the north.

The track configuration has been drawn using Peco Streamline track geometry for 00 gauge, code 100 or code 75. Combinations of short radius turnouts, large and small radius Y turnouts and double curved turnouts have

Left: the funicular railway carriages cross at this passing loop situated about halfway up the ski slopes on Cairngorm.

Above: the lower terminus of the railway provides the inspiration for the model version.

been used. All this enables the model to provide circumstances for a very wide range of locomotives and rolling stock to be operated legitimately and also for the inclusion of an unusual feature on a British layout: a funicular railway. Finally, as an extra challenge, why not build the layout to portray the railways in the depths of winter as the accompanying photographs show?



Glasgow Emerald

A two-level urban layout in H0

ANDREW KNIGHTS follows a previous essay in *British outline 1:87 scale* with this modern scene.

Glasgow Emerald is my second essay into the world of British H0; well, third if you count the steam powered birth of my previous H0 British layout, *Catbrae*. The new layout was constructed to overcome the deficiencies that *Catbrae* had. Firstly, *Catbrae* was a small branch line terminus but it had the sort of service that a medium-sized suburban terminus would envy. If there was a passenger train in the station, you could not do anything with a freight train and so on. *Catbrae* was on two separate boards – plus fiddle-yard – each of which was open during transit; more trips down the stairs and from car to hall.

Glasgow Emerald is that small suburban terminus. The aim was for trains to arrive and then have a loco run onto the stock from the loco release road. I became a little carried away during the coach construction phase and all three rakes of coaches are now four cars long. This means that there is a bit of a shuffle to place the spare loco onto the head of the train. It also means that the operator has to keep his wits about him, and remember to run out the loco just arrived before bringing in the following train.

The freight trains are on a lower level, which keeps the operation of the two parts separate. There is no connection between the levels, except for a single changeover switch which allows the throttle to control one level or the other. Like all my other show layouts, *Glasgow Emerald* is constructed in a 2m x 30cm box which folds in the centre, the hinges being on the front. When closed up, and with a piece of ply added across the open end, the whole is fully enclosed. This makes it safer and easier to transport and store.

The points are manually operated. The system is a form of 'wire in tube': I have used curtain wire, of the sort used to hold up net curtains, for the tube. This is hot-glued to the

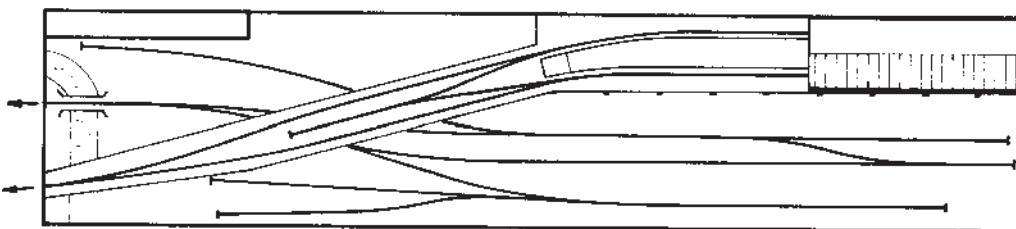


Below left: still with its pre-TOPS number, Class 26 No.5342 accelerates out of Glasgow Emerald station with a passenger train.

Below right: a view towards the terminus building, with lorries beneath the platform.

bottom of the plywood baseboard. Ordinary galvanised garden wire, or 0.8mm MIG welding wire, runs in this. At the operating end, the wire is bent into the end of a radio-control model's bell-crank. The far end of this takes a stiff steel wire – a straightened-out office paper clip – which runs up through the point tiebar operating hole. It is also soldered to a small DPDT slide switch. This is wired to the crossing nose of the relevant point. At the lever end, the wire is soldered into an electrical connector block. In this runs a short length of 2mm steel wire, which makes the lever. For storage, the

electrical connector screws are undone and the lever is pushed up tight to the baseboard, the screws then being re-tightened. A similar system of wire and connector is used to carry the point drive over the baseboard gap. It is a simple system, one that, if there are any failures during a show, can be repaired easily.



Left: the used car dealership occupies part of the space beneath the platform. An 08 sidles by with a china clay wagon.

Right: a Class 27 arrives with another service, which will be worked back by the Class 26 in the loco release road. A 'Whisky Blue' grain hopper is at the rear of the departing freight.

Below: close-up of 08 623, with the remnants of the signal box supports in the background. Photographs by the author.

The Peco code 75 track was laid and wired, then all the sleepers and rails were painted. I use the Games Workshop acrylic paints, sold as Citadel. The names are quite original, but the colours are finely ground and cover well. When all was dry the track was ballasted using several grades of Woodland Scenics. The idea was to make the top level's track look as though it was well maintained, and the lower level much less so. The sleepers in the yard were painted with greys and greens; some sleepers had their centres ground out. Those around the station were painted with blacks and browns. The ballast was similar in treatment: decent, clean ballast on the upper, passenger lines whereas the yard has a mixture of N scale cinders, coal and exterior Polyfilla®. Some green and brown ground foam even found its way into the mixture. Sidings had more rubbish added to the brew as I went. All the ballast was fixed with watered-down acrylic floor varnish.

Buildings are largely kit-bashed. Some are from the German firm Auhagen. These low-relief kits are photographic depictions of buildings. I scanned the models and modified them on the computer to suit the intended position on the layout and to give more of a British appearance. I added weathering at the same time. I printed several out of each finished building, and fixed the first one, complete, to its card shell. The next card shell had the printed windows and doors removed. The layer beyond that had window surrounds and door frames removed as well. The top layer only had the building framing and some other details left. A few other details were added on top of this. The result is a surprisingly good representation of depth, and a building custom-created to fit the site.

The backscene came from behind a school in Brighton. I was standing in the car park after



an exhibition and thinking of the layout to come, so I photographed the playing fields. The whole was assembled using Canon Photostitch and printed using a desktop publishing program. The backscene was printed at around 80 per cent density in order to make it seem a bit more remote. Reduced flats from Bilt-Eezi and Auhagen made up the buildings immediately behind the tracks. These were printed in a higher density, but still less than 100 per cent. The long bridge is made from Knightwing and Wills bits; the station building from Evergreen plastic and Plastruct. Signalling – non-working – is constructed using cut down Knightwing components.

Couplings on the stock are home-made. They allow pre-uncoupling using magnets and are generally 'hands-free'. This is important as the layout is front-operated and fully enclosed in its display box.

Where possible, small scenes have been employed to stop the observers looking where they are not wanted. The kids and bikes on the river and the low-level bridge draw the eye away from the fact that the river runs directly

into the back of the layout. The cars-sales team is there to draw attention into the layout, but away from the back. I find that it is important, when designing a small layout, to have the model's possible scenic weak-points in mind. Some of these can be turned to an advantage. Some scenes just grow as the model progresses. I hope the pictures give some idea of the process and, possibly, the overall operating potential.

Operation uses a simple sequence for the passenger trains. A single die is used to govern the freight trains, the number thrown indicating the number of wagons to be exchanged. Three freight trains operate: 'Whisky Blues' and vans; vans and open wagons, and, lastly, open wagons only. This all keeps the operator amused and alert, but it does not mean that the operator is so fully-involved that he is unable to chat to layout viewers or answer any questions. The rolling stock is mainly Lima: well, the coaches are mainly Lima, their wheels having had the flanges turned down a bit. The vans are Lima, some of which have had plywood sides added. Open wagons are running on cut-down 00 kit chassis – Parkside Dundas mainly – the bodies being mostly scratchbuilt. The larger opens come from the old Playcraft steel opens. The 'Whisky Blues' are cut-down Lilliput grain hoppers, which run on modified Lima chassis. All goods stock runs on Life-Like 3'6" H0 wheels, manufactured for the US market.

The locomotives are chopped-up Lima 33s on Athearn F7 chassis, except the 29: in this case the chassis is as above, but the body is ex-Playcraft. The 08 is a modified Dutch EE shunter from Roco.

If you have any questions, please ask the chap you see holding the throttle. The layout has invitations to Bognor Regis this month (see *Societies & Clubs* pages for details) and Eurotrack, Eastleigh, in February.



A small turntable in 00

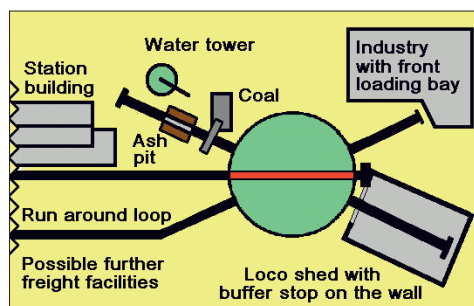
Build one for short locomotives – and more

Designed, photographed, drawn and explained by **GEORGE M. HOEKSTRA.**

Almost any layout has room for a small turntable for locomotives with a prototype length of about 40', but then do you actually need one? I can hear a lot of you objecting: 40'; that's the size of a tank engine. Tank engines do not need turntables; they are designed to run equally well forward or backwards. This, of course, is true but it is not the whole story.

There are actually situations where a small turntable could come in handy – not only on the model railway, but on the prototype as well. Firms like Stothert & Pitt made turntables down to 40' length. Many a branch line, served by tank engines, had a small turntable at its terminus station. Some heritage railways still have one. I recently saw one at the Swanage Railway.

Some further locations where a small turntable is needed have nothing to do with turning locomotives. For example, a flat wagon loaded with a shipping container, which has doors on one end only, has to be loaded from a bay facility. If the wagon arrives the wrong way round and if there were no small turntable available, quite a hefty crane would be needed.



Also, in many locations, lack of space prevents the installation of all the pointwork needed for a run-around track, the locomotive service facilities and the approach to a small



shed. The track plan in drawing No.1 does not have a single turnout and gives an indication of the possibilities. Convinced? Then let's build such a small turntable!

A small turntable

Why build one? Well, almost all the commercially available turntables in 00 are constructed, like the prototype, for tender engines and thus have quite a large diameter. Both Fleischmann and Kibri make small, hand-operated ones but they are designed to sit on top of the baseboard and do not have a well.

Years ago, at a swapmeet, I bought a motorised Peco N scale turntable which had a proper well (Peco sells it as an unmotorised kit, ref.NB-55). What caught my eye was the small size of the well; it had a diameter of 151mm. In 00 scale, this measurement would mean that, in prototypical terms, locomotives up to a maximum wheelbase of just over 37' could be turned, such as all the small tank engines. But even some larger ones will fit: Adams radial tank, Ivatt 2-6-2 tank and Gresley

Left: drawing No.1. You can squeeze a lot into a small space, thanks to the small turntable. There is not a turnout in sight. I even adapted the way the Swanage Railway saved space by having the turntable as part of the coaling facility, with the buffer stop on the wall of the loco shed!

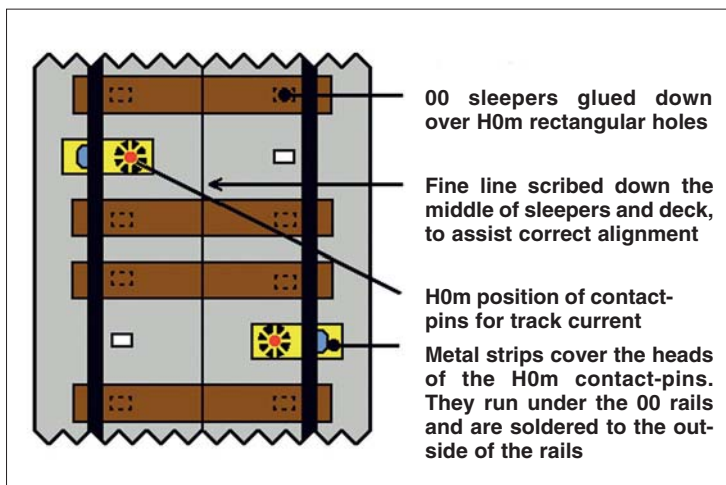
Below left: the buffer stop also partly obstructs the entrance – most unusual. If the loco should overshoot the turntable, it will run straight into the shed wall. The clutter, per-way trolley, scaffold towers and other small items will add realism to the scene if modelled.

Below: here is something for the British H0 fraternity: LMS 4547 in H0 by Lima fits well, albeit with a slight overhang, but all the wheels are firmly on the deck!

N2 can be turned. With a length over the buffers of 40'9", the standard 51xx Prairie will have a slight overhang but, since the total wheelbase is only 31'9", there are no problems. This was just what I had been looking for.

So a piece of 00 gauge track was fixed onto the deck of the table, which was only about





Left: the small turntable obtained by the Swanage Railway from Neasden Depot is situated just outside Swanage station. Judging by the size of *Eddystone*, which is being serviced on the turntable, it must be about 55' in diameter. The workings can be observed from a special viewing platform on the opposite side. Walk back through the car park and towards the road bridge, but do not cross it. The viewing platform is just past the bridge. This locomotive is too large to be turned together with its tender on this table but, once separated, they can be turned individually.

Above: drawing No.2. The two most important things to watch out for while mounting the new 00 track onto the H0m deck are carefully aligning the sleepers exactly in the middle of the deck, and carrying the track current from the contact-pins to the new position of the rails by means of a metal strip.

Above right: the ubiquitous J94. Many a heritage railway could not operate without this reliable workhorse. This one, in the guise (literally!) of WD No.191 as it ran on the K&ESR during one of the line's 'war on the line' events, was painted by my good friend, Geoff Dunster.

29mm wide. This, however, was not totally satisfactory. Not only is a 00 locomotive twice as wide as an N locomotive, but it also is very much heavier. As the locomotive was hanging over both sides of the lightweight narrow table, the whole operation was a bit unstable.

Then I saw that Peco had made a new turntable for H0m, ref.LK-1455. The well is the same as for the N gauge model, so the deck is of the same length. But the deck had been widened to 37mm to take the H0m track. This, I thought, could be the solution. So, one of the new kits was obtained from Peco and work commenced in earnest.

The first thing to do is to fix a piece of 00 track onto the deck. As I still have rather a lot of older engines with huge flanges, I used a piece of Peco code 100 track. The rail is 0.100" high – hence the name – and almost everything will run on it.

In order to have some reserve, I cut off a piece about 170mm long, rather than the necessary 151mm. Cutting track is best done with the Xuron cutter. It leaves a clean cut, which needs very little refining with the file. With this tool, you must cut the 00 track from top to bottom, not sideways.

New track on the deck

The new track, with its sleepers, would lie far too high above the deck. So a bit more than 1mm of the sleeper base was removed with sandpaper. A plate of toughened glass underneath the sandpaper will ensure an absolutely flat surface on which to work.

In order to remove equal amounts everywhere, the direction of sanding needs to be constantly changed. The plastic material is quite tough, so this job is somewhat strenuous. In two half-hourly sessions, though, you will have taken off enough.

The web under the rails should have been totally eliminated and the sleepers are now loose on the track. Only 1mm does not sound like much, but it certainly looks better. The existing H0m track chairs on the deck must also be sanded off.

Next, we cut off the ends of the sleepers on our piece of 00 track, on the outside of the rails, just beyond the chairs. This job, too, is done neatly with the Xuron cutter. The ends are then sanded off slightly.

Using 21 sleepers, the new track is fixed onto the middle of the deck. To ensure accuracy in positioning the sleepers, scribe a line exactly in the middle of the deck, as well as in the middle of the sleepers.

The sleepers are then glued in position, aligning both lines, making sure that they cover the rectangular holes left by sanding off the old rail fixings. Only the two holes for the contact-pins for the track current must remain free. Check drawing No.2. It cannot be stressed enough, how important it is to place the track exactly in the middle. Even an error of less than 1mm means that the table can no longer be aligned accurately with the approach tracks and rolling stock will derail. Once satisfied with the result, the track can now be cut off flush with the ends of the deck.

Further modifications

Before we can start assembling the turntable, we have to make some other modifications. First of all, the contacts to the rails will have to be adapted. As the 00 rails are more than 2mm further out on each side than the H0m ones, both plunger contacts no longer touch the underside of the rails. All we have to do is slip a piece of a not-too-thin metal contact strip under the rail, positioning it over the hole for

the plunger. The other end of the contact strip is then bent tightly back over the base of the rail with a pair of flat nose pliers and soldered to the rail. The soldering will have to be done quickly as the heat will damage the thin plastic very quickly!

Now we come to the handrail stanchions. As stated above, when I built my first turntable from the N scale kit, the deck on the table was far too narrow. The deck on the H0m model is much wider, so much, in fact, that I wondered if it would be wide enough for 00 engines with the stanchions in place.

Turntables look much better with handrails. According to standards published by the BRMSB over 50 years ago, the maximum vehicle width of the prototype in Britain was 9'. That would be 36mm in 00. If you install the stanchions as per instructions, the space between them is only slightly less. So, while gluing the feet of the stanchions onto the bottom of the deck, you ease them out 1mm on each side. The handrails provided can now be slotted through. After painting, they will be quite firmly fixed.

Finally, two strips are cut out of the deck extension plates provided in the kit. They are both one plate wide and seven plates long. These strips are glued in between the rails, meeting in the middle. They just fit between the rail chairs and disguise the sleepers nicely. After all this, all I need is for Peco to bring out another new deck for its turntable: this time with 00 track! Oh well...

Further assembly

The assembly of the complete turntable is well described and illustrated in the instructions, so I will limit myself to some observations. At step two, the installation of the two metal strips, as described above, will have to be observed. Care will have to be taken in installing the plunger contacts, each consisting of two contacts and a spring. There is a great danger of parts falling, or even coming flying out! You will only be safe once the turning block is in place and they are tucked away under the metal strips. This is why these contact strips must not be too thin: they need stability.

In steps six and seven, the contact plates are installed in the bottom of the well. Both arms of the plates have a small notch: bend them

here. Take care that the plates are installed firmly in the bottom of the well. Soldering of the wires to the tags will again have to be done quickly. Plastic and heat do not mix well!



In step eight, I did not glue the collar to the spindle from the deck. Instead, I used a slightly broader collar with a small screw, see photo above. This way, it is easy to take out the table assembly if needed for maintenance.

In order to avoid splitting the small parts, a pilot hole of a slightly smaller diameter is drilled through both parts. This is best done when they are fitted onto each other.

Approach tracks and finishing off

Steps nine–12. The full-size template comes in handy here. I would again recommend not gluing the well down onto the baseboard, but to use three small screws. If you ever need to take the well out, it is so much easier. The screws can be countersunk into the thick rim of the well. The holes are then camouflaged with a bit of filler and some paint.

The approach tracks can be fitted almost anywhere. The exceptions are the two 'dead' spots. Here the plungers down in the bottom of the well stand just between the two contact plates and no current can flow to the tracks. It is clear that no approach tracks can be fitted here. Also, the current to the track is reversed at this position: from here until the other dead spot, the loco will travel in the opposite direction as before. The change in polarity of the rails during turning is explained in the drawing. Many an otherwise experienced layout builder has been tripped up by the intricacies of wiring turntable tracks!

The new track still sits slightly high on the deck, even though we have sanded it down. Therefore, the approach tracks will need some slight packing between them and the rim of the well and for a short stretch over the baseboard surface.

The first sleeper is placed tight against the rim of the well and fixed to the baseboard



with a small woodscrew. In order to avoid splitting, a small pilot hole is drilled through both sleeper and packing, as well as a bit into the baseboard. The rails themselves can now be pulled forward over the rim, almost to the inside edge of the well. They do not need securing, as this distance is only 5mm. Note the remarks in the instructions about the slight chamfer which has to be filed onto the rails.

As far as painting is concerned, turntables for steam locomotives are dirty places. Steam locomotives produce great quantities of soot, coal dust and cinders, oil, sand and water, which continually fall and drip off. Therefore, the main colour is dark grey and brown. Small traces of light grey and yellow, representing the soot, cinders and sand, can be found in the well.

Finally, I know you want to know what happened to my old rebuilt N gauge turntable. Well, it has been rebuilt again, this time as a 009 turntable! A new piece of N track was glued back on and the table shortened to 76mm by cutting off the two outer sections on both sides.

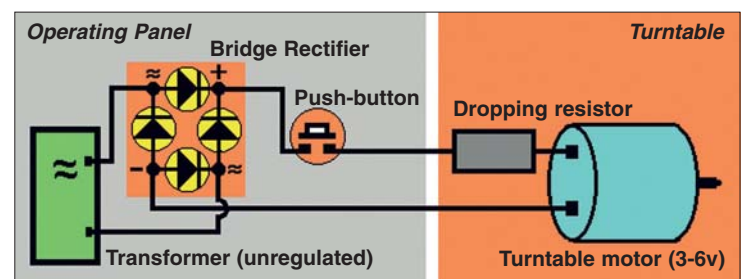
One more thing: this 009 table is now turned manually – its electrical drive now operates the new small 00 turntable. Have fun!

Left: detail of the packing for the approach tracks. A slight chamfer has been filed onto the approach rails. Note how the decking plates cover up the sleepers nicely!

Below: the finished result, suitably weathered.



Below: drawing No.3. Cheap low voltage motors can be run from the layout's own power supply, using a rectifier and a dropping resistor. For those of you with transformer/regulators that still have an unregulated 12v DC output, you can eliminate the rectifier.



Drive

As far as making the table turn, the solution of using a hand crank fitted onto the side of the baseboard is perfectly suitable for a small layout. All you need is a shaft of appropriate length, a crank, a worm gear and a sturdy gear wheel with about 20 teeth: all can be sourced from a Meccano set.

For those of you who want an electrical drive, the only important thing is to have a sufficiently large reduction drive. We want our turntable to move nice and slowly. The motor does not have to be an expensive 12 volt type. Small motors for 3 or 6 volts, built by the millions for use in battery-powered devices, are available for much lower prices. These motors can be run from the supply voltage of our layout, provided we use an appropriate dropping resistor in series. Have a look at drawing No. 3. The value of this resistor, in Ohms, depends on the type of motor used. Its value can be calculated using the formula:

$$\text{Ohms} = \frac{(\text{supply voltage of layout less working voltage of motor})}{(\text{Working current of motor in amperes})}$$

For example, with a 12v supply, a small motor for 6v/150mA would need a dropping resistor of $(12-6) \div (0.150) = 40$ Ohms. Resistors are sold in standard values, usually in the so-called E12 range. The value closest to 40 in this range would be 39 Ohms. But, as we want slow movement, I would try a slightly higher value. The next values in the range are 47, 56 and 68 Ohms. Try a 56-Ohm resistor. If the motor still runs too fast, take the higher value; if it is too slow, use the lower one. The power rating is calculated as follows:

$$\text{Watts} = (\text{supply voltage of layout less working voltage of motor}) \times (\text{current in Amperes})$$

$$\text{Thus the value for our example would be: } (12-6) \times (0.150) = 0.9 \text{ watt.}$$

As the motor will only run a small part of the time, a normal 1-watt resistor will do.

Never a dull moment

Many new products, including a live steamer for the garden

GEOFF THOMPSON reports on additions to the outdoor model railway scene.

The past few months have seen so many developments in the garden railway scene that it has been hard to keep up. Narrow gauge garden railway suppliers have had quite a busy time of late, and I don't think I have ever seen so many new items on show as there were at Llanfair and Elsecar recently. Both Accucraft UK and Roundhouse Engineering have brought out new steam locos, and the range of both ready-to-run and kit-built rolling stock has grown tremendously.

An inexpensive source of live steam locomotion from Germany has begun to gain a foothold on the narrow gauge railways around the UK. Regner produces geared locomotives: *Konrad* with a horizontal boiler and *Willi*, which is vertical boyled. Their performance and very low price (\$349.50 each) are attracting a lot of attention. If you like the quirky nature of geared industrial locomotives with flywheels, these little oscillating-cylinder locomotives provide superb slow-speed performance with very adequate hauling power. They are sold in the UK by Martin's Models.

Battery-powered locomotives are handy for a quick run when time is short, or filling in while steamers are being prepared, and are easier to operate for junior members of the family, so it is nice to see some new diesel outline locos, kit and ready-to-run, making an appearance. IP Engineering has introduced a new battery-powered 0-6-0 diesel outline loco,



Heading: Steve Fosbury's Regner *Konrad* geared locomotive, seen running on Ray Wyborn's line. This little locomotive is surprisingly powerful, and a cab is available as an optional extra.

Above: IP Engineering *Jack*, a powerful 0-6-0 diesel, kit price £209.95. (Photo TG.)

Right: IP Engineering's new rail bus, *Amy*, is available in kit form for £169.95. (Photo TG.)

Photographs by the author and Tag Gorton.



Jack, which can be fitted with two motors if required, for the ultimate in traction.

The firm's new railbus, *Amy*, is a delightful addition to a growing list of battery-powered diesel outline kits.

The range of kits from IP Engineering has expanded to include MOD wagons, compris-

ing a ballast wagon, powder wagon, guards van and yard cranes, both static and mounted on a four-wheeled chassis. Although huge numbers of these wagons became surplus to requirements, relatively few found their way onto other railways, particularly the powder vans, because they were so impregnated with explosives that they were deemed hazardous and were burned on site!

The IPE Darjeeling Himalaya coaches comprise no fewer than five examples. 'Blue' coaches are the enclosed type, with both passenger and guards/luggage. Semi-enclosed examples are a passenger coach, passenger/luggage and a mail coach.

Another IP Engineering development is rather unusual – three coaches from the Bredgar & Wormshill Light Railway. This 2' gauge railway in Kent is privately owned, and has been run by enthusiasts since the early





1970s. The balcony coach, two-compartment coach and brake represent the passenger stock running on the railway today.

IPE doesn't claim that its kits are exact replicas of the prototype, but they are a very good representation within the constraints of the need to operate outdoors in the British climate! That said, the quality of the wood panelling and detail castings is such that the finished wagon or coach looks superb.

The MOD wagons, Darjeeling coaches and B&W stock have a loading gauge which makes them well suited for use with Roundhouse locomotives, and indeed those from Accucraft and Cheddar, too.

Mentioning Cheddar, I was very sorry to hear that John Woodroffe of Cheddar Models had passed away. John was a good supporter of steam enthusiasts in both railway and marine hobbies. Cheddar ceased trading last May, but its product range is in the process of transferring to Stuart Models, so spares and eventually the locomotive range will still be available.

Probably the fastest selling item at the Llanfair and Elsecar shows were the new Lynton & Barnstaple four-ton mineral wagon and four-ton van from Accucraft, (see RM October 2005). Available in L&B and SR liver-

Above left: view of *Carrie* from the left side showing the pressure gauge, water gauge and lubricator filler (top) and drain (under footplate.) Note the rolled up canvas weather-sheet under the rear of the cab.

Above right: this head-on view shows the round sanders.

Below: *Carrie* in action, producing a good plume of steam despite the warm weather.

ies, and plain unlettered grey or brown, the open wagon costs around £25.00 and the van £30.00. Remarkably, they are supplied ready-to-run with wheels for both 32mm and 45mm gauges. There are four different running numbers for each, and stockists can endeavour to supply different numbers if the buyer prefers this. Accucraft plans to extend the range to include the bogie guards brake van and bogie flat wagon. The firm is also working on providing a range of Welshpool & Llanfair wagons, and Isle of Man passenger coaches.

With the expansion in availability of ready-to-run items for 16mm narrow gauge modelling, and at such keen prices, it may soon be cheaper to get up and running in 16mm than in G scale.

Roundhouse *Carrie*

There is no doubt that, for most people, the centre of attention will always be the locomotive. For many 16mm scale narrow gauge modellers, the live steam locomotive is the jewel in the crown.

In the early days of 16mm narrow gauge modelling, acquiring a new locomotive meant one of two options; build one from scratch or order one, with a waiting list of many months, from a tiny number of model engineers who produced limited numbers of ready-to-run locomotives. Nowadays, there are dozens of live steamers available off-the-shelf. The latest locomotive from Roundhouse Engineering has its origins in those early days.

Carrie is an improved version of a locomotive Roundhouse first produced in 1984, based on an original design by Jack Wheldon. The original Roundhouse 'Charles Pooter' Class

locomotive was the company's flagship model, and the only one offered with full valve gear. Production was discontinued in 1990 but, over the years, Roundhouse has had many requests to reintroduce the model. *Carrie* retains the Victorian charm of the original and employs the same Hackworth valve gear. The name was changed to avoid confusion with the earlier model, but the connection is that *Carrie* was the wife of Charles Pooter in the book *Diary of a Nobody*.

Studio photographs rarely do justice to a model locomotive and *Carrie* is no exception. The build quality and finish are superb, and the impression is of a very rugged machine. There is enough detail to be convincing, like the round sandboxes on the front of the footplate. The rolled canvas weathersheet at the rear of the cab roof is a very nice touch. I have no doubt many owners will embellish their model with tank and cab lining, and I know from experience how much this will enhance this already attractive locomotive.

The loco featured here is green, but *Carrie* is available in the full range of Roundhouse colours. I have seen a fully-lined black one which looks quite stunning. The model is not based on any prototype, but has features reminiscent of perhaps Beyer Peacock, Andrew Barclay or Kerr Stuart, without really looking too much like any one of them. To me, it is suggestive of a smaller version of the Davies & Metcalfe locos built for the Vale of Rheidol, but whatever its inspiration, it is a handsome engine. If you have never operated a model live steam loco, I would urge you to have a go; they come to life like the real thing!

Most models are gas-fired nowadays, and are not too difficult to operate. Fill the tank with gas (much like filling a cigarette lighter), fill the boiler with distilled water, top up the lubricator with steam oil, oil round the motion with car engine oil, turn on the gas and ignite, and watch the pressure rise on the gauge. Once the pressure reaches 20lb to 30lb you can turn down the burner for quieter and longer running. When there is enough pressure, the loco will respond to the regulator. Set the direction, open the regulator and you are off!



Anyone familiar with Roundhouse locomotives will soon feel at home in the cab of *Carrie*. The model is gas-fired using butane, with the gas tank in the cab. The cab roof hinges to one side for access, as per usual Roundhouse practice. On radio-controlled models, the batteries are held under the cab roof, with the usual aerial disguised as the roof vent. I found the gas control valve allowed very precise control, and the burner provided a good head of steam running near-silently. Most Roundhouse locomotives work on the single-fill system. The capacity of the gas tank is designed so that the gas will run out before the water in the boiler does. This is a useful method of ensuring you don't run dry if you are distracted by friends at garden meetings! It does have the disadvantage that you must wait for the loco to cool down enough to be able to re-fill the boiler, and then raise steam again. *Carrie* is fitted with a water top-up system which allows the boiler to be replenished while the engine is still in steam. This permits almost continuous running, with only brief pauses to top-up water, re-fill the gas tank and re-light the burner.

The new Roundhouse water gauge has an easy-to-see sight-glass to keep an eye on the water level. (I put a little blue or red vegetable dye in the water to make it easier to see.) You should not forget to keep the lubricator topped-up, and drain the condensate; check this before you re-light the burner after you have topped-up the boiler and gas. The lubricator has very easy access on this model, but watch your fingers; it will be hot! I like the way the lubricator is behind the cab side-sheet rather than in the doorway.

The *Carrie* I ran had radio-control for reverser and regulator, so I checked that this was working before I lit the burner. It is very annoying to have raised steam on a radio-controlled loco only to discover that the batteries are flat! I wondered what she would perform like, and was delighted to discover that the locomotive has a good wide power range, and excellent slow speed running. My heavy goods trains were hauled without fuss, and the passengers of the SWR were conveyed without discomfort, smoothly and at their accustomed stately pace.

If I can set a locomotive regulator so that the train does not stall anywhere on my line, but equally does not travel too fast anywhere either, then I reckon it is a success. *Carrie* performed this feat effortlessly, and proved she was quite capable of shunting stock at realistic speeds. I can't say exactly how long she runs on one tank of gas, because she never ran out of gas or water during my running sessions, but it must be more than 40 minutes.

Carrie is a little more expensive than some Roundhouse 'Classic' locomotives, at £1,070.00 manual and £1,195.00 radio-control, but then the water-fill system comes as standard, and she is engineered to last a very long time indeed.

Roundhouse Engineering 01302 328035
Accucraft UK 01694 723806
Martin's Models 01544 230777
IP Engineering 01202 660304

Newton Abbot East

A Great Western signal box in 4mm

A.J. LAWRENCE built this sizeable structure from plastic sheet.



Photographs by the author.

This was one of the largest timber-built signal boxes on the Great Western Railway, comprising 206 levers. It was constructed between 1925 and 1927. During the reconstruction of Newton Abbot station, it was positioned in the junction between the west of England main line and the Moretonhampstead branch.

A 4mm scale elevation drawing appeared in the September 1979 *Model Railway Constructor*. Building the model was one of those 'must-do' jobs, but it wasn't until the Evergreen range appeared on the scene that everything came together. The product, whilst expensive, is superb being both accurate and square. Most, if not all, of my supplies are obtained from Pat Ryan of Modelex fame, who provides an excellent service.

The model is virtually all Evergreen products, and the secret of successful modelling is to check all dimensions continuously and that everything is square.

The windows, 65 in total, were the biggest problem, as they either make or break a model. The front and rear windows plus the veranda window were obtained from the Modelex range. The top side windows are not available in this range and had to be scratch-built. The major difficulty was the locking room windows: I searched high and low for these at exhibitions/swapmeets etc, without success and was eventually forced to scratch-build them as well. There are 22 windows, 15 parts per window, making 330 individual parts altogether. The secret I find to avoid boredom and stress is to produce them in batches. This enables you to retain your sanity.

The roof, including the veranda, is detachable: the drainpipes locate into small holes drilled into the underside of the gutter. This gives the impression that the roof is permanently attached. The roof comprises, each side,

three Hornby church roof panels, butt ended and reinforced underneath. Because the thickness is consistent it is possible, with a little care, to make an almost invisible join. I approached Hornby, which supplied some spares: I also recommended that the firm sells them as a separate item which, in my opinion, would be to its commercial advantage, but without success.

The reason I made the roof detachable is that one day I would like to fit the box out fully, but have yet to acquire any interior information. If any reader has any information, drawings etc, on the internal layout, I would appreciate their responses [please write c/o the RM Office - Ed.].

The only other commercial items used are the finials, cowls and doors and, once again, these were supplied by Modelex. The stairs and walkway are built as one unit, which is also removable. This had to be constructed this way to enable me to obtain access to the locking room windows.

Constructing this signal box was a massive project and has given me great satisfaction. It was undertaken after gaining confidence building seven other smaller boxes (all GWR unless noted): St. Mary's Crossing; Chester No.5 (LNWR, over tracks); Henley-in-Arden; Tirydail Station; Luxulyan; Cradley Heath & Cradley Station; and Croesnewydd North Fork.



A powered turntable in N

Making a steam age essential move

JOHN WILSHAW needed a working example for his terminus station's MPD.

When planning the Motive Power Depot for the terminus station on my N gauge layout, *Upton Lacey*, I decided that a turntable was essential and that it should be power driven, with automatic alignment.

For the turntable itself, the well and deck from the Peco kit were used, but with the handrails made from fine brass wire. I added carrying wheels made from N gauge wagon wheels on half-axles running in short lengths of electrical wire sheathing fixed to the underside of the deck with an impact glue. These enable the table to rotate smoothly.

The barrels of the current collectors for the rails were also replaced by brass ones of the same pattern as the moulded plastic, turned in the lathe. The contact plungers and springs from the kit were retained.

After cutting a large dish in the baseboard to accept the well, it was found that insufficient chipboard remained to attach the shaft supports and the motor. Plywood was added to provide more depth for the wood screws used.

The plastic pivot which forms the bearing was replaced by a piece of brass $\frac{3}{8}$ " square by 3", again drilled and tapped in the lathe to take a length of standard Meccano rod to form the main shaft. This locates in a brass collar and two bearings made from Meccano strip were fixed beneath the baseboard. The second bearing keeps the shaft steady and vertical. The table does rotate freely and truly! 12BA countersunk screws attach the deck to the brass rod.



A 4.5volt DC motor with an integral gearbox (bought for about £5.00 at an exhibition!) runs from an old calculator transformer and, together with standard Meccano worm and gear located between the two bearings noted

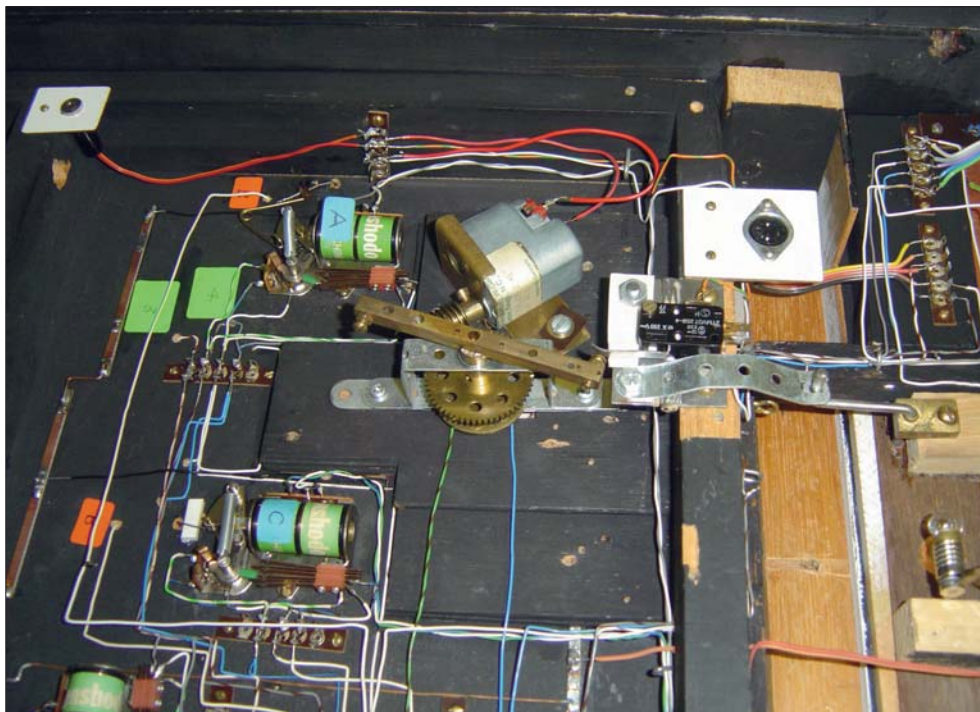
above, rotates the table at a sufficiently slow speed. Rotation through 180 degrees takes about a minute.

In order to stop the turntable in the correct position, a brass square section control beam is attached to the central shaft, below the collars and the driving gear, and this activates a microswitch as it rotates. The microswitch is mounted on a sprung hinge and, to start the rotation, can be pushed out of the path of the brass beam by a sprung plunger behind the layout backscene.

The brass rod is drilled and tapped 6BA at each end and round-head screws are fitted with lock nuts. It is these round-head screws that actually impinge on the arm of the microswitch allowing very fine adjustments to be made to ensure that the turntable stops with the rails exactly aligned.

I only need two locations (180 degrees apart) but I am sure that the method would work for more. The orientation of the beam and the microswitch arm makes reversing the direction of travel impossible of course, but I do not find this a disadvantage.

The photographs show that some of the engineering is rather crude, but the turntable does work and I feel that the original aim has been achieved.



Photographs by the author.

...an exchange of railway modelling ideas for beginners of all ages

Ashminster

A beginner's approach to layout building in 00 gauge

The tale of a retiree's return to the hobby is related by **DENNIS J. HIGGINS.**

My involvement with model railways dates back to my childhood and a small TT3 layout built for me by my father as a Christmas present. After a couple of years, I became distracted by other pursuits and my interest was not rekindled until a few years ago, having decided to retire early.

So how did I discover the hobby again? This was a slow and steady process over a number of years. My habit of browsing in antiques fairs and second-hand shops started to produce a supply of books on railways and railway modelling, the contents of which were eagerly digested. This was followed by the purchase of a few second-hand 00 gauge models – a couple of wagons, a coach and then a loco.

Then I bought my first copy of RAILWAY MODELLER and not only was I full of admiration for the excellent models and layouts featured but, having studied the advertisements, I was pleasantly surprised to find that such a vast array of products was available to today's modeller. I soon became a regular reader and always looked for back copies of all magazines to expand my library. This, I feel, was an important step towards planning my own layout as it showed me many examples of what could be achieved and details of the products which might be used.

When reading magazines, I was usually drawn to photos of the featured layouts and, whilst initially I just admired the marvellous efforts of others, I soon found myself comparing one layout with another and developing my personal preferences. Thus I started to build up a mental list of likes and dislikes and, subsequently, these were to be important factors in building my own layout.

Above right: close-up of platform 2. The station building is a Ratio kit, the cycle shed and posters are by Wills and the figures are Dapol.

Right: a train of clerestory coaches arrives at platform 2 hauled by Dean Goods No.2516 (an old Mainline model) whilst a porter on platform 3 is busy digging out weeds and repairing the fence. The bridge hides the layout's hinges.

Photographs by the author.





Left: an overhead view of the motive power depot with two locomotives receiving attention. Shed staff are busy at the coal stage.

Below left: the goods shed. The structures here combine some scratchbuilding with kits from Wills and an old wagon body.

The 'likes' were probably common to most beginners in the hobby; for example, the beautifully finished hand-built locos and rolling stock that took an accomplished modeller hundreds of hours of skilful work to produce. I knew that I did not have the necessary skills to match such achievements, but I was not disheartened because I realised that, until I could acquire such skills, I could, at a reasonable price, purchase a wide selection of ready-to-run models that would not disgrace any layout.

I found that I had a particular liking for those layouts where I felt the constructor had achieved a high degree of realism by careful design and skilful use of materials and colours. I know that modellers have many different aims in building a layout, but my personal goal was to produce a miniature world which, at least to my eyes, looked as close as possible to the real thing.

Railway modelling has sometimes been described as an art form and I think I must agree – perhaps building a layout can be likened to painting a picture of a landscape in three dimensions.

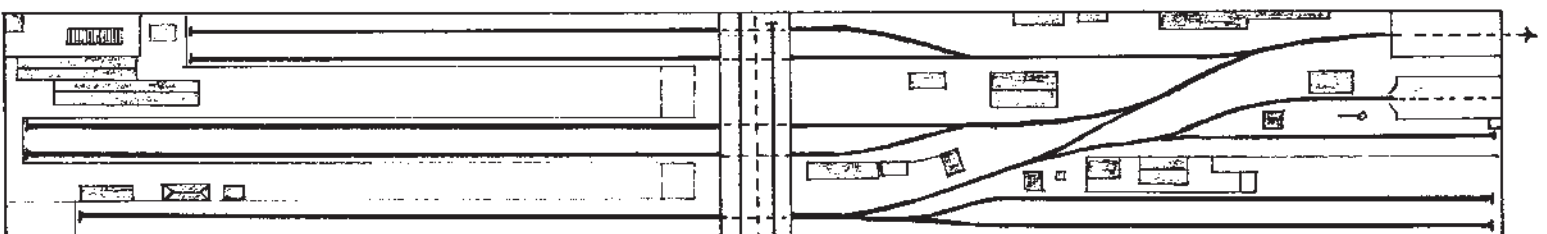
My desire to achieve realism led me to construct my list of 'dislikes', and perhaps at this stage I should apologise to all those modellers (who are probably much more skilful than I) whose efforts I have so often mentally criticised.

I disliked, for example, the use of bright, rather than subdued, colours and buildings which appeared to sit on, rather than being set into, the landscape.

I found a particular dislike for painted backscenes which were not up to the standard of the rest of the railway and where no attempt was made to disguise that very difficult feature – the point at which the three dimensional railway meets the two dimensional backdrop.

I also criticised obtrusive baseboard joints, track which had not been carefully ballasted and painted, and electrical feed wires being so obvious because of the large blobs of solder securing them.

It is, of course, so easy to be an armchair enthusiast, just observing and commenting on other people's handiwork. When I found myself occasionally thinking: 'I could do better than that', I knew I had to prove it by building



Right: Ashminster station showing a rather rusty Victorian gents toilet, a Wills kit. Posters on the retaining walls add life to the scene.

Below right: a Dean Goods-hauled train of clerestory coaches crawls through the tunnel and past the signal box – a Ratio kit.

my own layout, trying hard to avoid all those dislikes.

So what constitutes a 'good' model railway? This is something impossible to define as we all see things in different ways. Unlike experienced club modellers who build a layout primarily for exhibition purposes and who know that it will be under continual public scrutiny, the beginner designs and constructs his model for his own pleasure and to satisfy his own creative desires.

I am a great believer in the school of thought which says: 'if it looks right to me, it is right'. My advice to the beginner is to listen to any constructive criticism, but never forget that it is your railway and you should build and run it in the way that gives you the maximum pleasure.

Ashminster

The purpose of writing this article was to outline my initial thoughts leading up to the decision to build the layout. Lack of space and time precludes a detailed description of the many aspects of planning and construction. However, a brief summary might be of interest to readers.

I had opted to stay with 00 gauge because of its size, the considerable trade support, especially the ready-to-run models, and the fact that expense could be kept fairly low. In the



absence of a spare room or loft, the only place I could accommodate a layout was in my workshop, and this dictated its size and shape.

I finally decided on a scenic section 10' long by 18" wide, split into two 5' boards hinged in the middle for easy transportation. In addition, there is a fiddle-yard approximately 4'7" long composed mainly of a four-track turntable. This enables trains to be turned

completely, without the need for uncoupling or handling. Considerable use has been made of well-known products easily obtainable (often at discounted prices) from many suppliers. Track and accessories from Peco, building kits from Ratio & Wills, control equipment from Gaugemaster and rolling stock from Hornby, Bachmann, Lima etc.

So did I manage to avoid those 'dislikes' in building the layout? Well, I tried very hard. For example, I avoided the backscene problem by surrounding the whole station area and yard with stone and brick retaining walls. I hid the baseboard joint in the centre of the layout under the overbridge which crosses the tracks at 90 degrees and which conceals the hinge blocks and hinges joining the two boards.

I spent considerable time in carefully ballasting the track with granite chippings (N gauge), painting the rails in a dirty rust colour and then overall weathering.

When it came to electrical feeds to the track, I sited them, if possible, where they would not easily be seen, and buried them in ballast and paint.

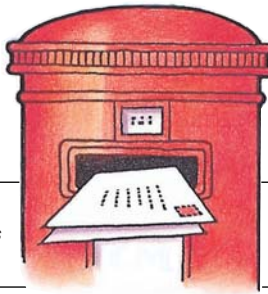
And finally

Having completed *Ashminster* and studied the photographs, I have become very critical of my own workmanship and can see many instances where I feel I could have done something differently and perhaps achieved a better result. I hope that, if I go on to build another layout, I will remember these points and my skills will gradually improve.

My thanks to those who have taken the time to read this article. If you are a beginner, I invite you to be as critical as you wish when looking at the photos of *Ashminster*. Please feel free to form your own list of likes and dislikes and maybe you will find these helpful when you decide to build your own layout.



READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

FAMBRIDGE TO SOUTHMINSTER

As I have made several trips along the Southminster Branch in recent years and know the area well (being an occasional visitor to the Mangapps Farm Museum), I had considered writing an article on the line for RM myself, that is until I saw the excellent feature on the subject by Steve Flint (RAILWAY MODELLER November 2005). So I was beaten to it, but well done Steve for a timely and informative composition!

However, may I be allowed to add some further points to what is a well researched piece. Although the single line from Burnham-on-Crouch does indeed approach the terminus generally on a straight alignment, there is a

reverse curve at the point where the connection to the yard is situated. Further, the run-round facility is contained within the siding area, not as part of the main line as shown. Access to Southminster yard is controlled by a ground frame allowing the once-weekly flask train to carry out its duties. The assertion in the text that the plan reproduces the track configuration is correct in respect of Fambridge but incorrect in respect of Southminster. The sketch will explain what I mean.

It is a shame that the flask train isn't pictured but, given the timing of the visit, this is understandable. I have however been able to find a couple of pictures of the overhead gantry crane,

the compound and the flask mounted on flatrol wagon 550020 (picture 1) taken in (I think) 1990, which you may consider interesting enough for publication, moreover because such pictures nowadays would be near-impossible to obtain. Access to the area in these days of heightened security would almost certainly be denied.

A small point but the overhead crane is actually offset relative to the siding to allow road access for the flask lorry on the side nearest the main line. (See picture 2.)

A somewhat surprising omission from the useful sources listing is *The Southminster Branch* (Farm Publications) written by Dennis Swindale in 1981. This excellent little softback book gives a comprehensive potted history of the branch and contains much useful information on the nuclear traffic.

There is also a video, *Liverpool Street to Southminster* (225 Productions) giving a cab ride over the entire branch.

MYLES MUNSEY

I was interested in the article on the above as Southminster is my local station.

The track layout as drawn is incorrect as there is not a facing point when approaching in the down direction.

Flask trains, which run once or twice a week, have to pull forward into the passenger platform before reversing into the yard, where the locos (usually two DRS Class 20s or Class 37s – sometimes one of each class) run round the train of one or two flask wagons, which are then pushed into the secure compound for loading.

An additional siding was laid for possible grain traffic, which has never materialised and stops just short of the goods shed which was demolished, along with all but the station master's house many years ago. There are no passenger waiting, toilet or ticket office facilities at the station, although a small room is available for 'one' train crews.

PAUL GOLDSMITH

TOPICS, VARIOUS – 1

Oh dear! What a frightening thought that Colin Chisem may be tempted to break up the absolutely superb *Tapley*, RM November 2005, to reclaim the baseboards for a further, future project.

On glimpsing the cover picture my daughter exclaimed 'it looks real' to which I concur, well excepting the tension-lock type coupling on the front of the loco, but I particularly liked the lower picture on page 702 and that wonderful tree to the left and framing the shot. For goodness' sake Colin do at least try to sell it on before moving in a wrecking crew: it is a work of art in its own right just like any quality painting.

Moving on from the theme of 'selling-on', here in the far-flung South West it is difficult to find different layouts for exhibitions without incurring prohibitive transport and travel expenses, and I have from time to time wondered if there was any way in which some sort of exchange scheme between North and South for club layouts might be feasible; anyone got any ideas whether this would be either popular or workable?

Now, oh bother! I am sorry, but reading through my article on *Curyford* I realise I have included a 'mental sideslip' having noted that I used a Branchlines kit to update the G6 chassis whereas it was an South Eastern Finecast set of etchings. My apologies.

Subsequently to writing the article, I actually caught myself out by buying a Branchlines kit to improve another G6 (this time EM-LSWR) only to be puzzled why it seemed unfamiliar with different axle spacing, until the penny dropped. This is specifically for the Hornby/Wrenn SECR R1 whereas the Finecast etchings are to replace the Hornby/Wrenn chassis for which the old Wills body was made to suit; not perfect spacing but quite close.

Referring to the letter from M. Hollyoake in the December issue about Model Gift Vouchers, I think this is a jolly good idea. A long time ago, once the Hornby tinplate had gone and I was trying to build a turn of the (19th-20th) century LSWR model with scratch balsa-wood coaches, the only 4mm present my parents ever came up with was a kit for a 1930s petrol tank wagon (the one on *Curyford* re-lettered POOL). Perhaps as I did not use it actively they gave up on this kind of gift, while vouchers could easily have overcome such difficulties.

Finally, where have the Romford RP25 15mm 10-spoke driving wheels gone? I would like to improve my B4 dock tank, too.

DAVID CURTIS

TOPICS, VARIOUS – 2

John Deaves' letter (September 2005) shows how fast technology moves forward. I do not have a computer but the CD-ROM ran perfectly well on my DVD player, as do the previous discs. One plus is the screen is bigger than a computer screen.

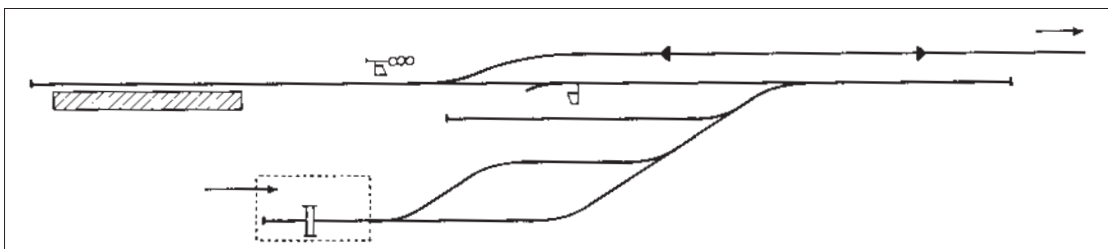
As for the hydrangea trees I will have a go. In the past I have experimented with gorse. The drawback is the sharp spines, but I got around that by snipping off the points with wire cutters.

While many modellers may not like the standard couplings being used on ready-to-run models, they should perhaps take a look at the original Tri-ang coupling and count their blessings.

A.J. ALLMAN

VENTNOR, loW

I am planning to model a layout based on Ventnor station (of which I have



fond childhood memories) and would be grateful for any photographs, useful references etc. to help me in this task. I am already aware of the several volumes by Andrew Britton on the island's railway network.

G. SOUTHALL,
14 Osprey Close, Guisborough,
Cleveland TS14 8HN.
Tel: 01287 634690.

A SCAFFOLDING SOLUTION

After losing my wife to cancer, I found myself very much on my own like so many other people these days, and realised I should start a new life, and this is where my favourite hobby came into its own i.e. a 00 railway layout.

It began by my purchasing some 30-odd buildings of various types, which took most of my time during 2004, but where to build my layout was the problem. Living in a remote part of Cornwall meant that I had built up quite a large amount of tools and other useful parts for emergencies in the workshop. Nevertheless, I decided enough is enough, and proceeded to empty the workshop to make room.

This was to fill two lorry-loads to be removed with another half a lorry-load stored in the garage. With help from various friends, we managed to re-decorate the workshop ready for building the layout.

A famous local company was discarding 10 sheets of 1/2" ply and 10 sheets of 1/2" plastic, a 'gift from the gods' for building my layout, without over-spending my budget.

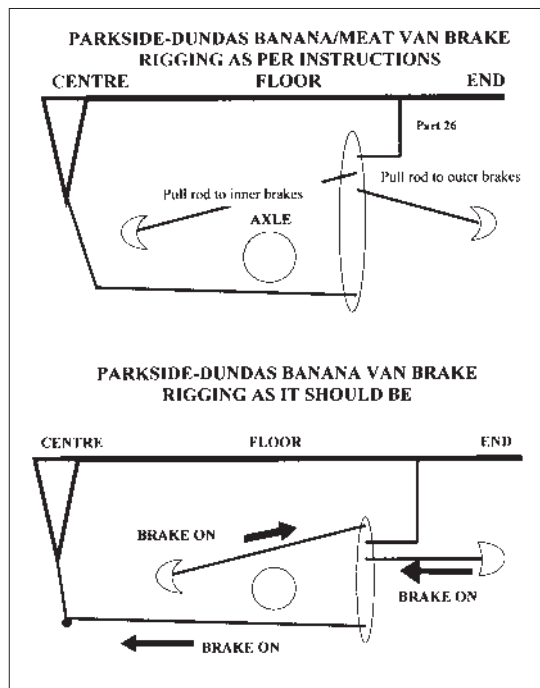
By January 2005 I was ready to start building, but while finishing two half-relief terraced houses, I had an accident with the glue and ruined a window. After thinking about the disaster and realising this would show up like a sore thumb when placed on the layout, I suddenly thought, to cover my mistake I would build scaffolding to scale with workmen replacing the said window and at the same time showing the firm carrying out the work with a 'McIntosh' billboard advertising the work being done as can be seen in the photos below.

This idea gave me scope for other scaffolding scenes, which I will complete at a later date.

DEREK WARREN

Below: a Metcalfe half-relief terrace house back as designed, and (right) Mr. Warren's scaffolding modification.

Photographs: Adam Warren.



PARKSIDE MEAT VAN BRAKES

I read with interest in the November issue the article by Len Weal on building the Parkside-Dundas kit of the Southern Railway Meat Van and would like to add a couple of comments.

My interest in building the kit is that I am fed up with almost every wagon on the Macclesfield Club layout *Hammeston Wharf* (see RM October and December 2000 and February 2001) being painted grey; I like a bit of colour in my life so will make up any kit where the end product is not grey.

For builders of the Banana Van there is a good 7mm scale drawing and notes by Ray Chorley that appeared in the *Model Railway Constructor* plans page August 1966.

I presume the underframe and running gear is the same on both vans and knowing a little about how the vacuum brake works from my days of working on BR I spotted an error in the assembly instructions. Too late I might add to correct it on the first vehicle I assembled. This is well illustrated in Len's brake gear/underframe photograph in his article. The part (No.26) that holds the rocker/brake pull-rod should fit into the centre of the three holes on parts No.28 & 29 not the end one: if you look at the brake gear carefully, when the brake is applied the long arm from the brake cylinder will

Above right: apropos Mr. Ashton's letter regarding corridor connections, here is the real thing, modelled for the official BR camera by Commonwealth-bogied Mk.I open first SC3102.

Photograph: British Railways (LMR).

pull on the bottom of the arms No.28 & 29 which in turn pull the outer brake yokes onto the wheels so the inner yokes must move in the opposite direction if the inner long arm yoke is fitted to the end hole. I hope the diagram makes it clear. This will overcome the problem with the longer inner pull-rod clearing the axle. I have written to Parkside-Dundas about this and the firm has agreed, and will amend the instructions.

Secondly, the drawing shows the van fitted with screw couplings not 3-link as supplied in the kit. There should also be a stretched Z-shaped bar fitted from the bottom of the brake lever rack to the adjacent W-iron. I made mine from a length of scrap brass from the edge of an etched brass kit and fitted them into place with superglue, which gives the brake lever rack considerably more strength as the part is rather vulnerable and can easily be knocked off or damaged.

Finally a tip about fitting those axleboxes without stitching them up with paint or glue. I 'paint' all the W-iron



faces first with a black permanent Magic Marker felt-tip pen first, I also do this with the rubbing faces of the brake blocks as they are almost impossible to get at after assembly.

Both the Meat Van and the Banana Van make up into beautifully detailed vehicles – and they are *not grey!*

HOWARD CLARKE

CORRIDOR CONNECTIONS

I read with interest the comments in the Readers' Letters section of the October issue of RAILWAY MODELLER by Les Caldwell with regard to close couplings, an issue with which I am totally in agreement.

I have often wondered why no-one appears to have produced a similar item as Mr. Caldwell suggests; fine corrugated rubber joints to go between passenger rolling stock. I can but presume that someone does, or did, manufacture such items that would 'slide' over the corridor ends of passenger rolling stock and allow them to be 'joined', with the fine corrugated section between allowing for easy movement around curves.

I am sure that many enthusiasts would jump at the opportunity to 'cover the gaps' between their passenger rolling stock. Manufacturers take heed! K.D. ASHTON

RAIL-EX TAUNTON SOUTHWEST

Somerset Modellers Club would like to thank everyone who made this year's show such a successful exhibition. Numbers through the door were consistent with our previous high numbers, and all the hard work was amply repaid with smiling faces and many positive comments received both on the weekend and since.

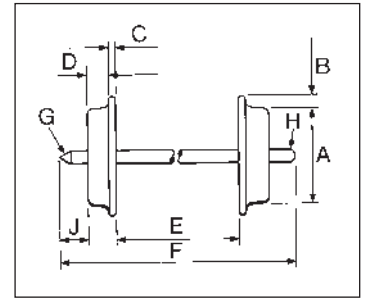
The winner of the St Christopher's Shield was *Haverling South* (2mm) and the Chairman's Shield was won by *Compton Park* (EM).

The planning for the 2006 show is already nearly complete – and please note, this will be held one week later, on 14 & 15 October. We thank our co-sponsors, Train World and Model Express, and finally all the visitors.

DAVID NELHAMS,
Exhibition Co-ordinator

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BR Mk.I Pullman cars in 00 brand new from Bachmann



When in 1960 a replacement programme was instigated for the Pullman cars working in the *Master Cutler*, the *Yorkshire Pullman*, the *Tees-Tyne Pullman*, and the *Queen of Scots*, an order for 44 new cars was placed with the Metropolitan-Cammell Carriage & Wagon Co. Ltd. Of these new vehicles, to Diagram 130, thirteen (Nos.311-323) were first class kitchen cars and the first of these, No.311 *Eagle*, has been released by Bachmann in the 'Blue Riband' series. Built with the profile and structural features of the BR Mk.I vehicles, they measured 64'6" over vestibule ends, spot-on at 258mm on the model. Likewise, the bogie centres of 46'6" scale out correctly at 186mm, all contributing to a good looking, well proportioned model.

Other important dimensional characteristics are the 5' long windows (compared with the 4' of the older cars) and these have been nicely modelled complete with bright surrounds and 'sliding' toplights.

The interior of the model features simply represented tables, chairs, partitions and working table lamps. The rather quirky interior layout at the toilet



end, which resulted in oddly-shaped tables, has been replicated.

Both roof and underframe are detailed to a high standard. On the former, water fill pipes stand proud of the surface, and the extractor fan vent covers are well represented. On the latter, the heating ducting is present and correct, and air braking equipment is supplied separately, to fit yourself if you wish, to haul your Pullman with a SLOA steam locomotive. A simple sketch is provided to show where the under-floor air reservoirs and actuators should be fitted, into their factory-formed holes.

The sharply-modelled Common-

wealth bogies carry rather conspicuous brake blocks out of line with the wheel treads. As the blocks are seldom noticed when viewing the real thing, and remembering the adage that small scale modelling is 'the art of omission', your reviewer would be tempted to remove them. Good features, though, are the red and yellow SKF roller bearing axleboxes. Couplings are tension locks in close-coupling NEM boxes.

The vestibule door commode handles are separately applied in bright metal and look a treat. Naturally, the lined lumber and cream livery is well applied and all lettering, including that

of solebar inscriptions, is legible. The Pullman coats of arms on the lower panels are, correctly, the 'new' horizontally styled versions.

Matching Mk.I Pullmans to be released later will be parlour first, and kitchen, parlour and bar second. All have lighting: the table lamps give off an effective glow when current is applied. (The lamps were largely superfluous on the real things, as they were lit by fluorescent tubes.)

Car No.311 *Eagle* is in the National Collection, presently outbased on the Bluebell Railway and in use as part of its premier dining train.

For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

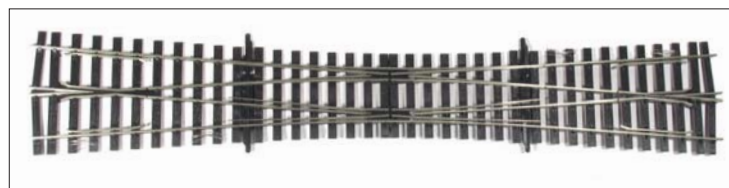
PRICE
ref.39-280, £25.95

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

New Peco 0 gauge double slip now available

Peco has released its long-anticipated double slip in 0 gauge. The precision-engineered component matches the existing diamond crossing in terms of 'footprint' and frog angle (584mm long overall and 8° respectively) but, unlike the diamond, the slip comes fully assembled, in one piece. The sleeper mouldings exhibit very good detail, as do those for the chairs. Rail is bullhead code 124.

The radius through the curved sections is 72": on test, a Fulgurex model



of a French 4-8-4T, with fairly rigid long coupled wheelbase, traversed this part of the slip without fuss. The points have the famed over-centre spring

arrangement, to keep the blades pressed against the stock rails, and the slip will accept the standard PL-10 point motor; two are needed, of course. The

slip is ready-wired for switching live frogs. Clip-on accessory switches are also under development.

For 0

MANUFACTURED BY
Pritchard Patent Product Co.,
Underleys, Beer, Seaton, Devon
EX12 3NA

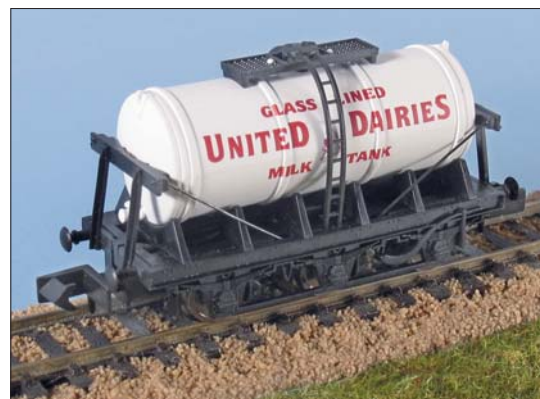
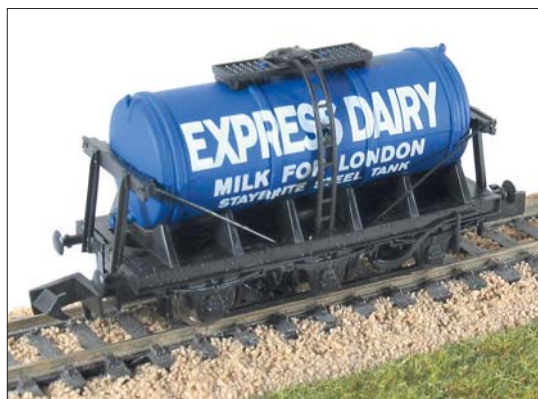
PRICE
ref.SL-E790BH, £75.00.

Six-wheel milk tanks and Dogfish ballast hoppers in N from Dapol

Although these two attractive new vehicles make you think 'Great Western', they do not seem to follow precisely any of the GW Diagram numbers illustrated in J.H. Russell's *Great Western Coaches Appendix Volume 2* (ie. 039, 042, 053, 054, 055, and 058). Neither do the models quite resemble the Derby-built tanks to Diagram D2173, built to a BR (LMR) design in 1950. As our photographs show, they are exquisite little models, crisply moulded and sharply printed. The tanks feature end discharge points, lifting lugs, ladders and landing, filler lid etc. The tank mounting chocks and end stays are well replicated, complete with wire stays, but the actual retaining straps, by necessity of the small scale, are moulded on to the tank and do not stand clear of it and attach to the solebar in the usual way of the prototypes.

The six-wheeled underframe is modelled in sharp relief with visibly engraved spring leaves, two brake-blocks per wheel, and a very fine flat-section tiebar connecting the axleguards. The curly brake levers at the right-hand ends are reminiscent of the aforementioned GW Diagrams 053, 054 and 055.

The photographs speak for the



excellent painting and printing. Fleet numbers, Dairy or Railway, are not carried. The Express Dairy blue looks correct to our eyes, although a senior colleague remembers a much darker shade. The red and white 'glass lined' UNITED DAIRIES tank with its distinctive 'caps and small caps' type style is certain to awaken many memories. Robert Hendry in *British Railway Coaching Stock in Colour* notes of milk tankers, that: *by the time they had been loaded, sent many hundreds of miles, discharged and then internally cleaned, there was little time for external clean-*

ing, so the modeller's vision of spotless milk tanks is far removed from reality. Was there ever a more compelling invitation for a bit of discreet weathering?

The models run very freely and have no problem in negotiating 1st radius Setrack curves. Standard N couplings are fitted.

Also new are ZFV Dogfish ballast hoppers, finished in contemporary liveries (note the post-BR style of Overhead Live Wires warning flashes) as DB993024 with grey support frame, and DB992938 with orange supports and vacuum brake cylinder. Both pro-

types were built in 1959 by Metro-Cammell.

The models are finely detailed, with excellently-produced handbrake and hopper actuating wheels. The hoppers themselves have very good detail inside and out, and the ballast chutes beneath the solebars are angled back towards the centreline of the wagon. Under a glass the chequer-plate pattern on the upper surface of the floor at each end can be made out – well done Dapol!

The Dogfish will be offered with no fewer than 10 fleet numbers and, doubtless, other dairy companies will be honoured with the six-wheelers.

For N

SAMPLES SUPPLIED BY
Dapol Ltd., Gledrid Industrial Park,
Chirk, Wrexham LL14 5DG

PRICES
milk tank – £12.99ea
Dogfish hopper – £10.75ea

WHEEL DATA
B. 0.5mm, C. 0.7mm, D. 1.3mm,
E. 7.4mm.



Latest Peco grain hopper in N



Peco has released the latest in its range of four-wheel bulk grain wagons in N, the prototypes of which were built in large numbers in the 1960s by wagon lessors BRT. Many carried advertising placards celebrating Scotland's finest export, as the fleet was dedicated to grain flows from East Anglia to Distillers group distilleries in Scotland. They have since been superseded by more modern wagons.

The Peco model has proven long-

lived too, first being introduced in 1969. This is a new advertising placard, correctly reproducing the lower case 'old'. The real wagons lasted until the 1980s, so the models will be at home on quite a few layouts.

MANUFACTURED BY
Pritchard Patent Product Co.,
Underleys, Seaton, Devon EX12 3NA

PRICE ref.NR-P63, £5.95.

Hornby Flying Scotsman in 00



Hornby has released its new A3 Pacific in the livery of the class's most famous member – possibly the most famous British locomotive ever. 4472 *Flying Scotsman* is presented in the style of finish the real thing displayed when taken into the custody of the National Railway Museum. Note, therefore, the anachronistic LNER livery with German smoke deflectors, post-BR overhead warning flashes and all – but what a fine model she makes...

For 00

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE
ref.R2441, £99.99

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Brand new private owner wagons in N from Graham Farish



Seven newly-tooled 9' wheelbase wooden-bodied private owner wagons are now available. These consist of four 5-plankers, three 7-plankers and one 8-planker. As readers will know from John Arkell's recent series on these vehicles (RMs August, October and December 2005), private owners varied in length and width over time; these models match the 16'6" over headstocks of the 1923 standard Railway Clearing House specification.

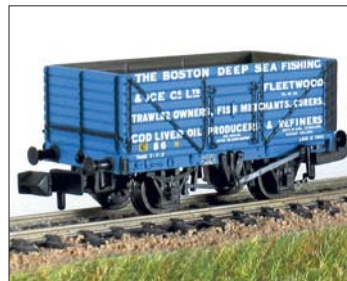
Outstanding new features of these are spoked wheels and brake gear assembled from around three separate components rather than moulded in one piece. The V-hanger and brake

lever really benefit visually from this treatment, although as they project outside the line of the solebar, fragility and vulnerability might be a problem. Standard N gauge couplers are fitted.

Plank lines, strapping, corner plates and solebar details are sharply reproduced. The solebars are moulded as part of the wagon body, allowing them to be body coloured if required.

The wagons have detailed interiors, which are always a different colour to the livery. The 5-plankers, two of which hail from the Bristol area, have side doors only, and the 'George Lovegrove & Co.' vehicle from Wirksworth features a convincingly modelled metal floor.

The 7-plankers have side, end and bottom doors, as has the Trawler Owners' 8-planker. Their attractive sky blue and white livery seems at odds



with their role of 'Cod Liver Oil Producers'.

This is a colourful selection of traditional wagons, moulded and printed to a standard which would have been unattainable in this scale not so very long ago. This extends to the wagon builder's plates on six of our eight samples, representing the work of Gloucester, Chas. Roberts and Ince.

Graham Farish does not use the 'Blue Riband' hallmark of its parent firm but, judging by these fine models, perhaps it should.

For N

SAMPLES SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICES

5-plankers £4.50ea
7-plankers £4.75ea
8-plank £4.85ea

WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



Fox Transfers for GBRf locos



As part of its extensive range of water-slide transfers and etched nameplates for 4mm scale, Fox Transfers has sheets (£6.45) for the GB Railfreight Class 66 (No.66 705) which was named to commemorate HM The

Queen's Golden Jubilee, complete with Union Flag emblem. Etched nameplates in the correct orange (£4.20 per pair) are also available. Fox also has sheets (£5.45) for the Class 73 'ladies', and etched nameplate sets (£4.20 per pair) for the four identities are also available.

For 4mm scale

AVAILABLE FROM
Fox Transfers, 138 Main Street,
Markfield, Leicestershire LE67 9UX

PRICES

In text. Please add 60p for UK inland
P&P on transfers/plates orders.

Precision Labels' latest

Precision Labels' extensive range of self-adhesive and waterslide transfers has been increased by some new Royal Train components.

The 7mm scale Royal Crest at right is nearly twice life size, but shows off the very fine printing and richness of colour. It is supplied in a pack of two along with two 4mm scale versions price £2.00; weatherproof alternatives are £3.00 per pack. The crest is that of HRH The Prince of Wales, and was carried on specials by 'Duchess' Pacific No.6233 *Duchess of Sutherland* from 2002 onwards.

Additionally new for Royal Train steam locomotives are metallic foil nameplates for No.6233 (see January 2005). Also air brake hoses, built from painted Heljan spares, are available to enhance this 'Duchess' and also the new Hornby *Flying Scotsman* - reviewed overleaf.

Precision Labels has sourced a supply of 2thou latex rubber, designed to span the gap between the rear of a steam locomotive cab roof and the tender front. Intended for 00 and more realistically 0, a 250mm x 150mm sheet is priced £2.95.

Precision Labels products can be sourced from stockists such as Frizinghall Model Railways of Bradford and The Alton Model Centre, or alternatively through the company's website (www.precisionlabels.com).



For 4mm & 7mm scales

SAMPLES SUPPLIED BY
Precision Labels.

AVAILABLE FROM/PRICES
In text.



Cork, Blackrock & Passage composite 'scratch aid' body kit in 4mm

Worsley Works has recently added to its range of 'scratch aid' etched brass body kits in 4mm scale a first/third composite as used by the 3' gauge Cork, Blackrock & Passage Railway. (We imagine that freelance narrow gauge modellers may be attracted by these elegant fully panelled coaches, which scale out at 143mm long and 26mm wide.)

As usual, the kit consists of sides, ends, and floor unit, plus body mounting brackets. All components have been very nicely etched – panelling and beading is well defined and the half-etched areas are very even.

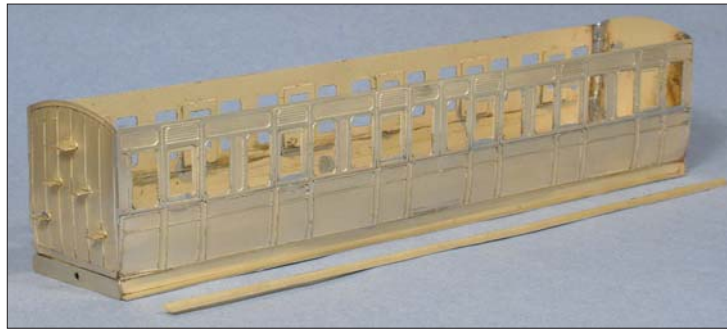
The sides are quite complex: the upper and lower sections are separate – the lower part overlaps a half-etched strip at the base of the upper section, thereby creating three levels of detail.

The droplight frames are separate parts which are fitted inside.

The tumblehome must be formed to match the lower profile of the ends.

The ends are panelled, and one incorporates roof access steps. These fold up from one piece and fit through slots in the end.

Reinforcing ribs fold up from the floor, while the solebars (with fold up



lower flange) and buffer beams have to be added. Lower footboards are also provided; mounting brackets can be formed from the scrap edge of the fret.

Unfortunately, this standard form of frame does not seem, from published photos, to be correct for the CB&P stock: the solebar should be deeper, with no bottom flange, and showing prominent bolt head and/or rivet detail. The doors have individual upper steps, mounted on single struts. The lower footboard is suspended on relatively few supports a long way below the solebar.

The kit does not include glazing or

any interior detail, and there are no 'solid' details as castings – in particular lamp tops will be required. The builder must also supply the running gear, and wire for handrails and door handles, though the fixing holes are present in the lower part of the sides. The upper handrail holes will need to be drilled through the inner layer once the two halves of the sides are joined.

No material is included for the roof. The design envisages the roof fixed to the sides and ends, and the floor (with interior detail if required) removable. Permanently attaching the roof would usefully reinforce the sides.

There is no form of location to align the sides and ends, but they can be soldered together accurately if care is taken, standing them on a true flat surface. It is worth reinforcing the corners with a fillet of solder, though take care not to impede the fitting of the windows.

It is assumed that the builder will understand the techniques required, and follow drawings and photos to add appropriate details: this does not seem unreasonable for something sold as an aid to scratchbuilding rather than a complete kit.

Worsley Works now has a wide range of 'scratch aid' kits in scales from 2mm to 16mm. 50p (in stamps) plus an A5 SSAE will bring you a copy of the latest list: please indicate your area of interest.

For 4mm scale narrow gauge

MANUFACTURED BY
Allen Doherty, Worsley Works NG,
19 Douglas Road, Worsley, M28 2SR.

PRICE
£20.00. Please add £1.00 per order for postage & packing. (Please make cheques payable to 'A.Doherty'.)

Recent Hornby 'Thomas' items



Naturally we must concentrate on the detailed, new-tooled models that have entered the Hornby range but, for the festive season, it's good to remember the truly 'fun' items, too. Step forward, then, some of the recent additions to the firm's 'Thomas' fleet, namely the Class 35 now as 'D7101' (ref.R9097, £43.99) – un-named, but the buyer can add one – a three-pack of raspberry syrup wagon, ice-cream van and cream tank (ref.R9095, £16.99), and individual wagons such as the cream tank (ref.R9206, £5.99). Other sets and wagons are available too.

Finally, no 'Thomas' scenario could be complete without Bertie the Bus (ref.R9096, £9.99), the half-cab PSV

with whom Thomas had a race in one of the stories. The model is 128mm long, 40mm wide and 43mm tall – somewhat overscale in 4mm terms, but then he needs to be – and is powered by an AA-size battery (not supplied). The on/off switch is situated at the rear of the body. Fixed front wheels means Bertie can run only in a straight line by himself.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES in text.



'Junior' locos for 16.5mm gauge



Bachmann has released a couple of delightful freelance tank locos designed for youngsters, and we imagine that the firm has the 'Thomas' models from other sources in mind – although these 'Juniors' have no faces, an omission which could be a big plus for the over-fives.

The saddle tank 'GWR' No.311 is an outside cylindered 0-4-0T with a nod at the Cardiff Railway and wheels a bit under 4" in diameter. The livery and lining is redolent of the GWR and junior now has the chance to run his own 'absorbed engine' on dad's layout with out causing too much offence. The crossheads, slidebars and motion brackets are actually very good.

The red 0-6-0T No.2005 doffs its cap at no particular railway company, although its inside cylinder configuration with approx 4 1/2" wheels and approx. 11 1/3" wheelbase gives it a satisfying 'colliery branch' sort of look.

Both locos have 'brass' spectacle rims and certain boiler fittings, full bunkers with coal rails and lamp irons front and rear. Tension lock couplers are fitted at both ends.

Performance is good, if a bit noisy, but is smooth and controllable.

In our opinion, these little engines will give immense pleasure to the more

discerning pre-teens. You might also think that they would provide a useful resource/mechanism for freelancers and 0-16.5ers, but wait.

At the time of writing we have dismantled and re-assembled only the green loco. Its design and construction is quite unlike anything we had seen before. One is tempted to use the phrase 'fiendishly cunning'. The plastic body is in several parts which interlock and snap together. It's best if you know in which order. The axles run in a metal chassis block and are retained by a plastic keeper plate. Into this chassis fits the motor/gearbox unit which is entirely enclosed in a plastic case which fits closely inside the loco body. After an hour or so of dismantling, you still haven't seen the motor. All you know is that it is mounted vertically and drives the front axle through plastic worm and gear wheels. No DCC capability is present.

Don't think of dismantling No.311 if it is a present for a young person.

SAMPLES SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE £24.95ea.

New from ZTC – 505 entry level Master Controller for DCC

In last month's issue, on p.824, we announced the arrival of the latest digital command controller from ZTC, the model 505, which was due to be launched at the Warley Show along with other new features.

The case is manufactured from aluminium and steel, with the ergonomically laid out controls produced in the now familiar trademark style of stainless steel. Use of this metal means they can be kept clean, which is important for components that are handled regularly.

All the silver-grey push buttons are a sensible size, clearly labelled, and have a very positive action. They have not been crowded into a small space, but laid out in a similar manner to the firm's 511 Master Controller.

Like the 511, the 505 offers a simple and comprehensible control interface whilst maintaining considerable versatility. The same style of operation has been maintained, in that each control feature still only requires two button presses, plus the relevant address, to accomplish all of the driving features. Appearance is not everything, but the proven layout of the main controls, simulating both steam and diesel cabs, the simple group of buttons, and the



soft blue back-lit liquid crystal display (LCD), with words in plain English, is very appealing.

By adopting a similar control philosophy and layout on both products, ZTC has made it possible for the modeller to begin with DCC using the mid-range 505 that is not only versatile but also can be easily upgraded subsequently

to offer performance similar to the 511. All that is required is the simple addition of a plug-in memory device, ensuring that product obsolescence is a thing of the past.

Technically the 505 out-performs all other budget entry level controllers currently on the market: it has a genuine 3 Amps continuous DCC output

power without overheating, and can deliver 3.5 Amps for up to three seconds. Naturally the output is short-circuit protected.

In use, up to 12 locomotives can be controlled at any one time, from a maximum of 9,999 addresses. The controller also has ability to operate up to six independent functions (F0 to F5 inclusive).

The controller will programme all NMRA-conforming Configuration Variables (CVs).

However, unlike the 511, the 505 controller does not support Zero 1 or provide smoothed or PWM DC output for analogue locos, nor does it offer Simulation Control. Careful scrutiny of the 505's specification will reveal a number of other reduced or missing features, but that is what enables the price to be reduced to less than half of the 511.

For Z to G

MANUFACTURED BY
ZTC Controls Ltd., 24 Chilwell Street,
Glastonbury, Somerset, BA6 8DB.

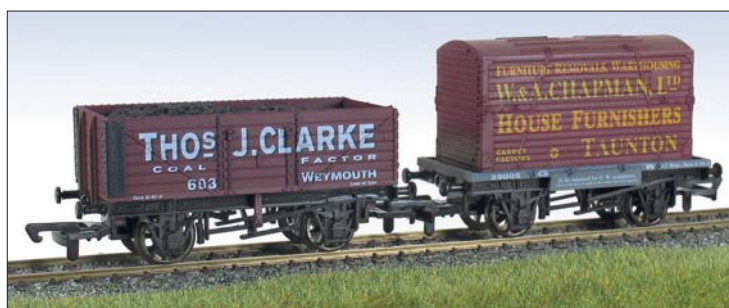
PRICE
£199.00.

Latest selection of wagon commissions in 00 and N from Dapol



The West Wales Wagon Works has commissioned two new Private Owner wagons from Dapol in 00, namely 'New Cross Hands' of Llanelly and 'W. Vincent' of Bristol. The former is a run of 143, and has random fleet numbers in the 390-399 range. Price £8.80 singly, £8.50 each for two or more. The latter is a run of 160 to mark the Shirehampton MRC's inaugural exhibition, held last October. Price £8.30 singly, £8.00 each for two or more. *The West Wales Wagon Works, Valentine House, Brynleri Close, Adpar, Newcastle Emlyn, Ceredigion SA38 9NP.*

Ballards' latest commissions span 00 and N, namely 'H. Syrus' of Hastings and 'F.W. Butcher' of High



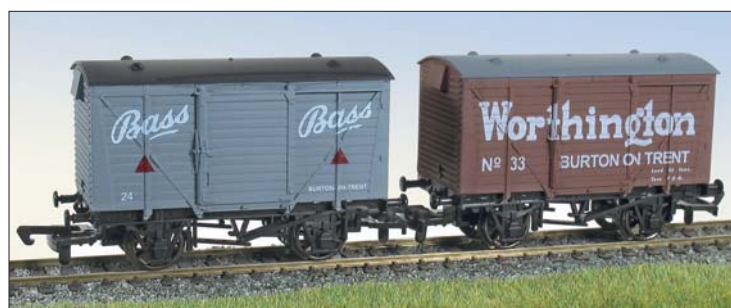
Brooms respectively. (See RAILWAY MODELLER March 2003 for the 00 version of the N one.) Price of each is £8.50, P&P £1.00 per order. *Ballards', 54 Grosvenor Road, Tunbridge Wells, Kent TN1 2AS.*

Wessex Wagons has four new commissions, all in 00: 'A.F. Tapp' of Dunster (192 in run); 'A.F. Chainey' of Yeovil (164); 'Thos. J. Clarke' of Weymouth (210); and GW conflat with 'Chapman' of Taunton container (270);

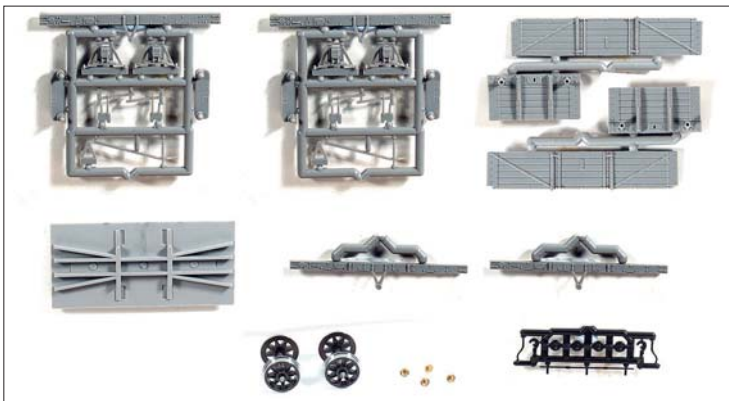
this is the firm's first commission of this type. Prices are £8.00 each (£12.00 for conflat & container) plus £1.00 P&P for a single wagon and an additional 50p per wagon thereafter. *Wessex Wagons, Narnia, Flaxpool, Crowcombe, Taunton, Som. TA4 4AW.*

The Tutbury Jinny has revisited its two-pack combinations of 'Bass' and 'Worthington' beer vans – see RM June 2003 – but with different fleet numbers, 24 instead of 29 on the former and 33 for 3 on the latter.

This time the run is limited to 200 sets, priced £14.99ea plus £1.00 P&P if not bought from the shop. *The Tutbury Jinny, Tutbury Mill Mews, Tutbury, Nr Burton-upon-Trent, DE13 9LS.*



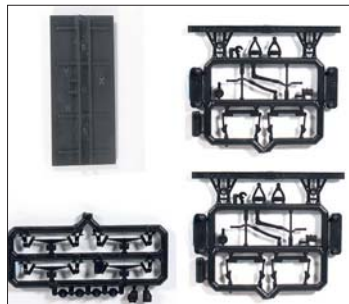
New Parkside Dundas kits



New to this extensive injection moulded wagon kit range in 4mm scale is an RCH 1923-specification five-plank wagon with fixed ends and steel floor. Such vehicles were built in numbers to carry aggregates, often used (ironically) in the road improvement schemes which were put into place after WW1 due to the rapid increase in road transport – especially road freight haulage. Many wagons made it to the 1960s.

The kit (ref.PC75) is based on a Chas. Roberts-built wagon, and exhibits all the fine detail and crispness of mouldings that we expect from this manufacturer. Interior detail is present too, and whilst the plain floor looks a little odd to eyes accustomed to planked versions, it too has subtle grooves representing panel joints. Similarly, solebar, spring and other undergear parts are well defined. The kit includes 16.5mm gauge Romford spoked wagon wheels.

Also new, and for the contemporary railway enthusiast, the chassis from the VEA van – see RM September 2005 – is now available separately (ref.PA30).



The components allow the conversion of suitable other wagons to air brake format with FAT19 suspension. Headstocks and wheels are not supplied.

For 4mm scale

SAMPLES SUPPLIED BY
Parkside Dundas, Millie Street,
Kirkcaldy, Fife KY1 2NL

PRICES
RCH 1923 five-plank – £7.25
VEA chassis – £2.75.

New chassis for 9mm gauge

Following the success of its 0-6-0, Avalon Line Models is planning to expand its range of ready-to-run 9mm gauge chassis with a long wheelbase 0-4-0 (ref.ALC4-9, £59.50) and also an 0-4-2 (ref.ALC3-9, £59.50).

Acknowledging that many modellers are not keen to assemble a mechanism kit, Avalon has again opted to market these units ready-to-run. They are hand-built to order and delivery can be from four to six weeks.

The 0-4-0 is 54mm long, 22mm high, and 27mm over cylinders, with a wheelbase of 20mm. It was designed to suit the Springside 09 body kit for the 18" gauge Horwich works locos, hence has no flywheel as there is no space; the transmission is at the rear.

The dimensions are very similar to the Ibertren 'Cuckoo' but the chassis is not identical or intended as a direct replacement in all applications.

The 0-4-2 is 63mm long, and 22mm high and 27mm over cylinders, with a driving wheelbase of 20mm. It has the transmission at the front, within the cylinders, and is fitted with a flywheel.

In each case, the main chassis is a complex one-piece whitemetal casting, with the cylinder block front and sides as a separate piece.

The disc wheels have balance weights cast in, and blackened tyres with a comparatively fine flange and a wide tread – a good practical compromise between appearance and reliable operation.

Power comes from a small five-pole open frame motor which drives through brass spur gears to a layshaft along the centre line, carrying brass worms which mesh with plastic gears on the axles.

The motion is etched nickel-silver – coupling and connecting rods,



crosshead, slide bars, and motion bracket, but without valve gear. The connecting rod naturally 'drives' on the rear wheel.

The wheels are insulated on the axle with a plastic centre bush, and current collection is by fine phosphor-bronze wire wipers on the top of the front and rear wheel treads.

The original 0-6-0 (ref.ALC1-9) remains available, but the price is now £61.50. Please note the new address.

For 9mm gauge narrow gauge

AVAILABLE FROM
Avalon Line Models, Hanton Farm,
Boulston, Haverfordwest,
Pembrokeshire, SA62 4AG
howardmartin@supanet.com

PRICES in text. Prices include UK post & packing. Cheques should be made payable to 'H.Martin'.

WHEEL DATA
B. 0.5mm; C. 0.8mm; D. 1.9mm;
E. 7.6mm.



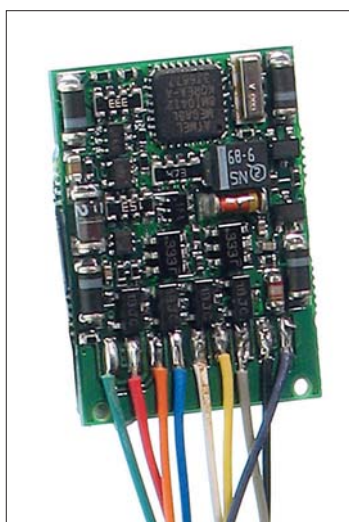
New Silver series DCC decoder from Lenz

After the successful release of the advanced Gold series Digital Command Control locomotive decoder, Lenz is proud to present the new Silver series version (ref.L10331). This has all the features and the same high-end motor management that has been well proven with the Gold series but recognises that not every user needs facilities such as the SUSI interface (which provide sound and other external auxiliary functions), RailCom, and Uninterruptible Signal Processing (USP). The result is a physically smaller device, and a significantly lower price.

The Silver decoder measures 23mm x 16.6mm x 3.5mm, and comes with a cable 80mm long fitted with a NEM652 eight-pin dual in-line plug. The circuit board is single-sided so can easily be secured within a loco using a double-sided sticky pad (supplied).

Full instructions for installation and use are provided, in the form of a 56-page (75mm x 105mm) booklet; though this does include the full documentation in German, English, and French!

The maximum continuous current carrying capacity is 1.1A; the motor output is permitted to peak at 1.8A.



There are four function outputs, each capable of 100mA.

As usual, the decoder has a programmable locomotive address, either basic or extended (1–9,999) and is selectable for operation on 14, 27, 28 or 128 speed steps. It has adjustable starting voltage, separately programmable acceleration and deceleration,

and optional back EMF (feedback) control, for constant speed under load and up or down hill. Minimum, mid-point, and maximum speeds can be set, with the device automatically creating a curve from these givens. Alternatively, a user-defined speed curve can be loaded to replace the default.

It also supports advanced consist-ing for multiple unit capability and programming on the main line (operations mode programming).

It will run on plain DC, automatically recognising the supply. (This can be disabled if desired.)

The decoder is fully protected against short circuits, overloads, and overheating.

It has high frequency (23kHz) motor control, and also the option of setting a constant braking distance if the controller is turned to 0 irrespective of the speed at the time – this is also designed to work together with the ABC braking protocol (switchable) to give guaranteed stopping locations in conjunction with signal indications. This also provides for reducing speed at caution signals. Used together, very realistic automatic slowing down and stopping at stations can be achieved.

Push-pull operation with change of direction and accurate stopping is also facilitated.

Function 3 halves the speed, to give finer control when shunting; the starting and braking delays, programmed and constant, are automatically disabled when shunting mode is selected. Function 4 allows these delays to be switched off and on in normal use.

A range of special lighting effects can be programmed for the auxiliary functions – Mars light, gyro-light, strobe, and double strobe – not quite as many as the Gold decoder, but enough for many applications.

The auxiliary functions 1 to 8 can be assigned as desired to the switches (function mapping). Functions 9 to 12 are not supported.

This unit will eventually replace the 1014, 1024, 1025, and 1035 decoders.

Overall, an impressively specified device, attractively priced.

AVAILABLE FROM
MacKay Models, Studio 56/57,
Embroidery Mill, Abbey Mill Centre,
Seedhill, Paisley, Scotland, PA1 1TJ.

PRICE
£19.50.

Book Reviews

Private Owner Wagons

A fourth collection Welsh Anthracite

Keith Turton
Lightmoor Press, 120 Farmers
Close, Witney, Oxfordshire
OX28 1NR
280mm x 210mm 183pp
Hardback £19.95
ISBN 1899889191

In this fourth volume of the author's series on Private Owner wagons he deals with the wagons which were used in a single trade, namely the mining and distribution of Welsh anthracite, the 'King of Coals'. This differed from other Welsh coal in that it was a 'premium' product, much in demand all over the country and abroad. For example, virtually every brewery in England used anthracite and for modellers this can mean that a wagon from a South Wales anthracite colliery is perfectly appropriate on a layout based in East Anglia, Kent or almost anywhere in the country. A photograph of a 'Pwllbach' wagon at Minster-on-Sea on the Sheppey Light Railway rather makes the point.

The wagons themselves were also somewhat different from the PO vehicles found elsewhere in the land. They were mostly painted black, almost always had side and end doors and very rarely bottom doors.

The book follows the same general layout as Volumes 1-3, with a superb collection of photographs, official 'roster' and publicity shots and also working scenes taken at collieries, yards, depots etc. The pictures are well captioned and an excellent index (at the front) guides the reader easily through an impressive list of owners and operators. Where an available 4mm scale model is known of any wagon, the manufacturer is given, and other scales' suppliers are detailed on the back page.

The text is thoroughly researched and very interesting, covering not only the wagons but also the people and villages involved in this very specialised industry. Contemporary advertisements also add a flavour of the times.

This volume is a worthy addition to its three predecessors.

Jinty

Ivo Peters
Somerset and Dorset Railway
Heritage Trust, Midsomer
Norton South station, Silver
Street, Midsomer Norton, Bath
& N.E. Som. BA3 2AT.
180mm x 126mm 32pp
Softback Price see text
First published in the 1980s, this booklet was written by Ivo Peters in the style of Revd Awdry's 'Thomas' books. In this case, of course, the illustrations are chosen from the huge number of b/w photographs which Ivo Peters took on the Somerset & Dorset line in its later days. Thus the book is designed to please on two levels.

Two thousand copies of this little book have been printed and any profit from these will help the Trust as it forges slowly towards Chilcompton. The book is available for £3.50 from Midsomer Norton South station (open 10.00-16.00 every Sunday and Monday) or for £4.00 by post (address above) cheques payable to S&DRHT. All orders received before 6 March 2006 will include an entry form for the Trust's Jinty competition to win a free first class trip for two to Paris or Brussels on Eurostar.

Locomotives in detail 4

Maunsell King Arthur Class

Peter Swift
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.
248mm x 185mm 96pp
Hardback £16.99
ISBN 0711030863

The latest book in this excellent series deals with the famous Southern Railway Maunsell Class N15 4-6-0s which grew out of a relatively unsuccessful 1918 design by R.W. Urie for the LSWR and were seen in service until 1962.

The book also deals, inevitably more briefly, with the small wheeled mixed traffic S15 derivant, members of which

Below: Urie 'Arthur' No.30747 Elaine, leaving Basingstoke with a freight train for Southampton on 7 April 1956.

Photograph: Philip J. Kelley.

class also lasted well into the BR era. Drawings of both classes are included, S15 by the late Ian Beattie and N15 by our own Bob Phelps. These give side, top and front elevations of the loco and side views of two sorts of outside framed bogie tender. Only one type of each loco is drawn, and for the numerous and constructional and temporal variations, the reader must refer to the good selection of photographs. The inside framed Drummond 'watercart' eight-wheeled tender and the SR 3,500 gallon six-wheeled type for Eastern Section use are shown by F.J. Roche drawings which, although excellent, may pre-date more recent research.

The photographs include a good helping of colour ones, including a few pre-war which must be rare.

The Bure Valley Railway Souvenir Guide

Ted Cubitt
The Bure Valley Railway Ltd,
The Railway Station, Aylsham,
Norfolk NR11 6BW.
210mm x 145mm 28pp
Softback £3.00 incl UK P&P

The nine-mile 15" gauge BVR runs between Aylsham and Wroxham on the trackbed of the East Norfolk Railway's branch of 1880 which closed under BR in 1952. There are intermediate stations at Brampton, Buxton and Coltishall. The scenery is varied and interesting and the railway now carries over 127,000 passengers in a year.

Ted Cubitt's Guide (the fifth edition) begins with a map of the route and continues with an illustrated description of the line as it is today with details of the journey, the permanent way, operation, signalling and the various facilities offered to disabled and regular travellers. The highly distinctive fleet of locomotives, coaches and wagons is described and illustrated.

This is a well produced all-colour Souvenir Guide which can also be obtained by post from the address above.

The Hornby Book of Model Railways

Chris Ellis
Navigator Guides, the Old Post
Office, Swanton Movers, Melton
Constable, Norfolk NR24 2AJ
190mm x 210mm 160pp
Softback £15.00
ISBN 1903872154

Although this attractive book naturally majors on Hornby products, those who know Chris Ellis's style through the pages of his magazine *Model Trains International* will recognise in the content his practical 'small achievable projects' approach which has won *MTI* many friends over the years.

After a little history, an introduction to the Hornby range and much useful advice 'Before You Begin', Chris really gets into his stride with 'Building a Layout'. The plans include the tried and tested *Inglenook Sidings* and *Tuning Fork*. Subjects covered are lay-

out types, baseboard construction, gradients, track laying, ballasting, wiring and control, scenics and structures, ground, cover, trees and much else. Using and adapting the Skaledale range is naturally discussed, as is using card and plastic kits, 'cross kitting' and creating low relief buildings and 'flats'.

Detailing, modifying and maintaining locomotives and rolling stock is discussed and a final chapter on 'Practical Layouts' includes another attractive project, the *Westwood Light Railway*, which provides a continuous run and three sidings on a 4' x 3' board for maximum operational interest (play value?) in a small area.

The book is well printed in colour and will be particularly helpful for those who are detailed to steer young beginners into the creative side of the hobby.

73129

The Forgotten Caprotti

Phil Deane
Published by the author and
available from Midland Railway
Trust Ltd, Butterley Station,
Ripley, Derbyshire DE5 3QZ.
295mm x 200mm 49pp
Softback £7.95 plus £2.05 P&P

This is the story in words and pictures of Caprotti Standard 73129 from its construction in 1956 right through to the present day in working preservation at the Midland Railway Centre.

There are many photographs showing the remarkable transformation of 73129 from a Barry scrapyard wreck in 1972 to an immaculately restored working loco undergoing her first loaded test run in May this year.

One of the aspects of this loco which made it different from the average restoration was, of course, the Caprotti valve gear, and enormous care was taken in restoring and fitting the parts, with replacement gears being sourced in Malaysia and many other triumphs and set-backs before the loco moved under its own steam in May 2005.

When ordering the book from the address above, please make cheque payable to 'Standard Five Fund'. All profits will go towards keeping 73129 running and in the best condition possible.

Crewe Works

Narrow Gauge system

Edward Talbot and Clive Taylor
The London & North Western
Railway Society, 4 Ferrers Way,
Darley Abbey, Derby DE22
2AA.
270mm x 213mm 64pp
Softback £8.95
ISBN 0954695119

The first edition of this book was published in 1986 as No.5 in the Society's *Portfolio* series. It sold out almost immediately and has been OOP ever since. This welcome second edition, with revised text and more illustrations, was produced to coincide with the Crewe Open Days in September 2005. The railway was built to 18" gauge. In



Right: 'large logo' Class 37 No.37 025 stands at Inverness on 1 August 1984, with the 17.35 to Wick/Thurso.

Photograph: Steve Haynes.

recent years, through the manipulation of various scale/gauge combinations, the modelling of sub-2" narrow gauge systems has become feasible, and several innovative modellers have shown us the possibilities.

The book is richly illustrated with contemporary photographs and site plans. The latter are also track plans, mainly of the 'two rail' variety, and provide a wealth of information and inspiration for anyone considering building a 'works' layout in whatever scale.

After an introductory chapter describing the origins of the Crewe Works internal narrow gauge system, the topics covered encompass the Old Works, the New Works, the Deviation Works, the Track, the Wagons, Ramsbottom's Engines, Webb's Engines, and the demise of the system.

A list of locomotives and details of preserved items from the system is followed by a bibliography which concludes a well researched and produced historical account.

Copies are available from Sales Officer, LNWR Society, 33 Hayward Avenue, Loughborough, Leicestershire LE11 2PR. There is no charge for post and packing.

Engine Sheds in Camera

David Hucknall
Sutton Publishing Ltd, Phoenix Mill, Thrupp, Stroud, Gloucestershire GL5 2BU.
270mm x 198mm 144pp
Hardback £19.99
ISBN 075094191X

This is a wide-ranging collection of black-and-white photographs taken at motive power depots in Britain during the 1950s and 1960s, many of which have not been published before. The pictures are drawn from the author's collection and also from the work of H.C. Casserley, W.A.C. Smith, Ken Fairey and other highly accomplished railway photographers. The captions are generally interesting and informative, although O.V.S. Bulleid is somewhat overquoted, we thought, especially as one opinion is repeated.

The photographs are arranged in chapters which include subjects such as preparation and disposal, yard scenes, duties, interior views and, most interestingly, the crews themselves.

Although the book is an attractive concept, a few imperfections in its production served to irritate the writer. For example, in his Acknowledgments, the author thanks Nigel Mussett for the loan of his colour photographs of Weymouth shed. This knowledge naturally sent your Weymouthophile reviewer enthusiastically searching the pages for pictures which are just not present – even in monochrome!

Perhaps more seriously, there is evidence of a couple of images being distorted to fit the frame, a computer-age naughtiness which is most unwelcome when a steam locomotive or any other work of art is the subject.



The Right Track

Narrow Lines Extra Handbook No.4

Edited by Nick Wright
The 7mm NGA, Publications
Dept, 94 Cheltenham Road,
Bradford, W.Yorks. BD2 1QQ.
300mm x 210mm 31pp
Softback £6.00 + £1.25 P&P
ISBN 0954981103

This is the latest in a series of handbooks published by The 7mm Narrow Gauge Association. Despite its title (perhaps, in this context rather inappropriate and misleading) it is really an introduction to this attractive scale/gauge combination, together with a series of articles on different aspects of this branch of railway modelling, specially written by well-known and accomplished practitioners.

Brian Bassington discusses the 'art' of modelling, modelling 0-16.5 on a budget, and Geoff Farmer describes his *Hafod Fach* quarry diorama built for a competition. An excellent article on buildings and structures in this scale is provided by none other than Gordon and Maggie Gravett, and Paul Bentall shows that the animation of human and animal figures is a possibility and that not only the trains can move in 7mm scale. Nick Wright takes as his subject the weathering of stock and locomotives, and John Rumble and Brian Bassington tell how they built a fiddleyard baseboard (and leg!) from foam board.

The handbook is well produced with covers and centre spread in colour. The contributors are mainly successful in communicating with the reader their enthusiasm for and knowledge of this interesting branch of the hobby. The book is available by post from the address given.

Video Reviews

Right Track 3 DVD Painting, Lining and Finishing

The best way to learn any kind of fine, manual technique is to sit next to someone who knows what they are doing and watch; this DVD is the next-best thing.

Tony Wright, with an able contribution from his son Tom, explores another

stage of rolling stock modelling. Once you have made a kit or bought a ready-to-run loco or coach, you may want to enhance its realism by changing its name or number, adding weathering or doing a complete paint job including detailed lining.

Without going any further than the opening shots, the viewer who might be new to the hobby, can see what a suitable work area looks like. From then on, Tony and Tom inform us about materials and techniques in an enthusiastic and confident way. The possibilities of customising a pre-painted model or painting a bare metal model are covered more or less in real time, using the extended sequences to the full. It is all well photographed with adequate close-up work to show the finer details.

The commentaries are well planned and delivered in a relaxed and spontaneous manner. It is easy for the viewer to select the salient points and perhaps gloss over some of the incidental asides.

Plenty of time is spent showing and describing many modelling methods such as the use of paint, transfers and spray equipment. This is not a DVD to be hurried. Just occasionally a sequence seems laboured and the hand movements appear a little fidgety, but the valuable hints and tips imparted are born of the presenters' practical experience.

After Tony and Tom have demonstrated their skills, Ian Rathbone, a professional model painter, is introduced. The DVD goes up a gear and is now an inspiration and masterclass in model finishing. Using apparently simple but specialised tools and techniques, Ian performs a kind of close-up magic. He shows that with a very steady hand, good eyesight (or maybe some visual aids) and some investment in equipment, totally convincing and professional results are achievable. Ian advocates and demonstrates the use of three vital words: practice, patience and perseverance. There is, of course, a kind of skill-based 'X-factor' that only comes with time, but this view of the master at work is as good as it can get on a screen.

Some of the advice about tools, safety and technique is inevitably duplicated by the presenters, but in the 3hours 15minutes of this packed DVD there is more than enough substantive material to assimilate and satisfy.

There is a brief bonus track featuring the Hornby live-steam A4s; not wholly relevant to the main subject matter, but welcome none the less.

The DVD case includes a list of materials suppliers, but there is no wasted excess packaging. This must help to keep the production costs low enough to enable a £17.99 price (including postage and packing) to be achieved.

The product is available in DVD and VHS formats direct from: **Activity Media Right Track Series, 7 Conway Drive, Flitwick, Beds. MK45 1DE or visit www.activitymedia.co.uk.**

British Rail Remembered 4 – Special Edition

Train Crazy Publishing of Blackpool produces an extensive range of train videos and books, Blackpool tram videos, trams magazine and Manx Electric Railway videos.

British Rail Remembered 4 is a DVD all about Class 37 diesels in Scotland. It is in four sections: Passenger trains, Freight trains, Bonus footage and Whatever happened to...? The viewer will find the quality of images commensurate with the age and nature of the original stock. Some is from Super 8 cine and Hi8, but the VHS material redresses the visual balance. That said, the high standard of the content rules. Andy Mitchell's sparing commentary is informative to the newcomer but does not patronise the more knowledgeable. He is not interrupted by any unnecessary background music, indeed many might consider the rumble of the locomotives to be music enough. The stereo sound quality is fine; play it through some good speakers for best results, small television speakers will not do it full justice.

A short introductory sequence gives us loco numbers and explains about the Class 37 and 37/4. The passenger and freight train sections, from the 1980s and 1990s, are packed with lengthy shots of the 37s in action in some of the best British scenery available. Even family members with no train interest can enjoy much of what is on view.

A great variety of rolling stock provides much regional interest beyond the locomotives with some stock not commonly seen outside Scotland. The occasional 08 shunter sneaks in to perform its noble duties.

The bonus footage includes some shots of Class 20s on the Highland Line and it is easy to recognise their distinctive sound which is quite different from the mighty rumbling 37s.

The Whatever happened to...? section is a short compilation giving details of the subsequent life of some of the locos depicted.

The camera work of C.W. West, Nick Meskell and Ken White is combined into a coherent and nostalgic 80-minute DVD. Price for VHS or DVD £14.95.

As a bonus for fans of 37s north of the Border, Train Crazy has released *Scottish Class 37s volume 2* (ISBN 095480354X, £9.95), and has a further book on the topic in preparation.

Contact: **Train Crazy Publishing, PO Box 13, South Shore, Blackpool FY4 1TA. Telephone 01253 346005. www.train-crazy.co.uk or admin@train-crazy.co.uk**

INFORMATION

FROM THE RAILWAY MODELLER

Heljan ready-to-run 0 gauge 'Hymek' should be out before Christmas



On a recent editorial visit to a model railway exhibition held inside the Danish State Railways' Museum in Odense, Denmark, we had the opportunity to meet up with Heljan, which had brought along another sample of its new 7mm Hymek diesel hydraulic. This was the green liveried/small yellow

warning panel version and was equally stunning as the BR Blue pre-production version we previewed in our report on the Gauge 0 Guild Convention at Telford (RM November 2005).

There was still a bit of fine tuning to be undertaken, notably the radiator fan roof grille, which was still in brass, and



adjustments to the headcode panel glazing. Also correct pattern screw couplings were absent. Nevertheless

the model, numbered as D7039, looked every bit like the prototype it represents and we hope to be putting one through the RAILWAY MODELLER testing rig here by the time you're reading this (we couldn't bring it back with us, unfortunately!).

Although the prototypes were only in service from 1961 to 1975, we are sure this loco will be very tempting to many 7mm scale modellers with layouts outside that timeframe.

The outlook in this country for enthusiasts in 0 gauge must surely now be very good with the arrival of this quality model. We are convinced that as a pioneer in factory-finished ready-to-run 7mm scale locomotives, it heralds a new era in off-the-shelf availability.

Heljan UK, c/o Howes Models, 12 Banbury Road, Kidlington, Oxfordshire OX5 2BT. Telephone: 01865 848000. www.howesmodels.co.uk

Bachmann and Graham Farish news



Recently we were able to photograph some imminent arrivals to the Bachmann 00 stable. The Class 57 represents 57 301 *Scott Tracy*; as we closed for press a sample was received – see next month for review.

In addition to the Mk.I Pullman Kitchen (see p.56) we also expect to see others, including *The Hadrian Bar*,

very shortly. The Parlour First *Emerald* will also be reviewed next month.

For N, the **Graham Farish Class 66** was seen in EWS maroon, and could be in our February issue as well!

Bachmann Europe PLC, Moat Way, Barwell, Leicestershire LE9 8EY. Telephone: 01455 841756. www.bachmann.co.uk

Dapol M7s in N have arrived!



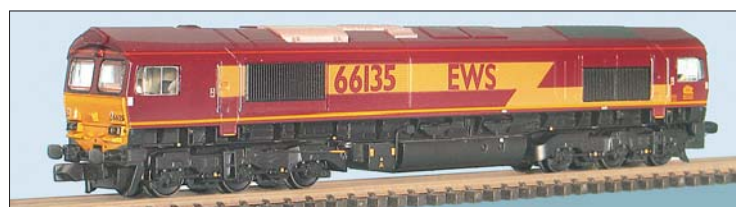
Just before we went to press with this issue, the N scale SR Class M7s arrived from Dapol. Naturally a full review will follow soon but, seeing the great importance of this release, we have stopped this news page for a picture and a few column inches.

Firstly, this attractive little model is that exceedingly rare thing, a pre-1923 prototype in N, nowadays quite rare in any scale, ready-to-run, come to think of it.

Designed by Dugald Drummond for the L&SWR, these 60-ton 0-4-4Ts were

actually Classes M7 and X14, totalling 105 and built from 1897 onwards. A couple were scrapped 'early', including No.672 which fell down the lift shaft to the Waterloo & City Line in 1948, but the class remained essentially intact and original until, when the writer was spotting them on station pilot duties at Waterloo in 1955 (18 seen), there were still 103 left.

Dapol Model Railways, Gledrid Industrial Park, Chirk, Wrexham LL14 5DG. Telephone: 01691 774455. www.dapol.co.uk



Magazine binders and binding services

The option of binding arrangements is again available for your magazines. Both types of DIY binders are advertised regularly in both RAILWAY MODELLER and CONTINENTAL MODELLER.

We can also arrange to have your copies stitched and bound into the standard case, complete with index. The binding, without the covers and advertisement sections, is £27.00 plus £4.73 VAT (£31.73). The price for binding with the covers and advertisements

is £32.00 plus £5.60 VAT (£37.60). Please remove all the staples and unwanted pages before sending the volume to the Editorial Office. Copies from earlier volumes can also be bound in this way. The binding cases are in red (CM) or blue (RM) material, similarly lettered in gold block with the title, volume number and year.

The closing date for binding 2005 volumes is 6 February 2006. The address is given on page 3a.

New for 2006 – second instalment



Southern Pride Models

The programme for 2006 headlines with the continuation of the BR Mk.II types, from the Ilcs (all variants including those with the distinctive GM roof vents), and on to the air-conditioned stock of IId/Ile/IIf with their many differences in roof/end/underframe details, and as a *pièce de résistance* the Manchester/Liverpool Pullmans.

The EtchMaster range of brass sides will be enlarged with the Mk.I Crewe re-railing support train, i.e. four differently altered Mk.I coaches.

In the pre-coloured Mk.I and SR EMU ranges, new liveries will be introduced, and those out of stock re-introduced. Hopefully the SR Bulleid range will also be re-introduced following new moulding tooling for roof and underframe details.

For interiors, many new seats and tables will be produced, including 1st Class open saloon double and single seats/tables, a three-seat for hi-density stock and specialist curved benches and two-seat and table cubicles for the Mk.I Bar/Griddle cars. For the Mk.II range the distinctive 'coffin tables' have been produced.

Southern Pride Models, P.O. Box 37, Kidderminster, DY11 6DS.
<http://www.spride.demon.co.uk>

Judith Edge Etched Brass Kits

After a spell producing mostly industrial types, Judith Edge Etched Brass Kits is returning to locomotives built for the main line companies and British Railways.



The latest release is an 0-6-0DE from the 1930s, built by English Electric and Hawthorn Leslie and the first with twin motor drive instead of the jackshaft arrangement. It was the forerunner of all locos of this type, down to the 08. Ten of these were bought by the LMS (7069-78) and one by the GWR (No.2). Two of the former eventually became BR 12000/1 and the GW loco survived to be re-numbered 15100. The kit includes parts for both varieties and is priced £48.00 plus £1.50 p&p.

One of Judith Edge's earliest kits was the LMS jackshaft 0-6-0DE. As only the second batch of these (12023-32) could be built from it, there will be a new kit – *right* – to build the earlier series (12003-22) in the near future. The price will be the same as the earlier kit at £56.00 plus £1.50 p&p.

The final new release is the first diesel shunter built by Hunslet for the



LMS in 1933. First numbered 7401, later re-numbered 7051, it worked on the LMS until 1939 when it was taken over by the War Department. After the war it was sold into industrial use and today runs on the Middleton Railway. The price is expected to be £40.00.

Judith Edge Etched Brass Kits, 5 Chapel Lane, Carlton, Barnsley, South Yorkshire S71 3LE.
Tel: 01226 722309

Port Wynnstay Models

In addition to its England loco plans (see November 2005 p.751), Port Wynnstay plans to add to its 7mm scale narrow gauge range a kit for the Festiniog 'Boside' bogie coaches 19 and 20. Patterns are also to hand for a kit for the North Wales Narrow Gauge/Welsh Highland/Festiniog 'Summer' coaches, WHR/FR Nos.23, 26, 27, 28. This will be to the original full height as built, with instructions to enable it to be cut down to Festiniog loading gauge as happened to the prototypes and so covers some five different variations of the coaches from the one kit. Couplings, paint, adhesive and lettering are not included in any of the firm's narrow gauge kits, but suitable 16.5mm gauge wheels are. The kits are produced with reduction of the gauge to 14mm (scale 2") in mind.

The earlier standard gauge range of 'body only' kits is slowly being upgraded to the 'everything except wheels and couplings' standard of more recent Port Wynnstay kits as time and finances allow. The purchaser will still have to supply paint, adhesive and lettering to all the kits.

There may also be several more Scottish wagons and vans. A North British hearse van, Glasgow & South Western cask wagon and a Great North of Scotland cattle wagon may appear when the patterns are complete, tried and tested and can be fitted into the schedule.

20 Willson Road Littleover, Derby DE23 1BZ. Telephone: 01332 774616.
www.portwynnstay.co.uk



RM Cup Competition 2005

Each January, RAILWAY MODELLER readers vote for the best articles published during the previous year. It could be about a layout, a review, a plan or a prototype – absolutely anything!

What did you find inspiring or particularly informative? Maybe something amused you or helped you solve a problem. Perhaps a memory was rekindled by a vivid description.

Every reader can vote. You might be a long-term subscriber or someone who has just started buying a few copies this year. Every vote is welcome and you will be entered into the draw to win your share of £1,000-worth of prizes! It could be £300 or £150, even runners-up will receive £50. The prizes are vouchers that you can spend with any of the retailers that advertise in RAILWAY MODELLER.

The contributor of the best article that you voted for will be presented with the RAILWAY MODELLER Cup. There is also a special extra cup for the best *Right Away* article for those, of whatever age, who are new to the hobby. The winner will be invited to collect the Cup at the Warley National Model Railway Exhibition at the NEC.

As promised last month, here are the entry form and details of the annual Railway Modeller Cup Competition. If you do not want to cut your magazine page, we are happy to accept a photocopy of the form, a postcard or even plain paper. Just make sure all the details requested on the entry form are provided. You can also contact us on railway-modeller@btconnect.com

When you fill in the form, enter the specific name of the article and not just the series heading. Please do not include any other correspondence on the same sheet as your competition entry.

All competitions must have guidelines and rules. We would like as many people as possible to vote, but multiple entries from the same source will be deemed invalid; the article concerned may be disqualified.

The closing date for the competition is January 31 and we will announce the result in the April edition of RAILWAY MODELLER.

Please vote now. The selections that you make help us to make the magazine better for everyone.

RULES

1. Readers will decide who is to win the competition by selecting, in order of merit, the six best articles and the favourite *Right Away* piece.
2. The RAILWAY MODELLER Cup and the *Right Away* Cup for 2005 will be awarded to the authors of the most popular articles.
3. Employees of Peco and their families are not eligible to compete.
4. Illegible or garbled entries may be disqualified.
5. The Editor's decision is final on all matters relating to the competition, and no correspondence will be entered into. Entry to the competition implies acceptance of these rules.

RAILWAY MODELLER CUP Entry Form

Articles in order of preference	Month
1 _____	_____
2 _____	_____
3 _____	_____
4 _____	_____
5 _____	_____
6 _____	_____

Right Away _____

Name _____

Address _____

When you have completed your entry, send it to:

Peco Publications & Publicity Ltd.,
Underleys, Beer, Seaton, Devon, EX12 3NA.
email: railway-modeller@btconnect.com

To arrive not later than 31st January.



Expo Narrow Gauge 2005

Expo Narrow Gauge, at the end of October, boasted a fine selection of layouts and trade stands which reinforced its reputation not only as the country's premier narrow gauge exhibition but also as an internationally significant event.

Visitors were noted from France, Belgium, Holland, and Germany, and indeed there were also layout exhibitors from all these countries.

It is therefore not surprising that many specialist narrow gauge suppliers use the event to showcase their ranges and announce new items.

Backwoods Miniatures

This firm is offering a ready-to-run American-style 2-6-2T for On30 (0-16.5), assembled and painted in China using the components from its own etched brass kit, and built onto the mechanism from a Bachmann Spectrum 0-6-0ST, so good performance is assured. Samples on show – *top left and right* – looked cleanly put together and nicely finished in plain satin black, and seemed amazing value at £145.00 complete. If you are interested, our advice is to grab one while you can!

Backwoods Miniatures, 11 Netherton Southside, Netherton, Morpeth, Northumberland, NE65 7EZ.

Telephone: 01669 630255
sales@backwoodsminiatures.com
www.backwoodsminiatures.com

Meridian Models

The ever-popular 'armoured' (ref.MM1) and 'protected' (ref.MM5) 40hp Simplex kits are now being offered ready-to-run, built and painted in War Department Light Railways green livery, priced at £80.00.

As standard a refurbished Jouef chassis is employed, but (subject to availability, and priced accordingly) an Arnold Köf can be used.

The Baldwin 50hp gas mechanical 0-4-0 is also offered assembled, painted, and ready-to-run for £200.00. The kit (ref.MM8) remains available, priced at £85.00 from 1 January.

The German 'Brigadelok' (ref.MM12) is newly listed as being available ready-to-run for £220.00, using a high quality Fleischmann chassis, albeit inside framed. Although made to special order only, examples in DFB black are usually available from stock; industrial versions can be custom built.

Meridian Models, 40 Moreland Avenue, Benfleet, Essex, SS7 4HB.
meridianmodels.rosa@talk21.com

Mercian Models

The long-awaited brass kit for a Festiniog England 0-4-0 in early form in 4mm scale is almost ready for release.

Mercian Models, 1A Market Way, Hagley, Stourbridge, DY9 9LT. Telephone: 01562 884800

MercianModels@amserve.com
http://www.modelrailways.TV

Bill Ferguson

Soon to be available, through Mercian Models is a range of resin-bodied Talyllyn and Corris items in both 7mm scale (to run on 16.5mm track) and 9mm scale for 18.2/18.83 track).

The TR proposals include locos Nos.1 *Talyllyn* and 2 *Dolgoch* – *right* – Brown Marshall coaches Nos.1, 2, and 3, two- and three-bar slate wagons, and spoil wagons.



The Corris list encompasses the Hughes 0-4-0ST and 0-4-2ST locos, coaches 1-12 – *above* – a four-wheel brake van, and quarry wagons.

Glyn Valley, Snailbeach, and Campbelltown & Machrihanish stock is also under consideration. Requests and suggestions are welcome.

Bill Ferguson, 34 Linburn Grove, Dunfermline, KY11 4LG. Telephone: 01383 624881
jw.fergusonky11@btopenworld.com

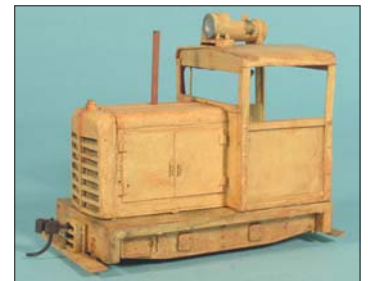
A Knight's Work

There are to be some new additions to the range of etched nickel-silver kits for early Festiniog rolling stock, only available through Mercian Models.

Test etches were shown for a four-ton flat wagon – *left* – a five-plank open wagon, a carriage wagon, a bogie ballast open – *bottom left* – a closed van with end doors – *bottom right* – and an iron open.

In preparation is a Park & Croesor iron open wagon, a FR long gunpowder van, a FR horse dandy, and a small four-wheel box water tank wagon; there will be more to come.

The kits include wheels and bearings, plus, where appropriate, a pre-formed brass roof and glazing material.



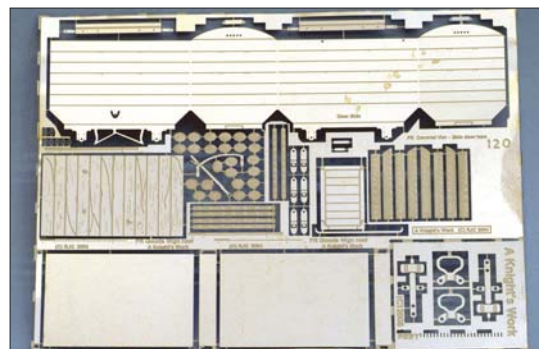
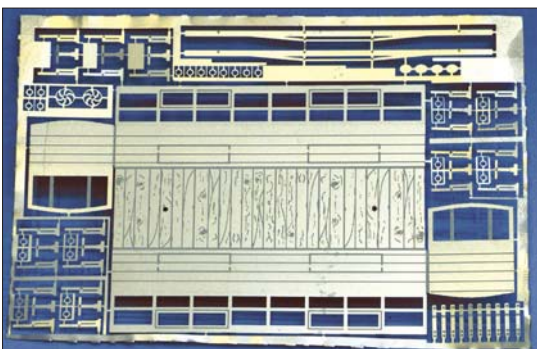
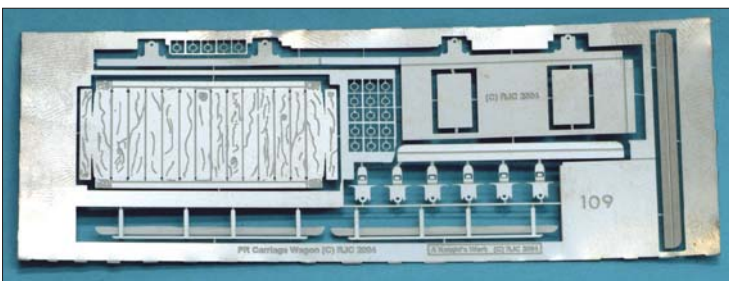
Smoky Bottom Lumber Company

Added to the range of highly detailed cast resin items is a freelance four-wheel diesel body kit – *above* – to suit the Bachmann On30 0-4-0 gas mechanical loco chassis.



Also new is a maintenance-of-way crew van – *above* – notable for the sides which are formed complete with interior detail. A small work boat is also new. This full hull (not waterline) model – *below* – is intended to be used as a load or perhaps ashore in a boatyard.

Smoky Bottom Lumber Company, B.P.76, F-19400 Argentat, France.
richardsblc@aol.com



Slater's

There are two new highly detailed wagon kits in 16mm scale, for 32mm gauge: a Dinorwic slate wagon with double flanged wheels, of mainly resin construction (ref.16W02, £17.50), and a Festiniog Railway two-ton slate wagon, in both braked (ref.16W03) or unbraked (ref.16W04) forms. The kits are mainly etched brass and priced at £21.00.

Slater's Plastikard, Temple Road, Matlock Bath, Matlock, Derbyshire DE4 3PG. Telephone: 01629 583993. www.slatersplastikard.com



S&D Models

The range of 7mm scale figures and accessories has been expanded with a number of new items:



From the Racing Drivers series, but may have railway applications:

7. MO20 video crew (cam.op. and sound recordist), £5.00.
8. MO21 radio interviewer, £2.50.
9. MO30 chief mechanic – left – (1950s), £2.50.

S&D Models, Highbridge Works, P.O.Box 101, Burnham-on-Sea, TA9 4WA. Telephone: 01278 781603 www.sanddmodels.co.uk

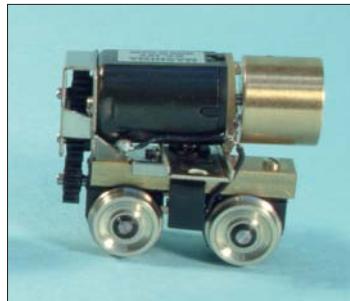
Awards

The David Lloyd Trophy, awarded to the layout effectively judged best in show by representatives of the 009 Society, the 7mm Narrow Gauge Association, and the Greenwich & District Narrow Gauge Railway Society (organisers of the event), went to

Chelmsford MRC for 'That Dam Railway' – below left – a 4mm scale evocation of the narrow gauge railways involved in a dam construction site.

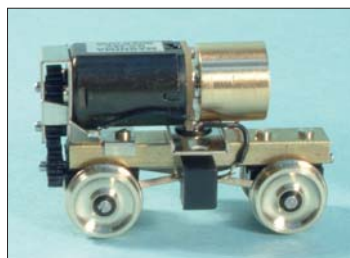
The Reinier Hendriksen Memorial Award, presented in memory of that gifted Dutch modeller, went to Chris Nevard – below right – for his beautifully crafted diorama Arne Wharf, justly considered to be the exhibit which accorded most closely with Reinier's modelling philosophy.

Following the success last year of the 'Shoebbox' modelling competition, this year the show featured the 'Cubic Challenge', where strict conditions were again laid down limiting the size of the display. The design solutions were ingenious and varied, and the quality of the modelling was high, which gave the judges a difficult task. First prize went to Simon Cox for Loxley Barton Falls – bottom left – (4mm scale, 9mm gauge) and a special runner-up award was made to Fried Lagerweij who had brought Smith & Son Mine – bottom right – (1:32 scale, 16.5mm gauge) from Holland. A working mine hoist and a synchronised loco sound system topped off some exquisite scenic work.



Branchlines

Advance samples were on display of the BullAnt, a multi-gauge motor bogie developed in Australia in close co-operation with Steam Era Models, which is responsible for the successful 16.5mm gauge fixed wheelbase Black Beetle self-contained motor bogie.



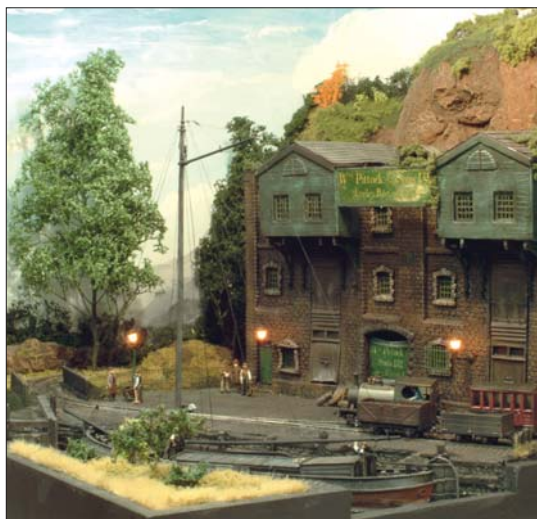
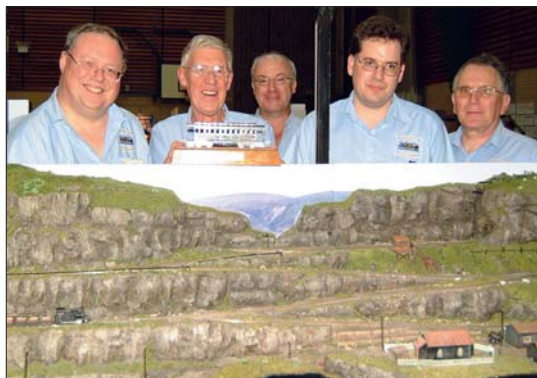
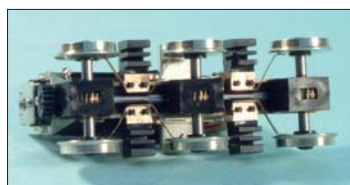
1. OF303 seated man wearing cap reading newspaper, £2.50.
2. AB73 large sack barrow, £2.50.
3. OA1 sitting dog (Spaniel), £1.50.
4. OF309 female loco driver with cap, gloves, and 'protective boots' (re-worked OF39,) £2.50.
5. OF311 loco driver, cap worn backwards, goggles, £2.50.
6. OF312 loco fireman/crewman, beret, gloves, bib & braces over-all, £2.50.



The BullAnt is intended to be even more versatile, to assist narrow gauge modellers: it is planned to be available in two-, three-, or four-axle formats, with wheelbases from 14mm up to 60mm, in gauges from 9mm upwards. There will be a wide choice of wheel options from 8mm diameter upwards, disc or spoked, using existing items from the Steam Era Models range. Power will come from a can motor, 15mm, 20mm, or 244mm long, fitted with a flywheel, and driving through double reduction gearing with a 15:1 ratio. (We understand that 31:1 and 60:1 options may be offered later.) The units have been fully tested and approved to meet EU EMC standards. Dummy versions (less motor and gears but with pick-ups) will also be available.

Prices are expected to be around £35.00 for a powered unit and £12.00 for a dummy, depending on the configuration.

Branchlines, P.O.Box 31, Exeter, EX4 6NY. Telephone: 01392 437755. sales@branchlines.com



Ally Pally rally



After the great success in 2005, the London Model Engineering Exhibition returns to Alexandra Palace on 20-22 January. It will bring together model engineers, craftsmen and model-making enthusiasts in an interactive show (details in *Societies & Clubs*, p.71).

Now in its 10th year, it is the largest model engineering show in the south of England. Nearly 800 scale models from the age of steam to the present day will be on display. Forty clubs and societies will support the show and there will be plenty of members and stewards there to talk to.

Locomotives from 0 gauge to 7¹/₄"

will be amongst many other kinds of models such as rockets, boats and road vehicles.

Over 90 specialist suppliers will present the opportunity to purchase the latest products from machinery to everything a model engineer or modeller could possibly need.

The show is open from 10.30 until 18.00 on Friday and Saturday, 10.30 until 17.00 on Sunday.

Admission: adults £9.00, senior citizens £8.00, children £5.00, family (1+3) £14.00 and family (2+3) £23.00.

Full details call 01926 614101 or see www.londonmodelengineering.co.uk

New Sittingbourne engineering group

A new model engineering group is to be established within the Kemsley Down Terminal of Sittingbourne's Steam Railway. Potential new members are invited to attend an initial meeting on Sunday, 29 January at 14.00.

Thanks to the trustees of the Sittingbourne & Kemsley Light Railway, the Kemsley Down model engineering group will have access to the majority of the SKLR facilities. These include 60 yards of 5" ground-level track, 100 yards of LGB™ track, 150 yards of 00 gauge outdoor track, a mess room and undercover accommodation.

Membership of the SKLR is not essential, but reduced rates apply to members. Meetings are provisionally planned for one Sunday afternoon each month with evening meetings to be arranged.

If you would like to attend the initial meeting, the aims will be to decide the group's name, choose and elect the officers, discuss if the Group needs charity status, agree dates of meetings and discuss any suggestions.

For full details, call Tony James on 07944 135033 (except Thursdays) for security clearance and accurate directions.

What's on at the NRM?

The world's largest railway museum at York has now issued its programme of events occurring until April 2006.

The free leaflet gives directions about how to find the Museum, then lists the regular and special events that take place. The Christmas holiday train rides are followed at the end of January by National Story Telling Week. You can have a day out with Thomas the Tank Engine during mid February. Those with interests in science will enjoy National Science Week in March. The Easter Holiday activities include the NRM Easter Hunt, play train and train rides in the South Yard.

Apart from the educational, curriculum-related events, there are plenty of fun-based activities: details of the rides, the play train and daily talks and demonstrations are shown in the leaflet. The Museum also has its own

theatre company, called Platform 4, that performs most weekends.

Later in 2006, the Spring Bank Holiday half-term has a Green Railways event that puts railways into context with today's concerns for the environment. The September Crime Weekend allows the detectives amongst you to exercise your skills. During the autumn half-term the NRM presents a groovy 1960s-based weekend to show how technology propelled Britain into the modern era, all to a background of flower power and swinging designs.

Entrance to the Museum is free.

For further details, contact the Programmes Office from January 2006 on **01904 686248/685741** or www.nrm.org.uk. To join the mailing list call **0870 421 4001**, e-mail nrm@nmsi.ac.uk or see the website.

December diesel day

On December 27 the last major event of the season on the Gloucester-Warwickshire Railway (GWR) will feature eight of the railway's operational fleet of locomotives. The line operates between Toddington, Winchcombe and Cheltenham Racecourse stations.

Trains will run from 10.30 from Toddington and 11.15 from Cheltenham Racecourse. It will be the first time for several months that Class 20 No.D8137 has run after undergoing mechanical repairs. No.47 376 will also show off its Freightliner grey livery and replacement *Freightliner 1995* nameplate. Visitors can enjoy the catering at the 'Flag and Whistle' tea rooms at

Toddington. Light refreshment and 'Rail Ale' will be obtainable from the buffet cars.

Yard tours will be available to see other locomotive restoration and repair projects such as 'Peak' Class No.45 149, Class 26 No.26 043 and rare diesel shunter No.7069.

Toddington station is 100 metres from the junction of the B4632 and B4077, and 15 minutes from junction 9 on the M25. Access to Cheltenham station is from the main entrance to the Racecourse.

For more details, call Toddington station on 01242 621405 or visit www.gwsr.com.

Railway history course

In the spring of 2006 Martin Bloxsum will host a course for modellers and enthusiasts entitled *Rails to Shakespeareland*; the Stratford upon Avon & Midland Junction Railway 1864-2006.

The course traces the history of the Midlands cross-country line including its origins, operations, locomotives and rolling stock. It is held on Tuesday afternoons from 13.30 until 15.30 for 10 weeks starting January 10 at The WEA, Vaughan College, St.Nicholas

Circle, Leicester LE1 4LB. Telephone 0116 251 9740 for course fees and eligibility for free tuition.

The course is also held on Thursday afternoons from 13.30 until 15.30 for 10 weeks starting on January 12 at The Bluecoat School Buildings, central Coventry. Telephone Warwick University on 024 7657 3739 for details of fees and eligibility for free tuition.

If you would like more details, you can call Martin Bloxsum after 19.00 on 01455 553332.

J&M Models reorganisation

J&M Models, the manufacturer of 1:32 scale model railway carriages, has moved and divided into separate mainland Europe and British operations.

From 1 October 2005 the firm has been operating as J&M Models Europe and J&M Models UK. J&M Models Europe manufactures and markets Continental European outline models and J&M Models UK does the same for British and American models.

Both divisions will maintain a close working relationship to keep the brand name of J&M Models under one banner and to maintain and develop the

well-known quality of their products.

Contact: **J&M Models UK, Colin Freathy, 1 Rodney Cottage, Cross Park, Saltash, Cornwall PL12 4AJ. Telephone: 01752 842392. e-mail: cfreathy@blueyonder.co.uk www.jandmmodels.co.uk**

J&M Models Europe, Bram Hengeveld, Beethovenlaan 19, NL-2102 ES Heemstede, The Netherlands. Telephone 00 31-23 558 3396 Fax 00 31-23 5475222 Mobile 00 31-653 438313 junction@exclusivemodels.nl www.exclusivemodels.nl

Comet redesigned bogies

All versions of the Comet four-wheeled bogies have been redesigned so that they can be built rigid as before, or sprung.

As sold, the bogie kits only supply the parts for the rigid form of construction; the pack containing the springing unit is sold separately. The spring plate is allowed to move freely up and down the slots in the bogie stretcher. Coil springs are mounted on screws projecting downwards from the stretcher, under the spring plate and retained with nuts.

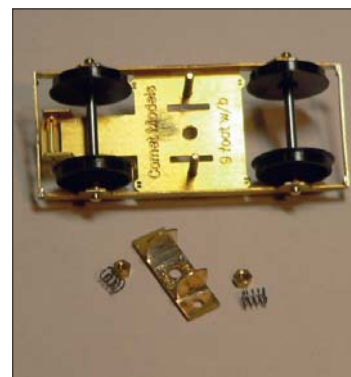
The spring tension is adjustable to ensure good track contact and a steady ride.

Bogie types are LMS 9' riveted and welded, GWR 7' plate, 9' plate, pressed steel and Centenary, LNER Gresley 8'6", BR Mk.1 and Commonwealth and SR 8'6" steam, all of which are £7.25 per pair. Springing units are available in a one-coach pack (C57 £2.50) or a five-coach pack (C58 £10.00).

Also in the range are the LMS and

GWR six-wheeled bogies in the original unsprung format. Markits (Romford) coach wheels and bearings packs can be provided, three-axles £3.25, four-axles £4.25.

Contact: **Comet Models, 105 Mossfield Road, Kings Heath, Birmingham B14 7JE. Telephone 0121 242 2233. www.cometmodels.co.uk**



Ace Products 'Terrier' and other kits

Following the success of the gauge 0 Class A1/A1X 'Terrier' 0-6-0T, the same kit is now offered in gauge 1.

The 28thou nickel silver chassis, mirror-imaged for accuracy, includes details such as motion bracket, brake gear, wheel balance weights, springs and ashpan. The superstructure is of 22thou etched brass and the boiler comes pre-rolled.

The 'Terrier' kit includes additional parts to create different versions of the engine. Fitting the extended smokebox allows the A1X to be made; the larger bunker allows the loW engines like *Freshwater* to be produced. *Stepney*, with its raised bunker, from the Bluebell Railway, can be modelled too.

The 'Terrier' kits are £99.99 in gauge 0 and £159.99 in gauge 1.

Work is proceeding on re-tooling for

two larger tender engines. The 28thou nickel-silver chassis have already been prepared for both kits. A few Ravenscale kits for the LNER B12/3 and Southern 'BoB'/'WC' are still available for £159.99 each.

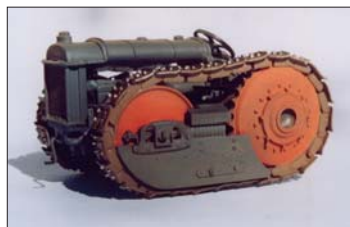
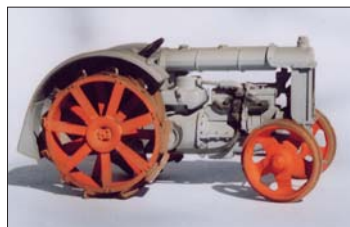
The Ace Products range has recently been augmented with the addition of the BR/SR rebuilt 'Battle of Britain'/'West Country' 4-6-2. The kit for this engine, which has been drawn on the AutoCad computer design program, includes new castings for the axleboxes and smokebox door. Nameplates are also supplied.

The kit includes alternative parts for all three versions of the Bulleid tender and is priced at £249.99.

Contact: **ACE Products, 7 Ringley Park Road, Reigate, Surrey RH2 7BJ. Telephone 01737 248540.**



Classic Commercials Fordson F tractors



A model of the world's first mass-produced tractor is available in 7mm scale from Classic Commercials. The Fordson F tractor and its crawler variant were made from 1918 until 1928. Thousands were sent around the world to help rebuild Britain and large parts of Europe and the Empire after the devastation of the first world war.

Kit ref.CCFF represents a 1926 model with steel field wheels. Sister kit ref.CCFT builds a tracked version of the F as constructed by Belle City Manufacturing. The prototypes were used for ploughing and hauling.

Known as the Trackpull Crawler, it is very similar to a number of third-party conversions using large-diameter wheels for tracks.

Both kits are whitmetal and brass. Basic tools, paint and adhesive/solder are required to complete.

Price is £29.95 each plus £1.50 postage from **Classic Commercials, PO Box 800, West Wrattling, Cambridge CB1 5NB. Fax 01223 290195. e-mail robert@rbc-pr.com.** An illustrated colour catalogue is also available for £2.00 from the above address.

Dingham couplers price change

With effect from 1 January 2006, there will be price increases for Dingham Autocouplers for 7mm and 4mm scales. The couplers were reviewed in RM in September 2002.

Unfortunately, it is no longer possible for the company to absorb increases in the cost of etching, raw materials and postage. The new prices are as follows: 4mm coupler kit (20 vehicles) £10.00, 7mm coupler kit (20 vehicles plus four short-buffered vehicles)

£15.00, electromagnetic (suitable for both scales) £5.00, springs for fitting 7mm couplers (per dozen) £2.00. All prices include UK postage and packing. Make your cheque payable to 'T.Shaw'.

Contact: **Dingham Autocouplers, 24 Nursery Lane, Addingham, Ilkley LS29 0TN. Telephone 01943 831935. Email: couplers@dingham.demon.co.uk or visit www.dingham.demon.co.uk**

DJB Model Engineering news



This Ffestiniog rebuilt Funkey Vale of Ffestiniog was created from the DJB Engineering kit and is available for either 32 or 45mm gauge track.

Power is from a 12V lead-acid battery driving two MSC motors, one in each bogie which in turn drive all four axles through a chain-drive system. The diesel is radio-controlled using a Hi Tec transmitter and receiver set, which controls the motors through a Brian Jones Macfive speed controller. The model is also fitted with Brian Jones FX-4U digital soundboards, programmed with the actual Funkey diesel engine sound recorded on the Ffestiniog Railway last year.

The speaker is fitted in the end of the engine compartment and the sound comes through the radiator grille. The model is also fitted with full directional lights and there are four white/yellow forward-motion lights with two rear red tail-lights.

The cab interior is complete with seats and full control console. The engine compartment roof is removable to access the electronics, on/off switch and battery charger socket.

There are several levels of kit available and full details of Funkey kits are on DJB's website together with all the RTR models and parts.



DJB Engineering has also produced a deeper-sounding whistle for use on live steam locos such as the Roundhouse 'Carrie' (see p.48).

The idea of the 'Bangham' resonating whistle is that it has a small visible whistle to mount outside the cab and a discreet resonating chamber and operating valve inside the cab. This larger system gives a more realistically pitched note.

A range of whistles is available, audible samples and full details of which can be obtained on the website.

Contact: **DJB Model Engineering Ltd., 17 Meadow Way, Bracknell, Berks RG42 1UE. Telephone 01344 423256, also at Eleanor House, Sibthorpe Hill, Tuxford nr. Newark, Notts NG22 0PJ. Telephone 01777 871047. www.djbengineering.co.uk**

New NDR Carriage Works van

A Londonderry & Lough Swilly brake/luggage van in 16mm scale is the latest release from NDR Carriage Works.

These individually detailed models are manufactured from high quality wood and metal components. They are designed by the maker using observations, photographs and existing plans. Built to run on 32mm and 45mm gauge track, the van is £140.00 unpainted; a full painting service is available for between £35.00 and £45.00 depending on the model.



Contact: **NDR Carriage Works, 2 Dan-yr-epynt, Tirebad, Llangammarch Wells, Powys LD4 4DR. Telephone 01591 610600.**

25 years' service recognised

To celebrate 25 years of assisting Ian Futers to operate his layouts on the exhibition circuit, Steve Corrigan (right of picture) recently received a framed print of the Blue Pullman from Ian at the Newcastle MRS clubrooms. Steve is the Chairman of the Society.

Well-known P87 modeller John H. Wright was on hand to capture the moment on film.



Perfect Miniatures Scale 7 wheels

There is very good news for all gauge 0 modellers working to Scale Seven standards. Peter Hunt of Perfect Miniatures has been appointed the sole agent for Alan Gibson's 7mm scale wheels to S7 standards.

The immediate range consists of 13 different driving and 15 bogie/tender wheels. All the rest of the existing finescale range will be made available to S7 standards if sufficient orders are received.

Eventually the rest of the Alan Gibson range, including diesel and electric locomotive wheels, will be added. Wagon and carriage wheels are also to be included, making a good range of ready-to-run S7 wheels.

Driving wheels are moulded in black ABS plastics pressed into correctly profiled steel tyres. Precision ground $\frac{3}{16}$ " diameter steel axles with squared ends simplify quartering. M2 screws secure the wheels.

Drivers are packaged as two wheels, one axle and two M2 screws for customers who may wish to use other sources of crankpin.

Alternatively, each driving wheelset can be supplied at extra cost complete with two crankpins and a pair each of long and short bushes.

Steel 12BA crankpins with long and short bushes are supplied in packets of 10, sufficient for five wheelsets.

Bogie and tender wheels of similar construction to the drivers are secured by M2 screws to $\frac{3}{16}$ " diameter precision ground steel axles with turned shouldered ends.

Wagon and carriage wheels consist

of black injection moulded centres pressed into chemically blackened steel tyres to a recommended prototype profile. They are mounted on $\frac{1}{8}$ " diameter precision ground steel axles that have the journals turned down to 1.5mm diameter.

Brass axle bearings are available in packets of 20.

Two different Lowmac 2'7 $\frac{1}{2}$ " diameter wheelsets, spoked and plain, as well as 3'1 $\frac{1}{2}$ " DMU plain disc wheels will be available shortly.

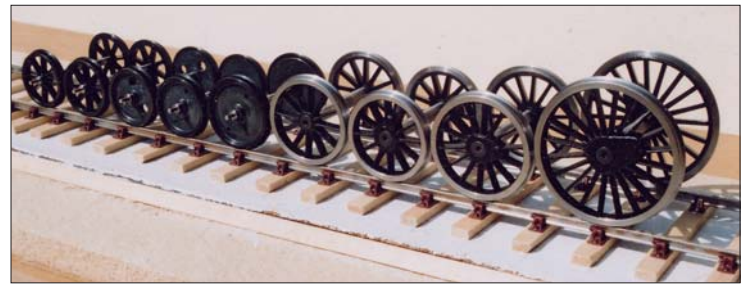
Axles for drivers and bogie/tender wheels will be made available for those modelling 5'3" gauge railways to S7 standards. Eventually the wagon and carriage wheels to S7 standards will be produced for 5'3" gauge if sufficient interest is shown.

The cast brass locomotive hornblocks are now re-released and complete with machined axle box, lost wax horn guides, profile milled keeper plate, retaining screws and springs. The screw threads are cast into the horn guides. Running a tap through these holes before fitting the screws is an advantage.

Hornblocks are available for GER/LNER or MR/LMS locomotives.

A list of the wheels and prices and a list of all locomotive kits supplied with S7 wheelsets, motor and gearbox, hornblocks, sprung buffers, plunger pick-ups and screw couplings, is available for a large stamped self-addressed envelope to the address below or telephone 01787 375884.

Perfect Miniatures, 86/88 Friars Street, Sudbury, Suffolk CO10 2AJ.



New products via Finney and Smith

Bachrus has introduced a new version of its rolling road, designed for larger size locomotives. The Series 60 is suitable for gauges from 23mm to 45mm; in other words 0 gauge, gauge 1 and G scale.

The system consists of saddles, which are rollers for the driving wheels that sit on the track to set the gauge and provide electrical pick-up, plus stirrups, plain sections for the carrying wheels. An adaptor pack for three-rail locos, comprising stands, brass tubing and instructions, is also available. This Series is in addition to the existing range applicable to smaller scales; see our February 2005 reviews pages.

Basic set of four saddles	£50
Basic set of three saddles	£38
Add-on set of two saddles	£26
stirrups	
(one pony, two bogie, tender)	£28
three-rail adaptor	£5

Finney & Smith are also importing the 'The Right Clamp'™, which has been introduced as a tool to hold parts of a workpiece at 90° when being glued or soldered. These are obtainable in a large variety of sizes ranging from 1 $\frac{1}{2}$ " x $\frac{1}{2}$ " to 7" x $\frac{3}{4}$ " with jaw sizes between $\frac{5}{16}$ " and $\frac{5}{8}$ ". Prices vary between £13.50 and £25.00.

Finney and Smith are now selling six varieties of micro-bore brass tube, ranging from 0.3mm diameter, 0.1mm hole to 0.8mm diameter, 0.27mm hole. These come in 400mm lengths and are £2.50 per length.

Please add postage and packing of £1.00 per order.

Contact: **Finney and Smith, 21 Bellott Drive, Corsham, Wiltshire SN13 9UQ. Telephone: 01249 714085. Mobile: 07966 423548. www.finneys.org.uk**

M&M Models postal address

Further to our review of the M&M Models products (see RM October 2005), we have been advised of the firm's full postal address and payment details.

M&M Models, 22 Plantation Court, 41 Plantation Road, Poole, Dorset BH17 9LW. Please make cheques payable to 'M. Butterworth'.

Gauge 0 Guild Workshop Day

On Saturday, 21 January the Gauge 0 Guild, in conjunction with The Model Railway Club, is holding a Workshop Day at Keen House, the clubrooms of the Model Railway Club. It is at 4 Calshot Street, London, five minutes' walk from Kings Cross Station. Unfortunately, Keen House is not suitable for disabled access.

The day will open at 11.00 and close at 16.00. Admission will be £3.00.

There will be two layouts, *Happisburgh* and *Tinkers Green Sidings*. The former is the MRC's 0 gauge layout and the latter is a Scale 7 layout belonging to Rob Thompson.

The demonstrations will cover a wide range of modelling activities, as follows: Alan Blackburn, trackwork construction; Roger Kingstone, loco construction and soldering; Malcolm Parker, construction of rolling stock; David Coasby, weathering wagons; Mike Tucker, building construction; Peter Elmslie, loco construction; Richard de Camin, rolling stock; Peter Dobson, loco construction and soldering; Steve Nall, architectural details; Paul Prior and Heather Kavanagh, trackwork and rolling stock construction in Scale 7; Graham Beare, wagon springing; Chris Webber, wiring layouts; Tony Watts, Lancashire & Yorkshire locos and wagons; Peter Mann, track ballasting; Howard Finch, track construction.

For more details contact: **The Model Railway Club, Keen House, 4 Calshot Street, London N1 9DA. www.themodelrailwayclub.org**



TARRANT VALLEY RAILWAY
Stephen Green describes the Wimborne MRS' modular 009 layout



THOMPSON B1 IN 0
David Southwell builds the Percy kit for these capable 4-6-0s



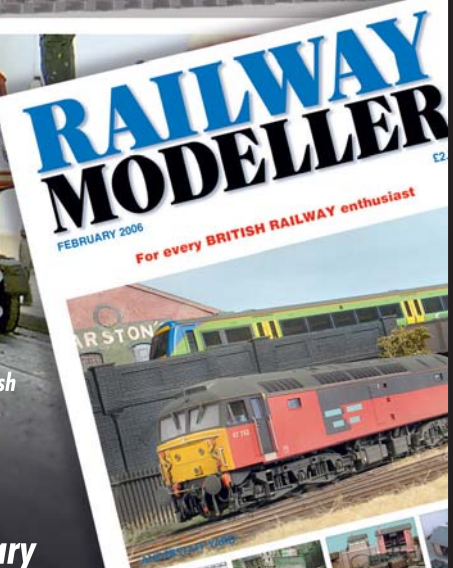
KINGSWAY SUBWAY
Trams in the heart of London in 4mm, by John Howe

Coming next month

- **ANDERSTAFF YARD** Freight operations in 4mm, by Brendan Walsh
- **SCRUBBS LANE & THE MALTINGS** Built in 009 by John Thorne
- **WESTERDALE** A secondary main line in N, modelled by John Grey

plus all the regular features

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TARRANT VALLEY

– Modular 009 Layout



THOMPSON B1

– Building the O Gauge Kit

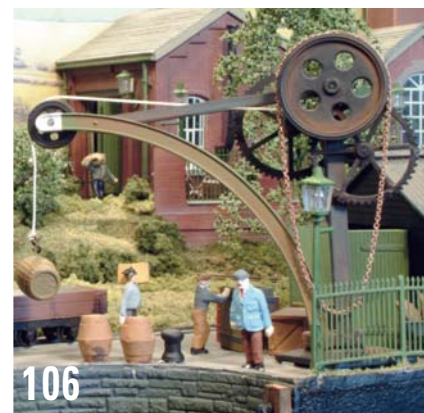




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RAILWAY MODELLER

Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

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In this issue we have reviews on the new Hornby Class 60, Heljan Class 33, Bachmann Class 57, Dapol M7 tank in N, Hornby 'Seacow' ballast hoppers, more Mk.1 Pullman cars from Bachmann, further Private Owner wagons in N from Graham Farish, plus new lever frame components and program from Modratec in Australia, and so much more besides!

All these new items, plus the others about which you will read in the news pages in this and the following months, can only buoy the spirit in the face of those who predict all kinds of turmoil for the hobby. This mix of both pre- and post-'unit railway' era products shows that interest in both is increasing, the pre-unit ones probably more so for reasons we need not restate. Similarly, we shall contain our thoughts on the models listed above, save only to note that the M7 might - just might - prompt manufacturers to consider other long-lived four-coupled locos (Compounds, 'Clauds', 'Dunalistairs', 'Glens', Southern 4-4-0s various) which could wear BR lined black as well as Group liveries. Then, for the Festive Season a couple of years hence maybe, there could be special-run versions in respectively maroon, blues and greens. Pre-group locos to 21st Century standards: now, there's a thought. "Dear Santa...

For the answer to this mini-riddle, readers need look no further than our lead times. Here you are holding the issue that we had to put 'to bed' before the Festive Season! Because of our constant rush we have hardly had time to register properly the huge increase in new products from the 'majors' in the past weeks, roughly those either side of the Warley show.

Unlucky for some.....

...but not for the irrepressible Paul Jones and his hard-working team which organises the Warley Show at the NEC. This year's show was the 13th at the country's premier exhibition venue, and the attendance was a very creditable 18,100+ visitors over the two days - just a smidgen down on last year's record. A report on some of the new products seen at the event, plus the awards presented (including our own 'Right Away' Cup) will be found in the news pages. Well done Paul, his team and all the unsung members of Warley MRC for putting on the UK's No.1 model railway exhibition.

Our thanks also to all who stopped by the RM stand, with their questions, comments, ideas and photographs, who it is hoped went away with the guidance and inspiration - and magazines - for which they came.

Cup Competition reminder

There are just a few more weeks left in which to send your entry for the 2005 Railway Modeller Cup Competition, full details of which, along with the entry form, were in last month's edition. As ever, we are looking for your six favourite features of the year, along with the 'Right Away' that you would like to see invited to Warley 2006. Send your entries by post to the usual address, fax to 01297 20229 or email railway-modeller@btconnect.com. Closing date is the end of January, so don't delay!

Training Courses at Pecorama

Dr Michael Watts, now quite famous for his Training Courses, will be running three such events during 2006 at our very own Lecture Theatre here within the Pecorama complex.

More details about these Courses can be found in the News Section of this issue and, if you are at all interested, we suggest you make enquiries as soon as possible.

Building The Baseboard

The latest revised Shows You How booklet to be published by ourselves will be given away free with the March RAILWAY MODELLER. Although a subject many enthusiasts will be familiar with, it nevertheless contains important issues, especially for the new enthusiast or for someone who is thinking of building a new layout for 2006. A poorly constructed baseboard can lead to

endless problems further down the line. To avoid disappointment order your March issue from your regular supplier now.

Cover: Relegated to lesser duties, 47 782 enters the yard where it will run round its train of steel empties before heading for Calcutta Sidings. 170 515 rumbles over the viaduct slowing for Anderstaff Park.

Photograph: Steve Flint, Peco Studio.

Wellbridge

A 00 Southern Region club layout

Built by Crawley MRS and described by **PETER SELBY**

Wellbridge is the present 4mm scale 00 gauge layout from Crawley Model Railway Society, and features a small station serving a village on a double track main line, somewhere in the Bournemouth area and set in the late 50s/early 60s period.

The village and its attendant station is typically generic for British Railways Southern Region, and many such examples could be found across southern England. In fact, I lived in a typical example as a youngster, I suppose; two stops out of Brighton on the London-Brighton main line, it was a small village with a local school, post office, garage, churches and pubs just like *Wellbridge*. It had a small fire station at one end of the village and even a golf course a couple of miles away on the South Downs. The station, where my father worked for many years, originally had gas lighting and a small yard with a goods shed, from where rail-borne goods were delivered to local villages around the area.

In such places, especially where local stone is not used extensively for buildings, you would find buildings constructed over the years in different materials and different styles, and any one building transposed from one location to another would not look out of place at all. So in modelling our generic village we could model buildings from a vast range of locations without being in the wrong as long as everything sat harmoniously together.

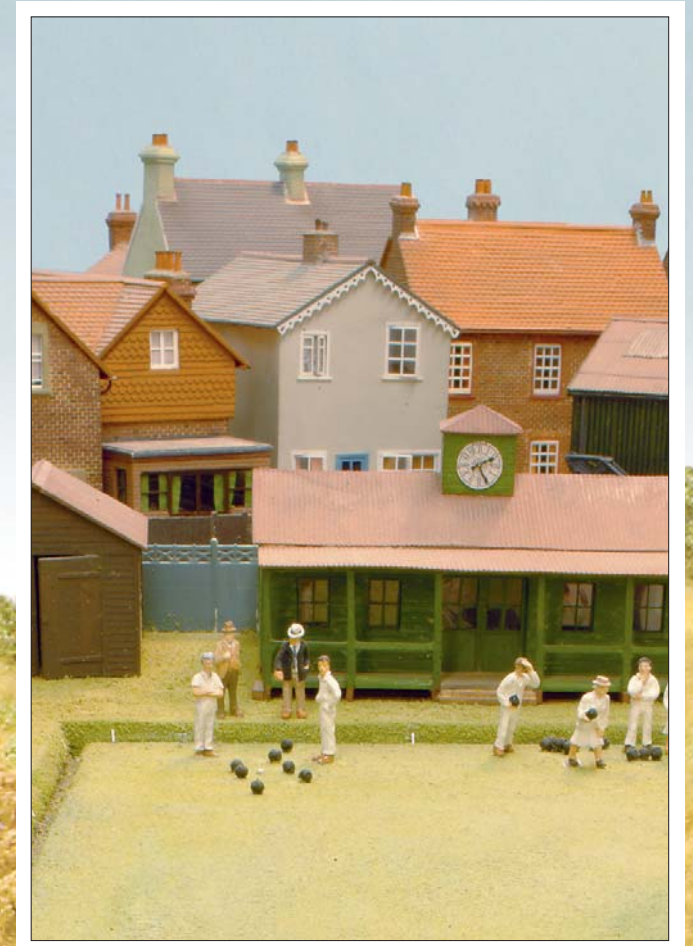
Passengers and staff await the next train at Wellbridge Station. Walls building sheets have been extensively used here and on other buildings on the layout.

Photographs by Len Weal.



A sedate game of bowls continues at the Bowls Club undisturbed by the passage of trains in the cutting below.

A grubby Standard Class 4MT pulls hard through the cutting with an inter-regional train.





So, if not modelled on any particular location or any particular area, why do we describe *Wellbridge* as being set 'somewhere in the Bournemouth area'? Well initially, when a new 00 layout was proposed and presented for committee approval, the trackplan was nothing like the finished layout. It was much more complex and, and viewable on all four sides. For some time, some of our members had researched and desired to build a layout based on Bournemouth West, with traffic from Waterloo, and the Midlands via the Somerset and Dorset, as well as local services to Swanage and parts of the S&D. Construction started, with the usual enthusiasm for a new

club layout. However, as time passed this enthusiasm faded. About this time we had several new members join us, who were reasonably new to the hobby, and did not have the necessary skills for hand-building trackwork, which was the next major stage of construction. Retaining our new members and maintaining their enthusiasm was important to us, so we had discussions about the lack of progress on the new layout. The result was a radical rethink and redesign of the layout to the form in which it appears today, which as the plan shows, is viewable on three sides and includes a 14-road fiddle yard on the fourth side.

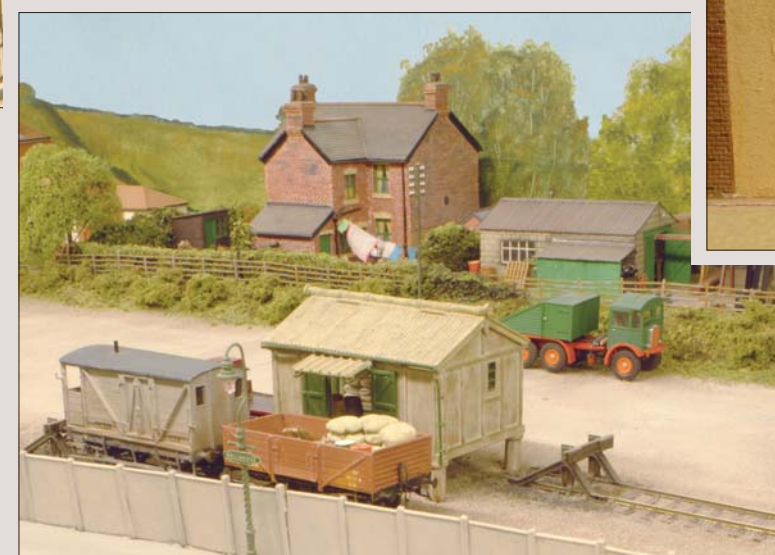
Part of the rationale behind the revised

design was the idea that new members could assemble a complete train from RTR stock, while more experienced modellers could provide variety using kitbuilt locomotives and rolling stock. The layout could then satisfactorily accommodate the needs of the club's 00 gauge modellers.

As some excellent research had been undertaken initially, including locomotives seen in the area in our time frame, and the make-up of typical trains, we decided to set the layout 'somewhere' in the Bournemouth area, such as Branksome or Parkstone. The name Wellbridge, incidentally, comes from a list of place names used in the Thomas Hardy Wessex novels.

The layout

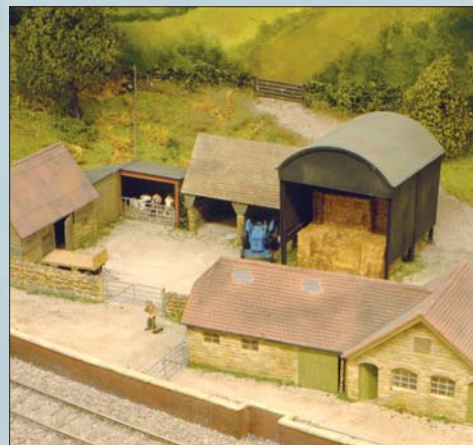
The revised layout design features an exit from the fiddle yard through a tunnel in a chalk escarpment, and over a curved viaduct, below which a rural road passes a farmyard and farm cottages, crosses a small stream overbridge and winds uphill to appear near the station. This road passes by 'The Plough' public house, where an old horse-drawn plough is mounted on a plinth in the car park. Next to the end of the platforms is a level crossing, with nearby a newsagents and confectioners and a fish and chip shop and part of a small housing estate - bus stops on each side of the road are handy for the station. The goods yard is not too cramped and has an agricultural merchant's store, a coal merchant's store and a weighbridge, as well as the goods shed.



▲ Road traffic is light in the village as a few people visit the shops.

▲ An interesting mix of building styles frame the Morris Minor convertible as it prepares to pull out of a side road.

◀ Goods are ready to be unloaded into the agricultural merchant's store.



▲ From high above the viaduct, a farm labourer can be seen sweeping in the yard outside the milking parlour on Bridge Farm.



▲ The farm labourers' cottages, gardens and chicken shed viewed from the viaduct.

Behind the goods yard can be seen several houses, a small yard with workshop and a preserved traction engine under cover, allotments, and the road between the village and the station, wandering uphill behind the houses. The road reappears by the small village school, next to which is the local builder's yard and the fire station. Here, the duty officer stands by for the call of duty, upon which he would sound the post-mounted siren to call out the volunteer fire crew.

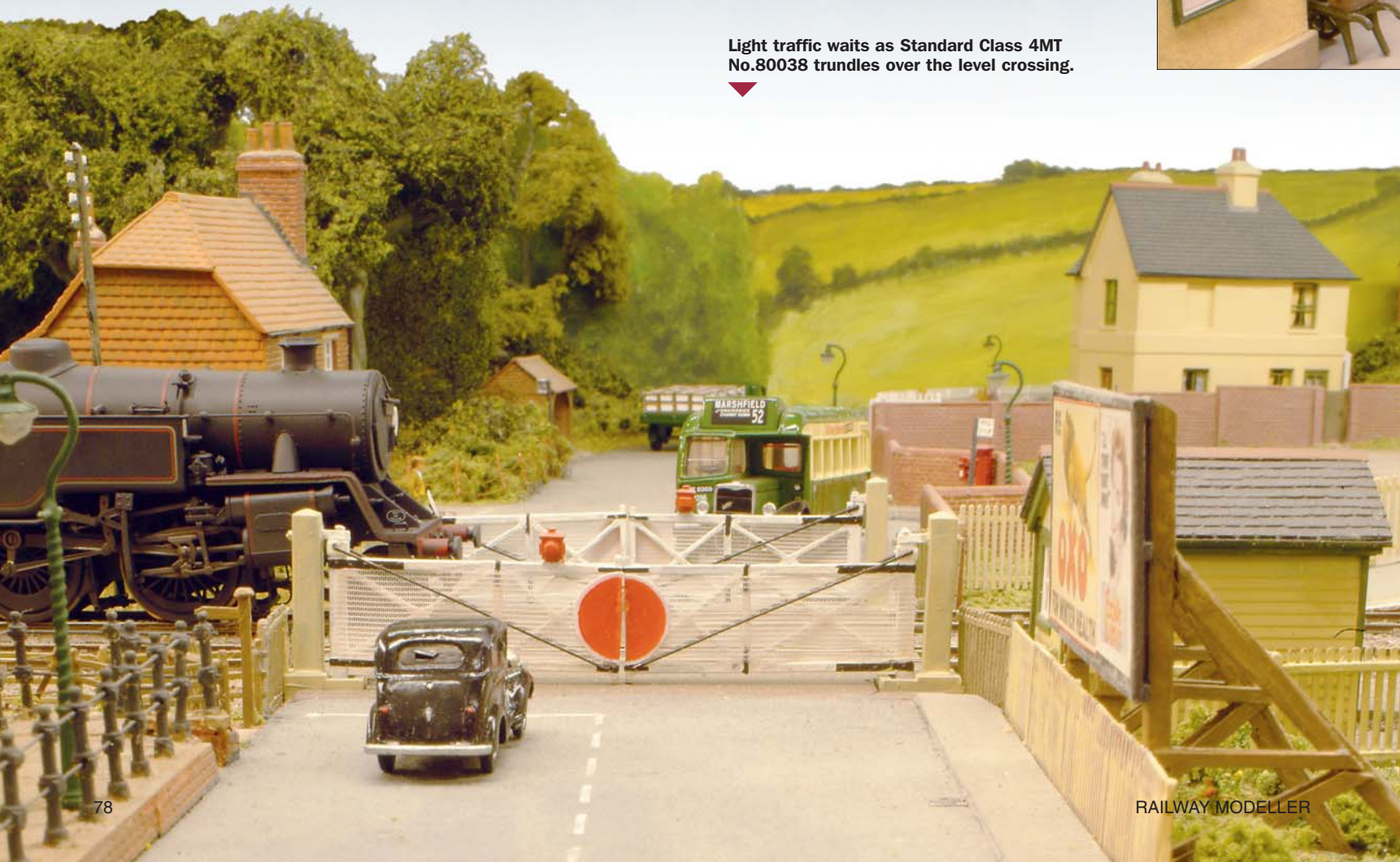
Across the road from the fire station is St.Peters' church and a small lane at the top of the cutting embankment leads to a market garden, riding school and stables and the club house for the golf course. The lane leads up to a high three-arch overbridge over the railway cutting, while the road up from the station passes over a plate girder bridge and into the village. Usually the vicar can be found at one end of the bridge, deep in conversation with the clerk of the parish council – when the sound of steam engines passing under the road bridge makes conversation possible! I expect the passage of trains also rattles the bottles and glasses in 'The Red Lion' at the other end of the bridge, too.

Passing through the village reveals not only the pub but a baker's shop, an ironmonger's, a greengrocer's, an antiques shop, a chemist, a Post Office and general store, a garage and Wellbridge bowls club. Typically, the village is a good 5-10 minutes walk from the station, and the objective when planning the scenic side was to show as much of the countryside through which the railway runs as we could fit in.

Trackwork on the viewable part of the layout is SMP code 75, with the points built *in situ* from C&L components and operated by Tortoise point motors, as are the signals. In the fiddle yard Peco code 75 track and points, and point motors, are used. Control is by three operators; one for the inner track and one for the outer track and one for the goods yard as and when required. In the fiddle yard

► 'West Country' No.34038 Lynton brings its train to a halt as a semi-fast runs through non-stop. The stationmaster and a porter discuss the day's tasks.

▼ Light traffic waits as Standard Class 4MT No.80038 trundles over the level crossing.



are two logic point-switching panels; one for the inner and one for the outer tracks. We dial up the track number we require, press the button and the point actuators required for that track are operated by CDUs. Each road in the fiddle-yard is divided in two so that short trains can be doubled-up on one track. Switching on one or both track feed switches enables the train to be driven out of the yard, through the station and back to the fiddle yard. Movements in the goods yard are operated by a controller connected to the main control panel which is situated adjacent to the yard. A mixture of trains for exhibition operation includes two three-coach locals, 8-coach through trains, van trains, parcels and mixed goods trains.

Baseboards and supports

The layout is built on 12 baseboards. The end boards – the viaduct board and the cutting board – are 6' x 3' 'trestle table'-like structures with their own folding legs. On each long side are five 4' x 3' boards, giving a total size of 20' x 12' with a central operating area. Construction is of ply with twin-beam-and-softwood-block constructed ends and sides with ply tops and integral backscenes on the

scenic boards. The five boards each side are supported on the carrying frames, of which there are three each side. For transportation, each carrying frame can hold one scenic board and one fiddle yard board, carried such that the top vulnerable surfaces are facing each other in the middle. The frames have levellers at each corner for adjustment, and on the scenic side also serve to support the gallows-type lighting supports.

Buildings and scenery

The majority of the buildings on the layout are scratchbuilt from Wills Scenic Series sheets and plasticard, or Wills Craftsman kits. Where a plastic kit has been put to use it is never built as intended, but modified as required. For example, in the farm yard two Wills barns have been used. On one the tiled roof has been replaced with corrugated iron and the door partly opened – on the other the complete front has been replaced to make a two-bay implement shed. The Ratio

► An express train rounds the bend under the road bridge with 'Merchant Navy' No.35027 Port Line in charge.



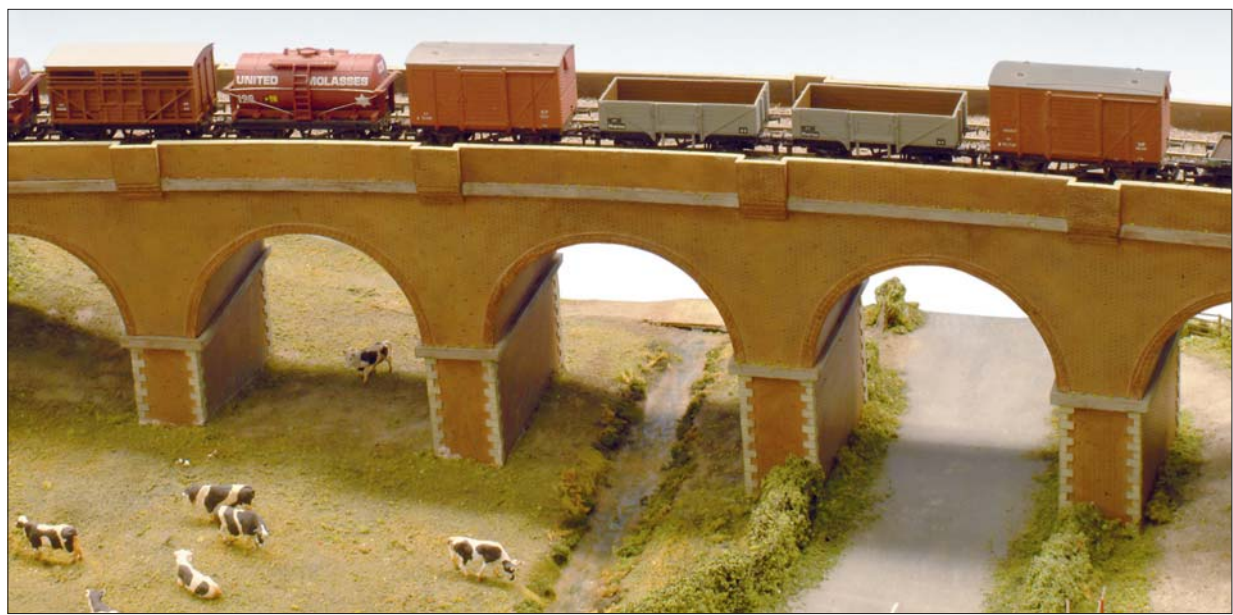


▲ Early morning near the station as the milkman makes his deliveries.

concrete footbridge has the steps facing in opposite directions instead of the same as intended and the concrete merchants' store from the same source has had the road-side opening moved from opposite the rail-side opening to one end.

Using mainly Wills building sheets has resulted in a uniformity of finish to the structures which is apparent across the layout, as has the fact that the majority of the buildings were constructed by one person. Once a building was finished and fixed on the layout, our newer members were given the opportunity to 'form' the gardens for a particular building, having been shown the methods to be used. This gave them a great sense of pride in what they had achieved and in their contribution to the layout. In fact, a great deal of the layout has been constructed by our newer members 'learning on the job', so to speak.

▲ A mixed freight heads towards Wellbridge across the viaduct above Bridge Farm.



Most of the lineside fencing was made from copper wire flattened between two roller bearings and then soldered up in a jig. When cleaned up and spray painted in grey primer, it can be made to follow the ground contours by holding the uprights and pushing in opposite directions.

One great advantage the club had during construction of the layout was that the owner of Set Scenes, the model railway scenic material supplier, was our Vice President at the time, so that materials were readily available, and methods learned from our in-house expert in the field – excuse the pun!

Our approach to scenic work is that it's like painting a picture in 3D. After placing buildings and adding some scenery, like an artist, we step back and view what we have done from several angles and decide whether the harmony is right. If any part looks awkward or jars the senses in any way, then we take steps to alter it until we are happy with the scene as a whole. Then we proceed with the next bit. Working in this way has produced the desired result, and judging by the comments we have received when the layout has been exhibited, the public find our

efforts appealing as well. To date, *Wellbridge* has had three public showings and won 'Best in Show' at two of them.

Locomotives and rolling stock

As the club owns no stock for the layout, we rely on members to provide complete trains of the correct type and the correct period when on exhibition. Ready-to-run locomotives feature predominantly on the loco roster at the present time as the Southern Region of British Railways has been admirably served by the trade recently. So we run Bulleid and Standard class locomotives

along with Q1s, Ns and a 'Lord Nelson'. In the future kit-built locos such as M7, Q, T9 and 700 classes will appear on the layout. Coaching stock utilises Bulleid and Mk.1s in the main, although we hope to have some Maunsell kit-built coaches too. A heavier appearance of kit-built rolling stock appears in our parcels, van and mixed freight trains. As complete trains do not have to be shunted in the yard, freight vehicles for use in the goods yard are fitted with Sprat & Winkle couplings for (we hope) hands-free shunting.

Conclusion

After a hesitant start and near demise, a pleasing layout has arisen, and justified all our efforts. A superb contribution has been made by relative newcomers to the hobby and to recognise their endeavours, the shops have their names included where possible. Apart from some minor tinkering and refining, such as possibly fitting point rodding and some more figure groups, we can sit back and enjoy operating and showing the layout to the public, and representing our club. One of the Society's aims is individually and collectively to strive to increase our modelling skills, and hopefully *Wellbridge* will help to achieve this aim.

For further details of Crawley Model Railway Society, please visit our website www.crawleymrs.org.uk or visit our next exhibition in Horsham on April 8/9 2006.

▲ A BR horsebox is prepared to collect a horse from the stables for rail shipment.



▲ The small market garden nestles against the churchyard in the lane at the top of the embankment.



▲ Standard class 4 No.75027 pilots No.34041 Wilton with a train from York heading for Bournemouth West.





Photographs by the author.

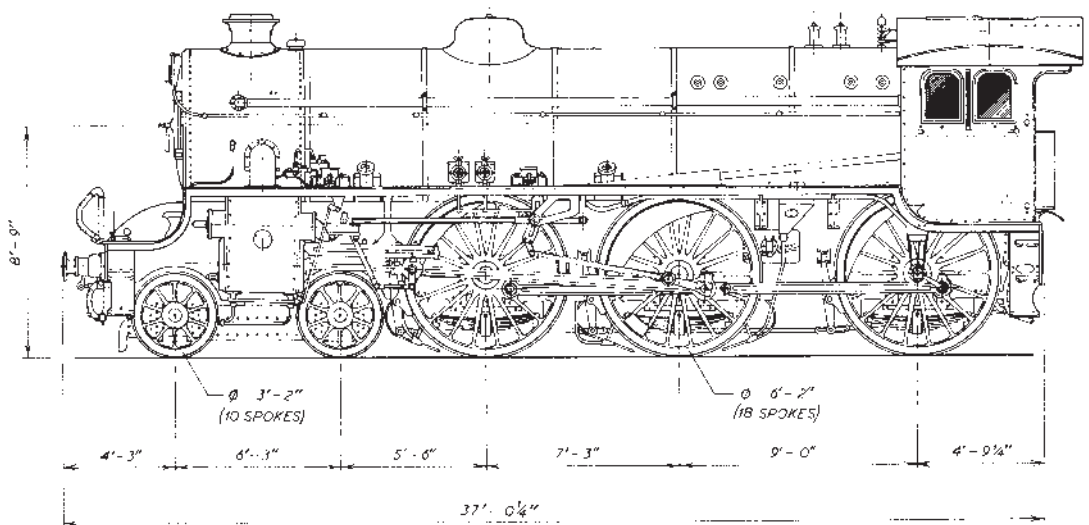
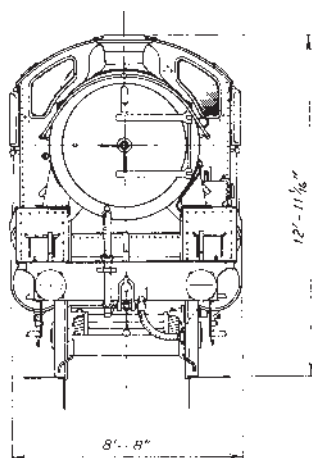
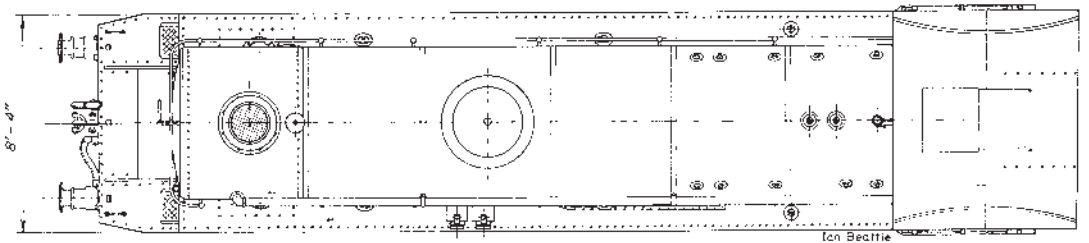
Scale drawings

An O gauge B1

Constructed from the Piercy kit

This model of one of Thompson's capable 4-6-0s was built by **DAVID SOUTHWELL**.

This drawing, by the late Ian Beattie, first appeared in RM June 1986 and is featured also in our compilation volume *Drawn and Described*. It is reproduced here to H0 scale.



I had just finished work on an 0 gauge Tower/DJH streamlined 'Duchess', bright in crimson and gold when the large heavy parcel arrived by carrier. I instantly knew it would be from DJH and, although I love to receive parcels, one with a locomotive kit inside always makes 'the juices run' a lot more strongly.

I also had a good idea as to what might lie inside, as I had recently been asked by a friend to build and paint a Piercy 0 gauge B1 loco in LNER green livery, as No.1011 *Waterbuck*. As I excitedly tore away the outer brown paper packaging to reveal the familiar DJH heavy-duty grey box, my expectation was confirmed, and there in front of me lay this beautiful kit which was to secrete so many difficulties but eventually reveal one of the most wonderful models I had ever built.

The day of the arrival was a warm spring afternoon; and I thought what better way of spending that afternoon than reading the assembly instructions outside in the garden with a cold beer – for me, sheer heaven.

As I enjoyed the moment, I quickly realised that I was in for a long and complex undertaking. There were over 600 parts in that box, the instructions were, in some places to me, a little unclear, the exploded diagrams and drawings lacked clarity of the smaller components; and to compound the problems even further, although all the parts were numbered on the drawings, none of the actual physical parts were numbered at all. There were, however, eight pages of listed numbers to describe the relevant parts and also whether they were an etched, whitmetal or lost wax item. The game of 'hunt the thimble' could then commence.

One other realisation also became apparent as I read on through the instructions: I would be referring to four separate drawings whilst



This page: wheels painted and lined, and (below) closeup of the tender chassis detail on the finished model.

construction of the loco body was in progress. Two of the drawings needed were on opposing sides of the same sheet of paper so I decided to separate the manual and photocopy one of the drawings so that I could have sight of all four drawings simultaneously. I thought this was a good idea, but it was probably that beer which had prevented me from a little lateral consideration; for after splitting the manual, I discovered that none of the pages were numbered and so restoring the pages to their original position was the first challenge in the many interesting times which lay ahead.

Also included with the kit was the recommended motor, the DJH Napier, the correct set of Slater's wheels and a very nice little set of castings for the screw-link couplings. With everything ready to hand, where was one to start with what looked like a very daunting task? I decided that, with such a great deal to think about, I would take one little step at a time, and not think too far ahead. With this in mind, I thought it would be a good idea to paint the wheels first, as the lined green livery would look so 'cool' and would spur me on when things would begin to get tiresome.

With the wheels duly painted the next step for me was to construct and paint the tender. This gets the easiest part out of the way first and also gives the first hint as to the quality and construction methods of the overall kit. It was at this stage that I was to discover the enormous number of castings offered in order to achieve an exact replica of the prototype.

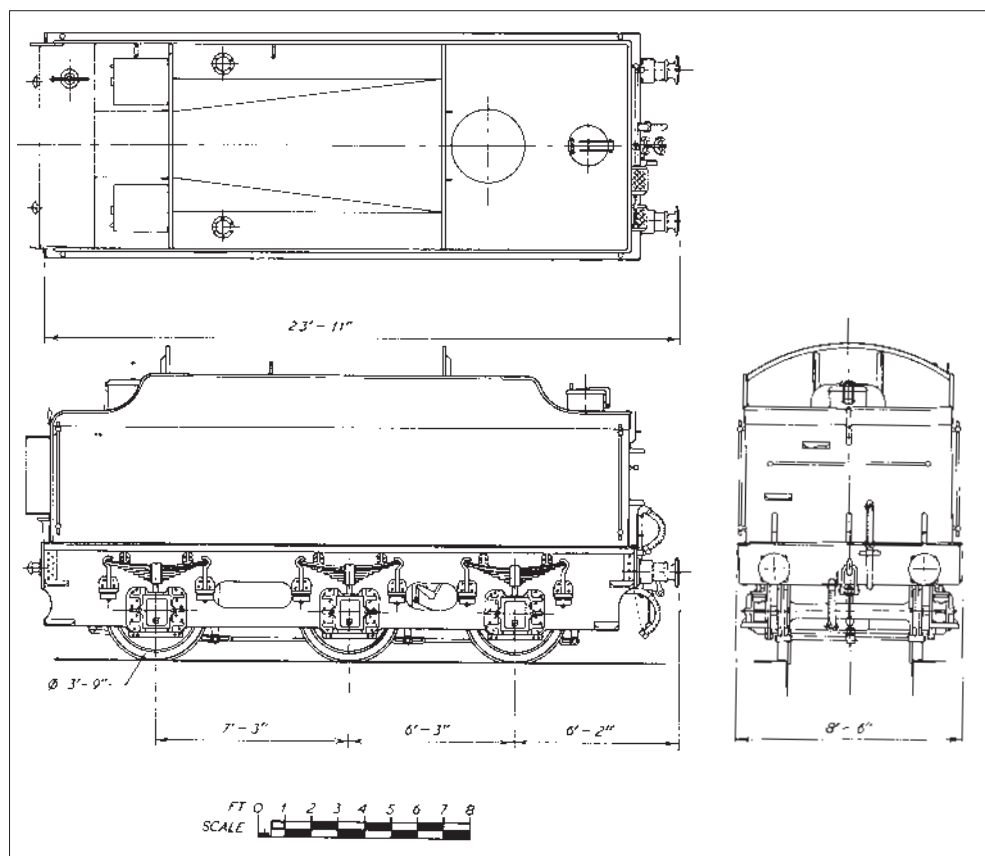
This was obviously going to be a marvellous model when completed. However, the downside was that the castings all needed a great deal of fettling, some much more so than others, and this added greatly to the time taken to complete each assembly.

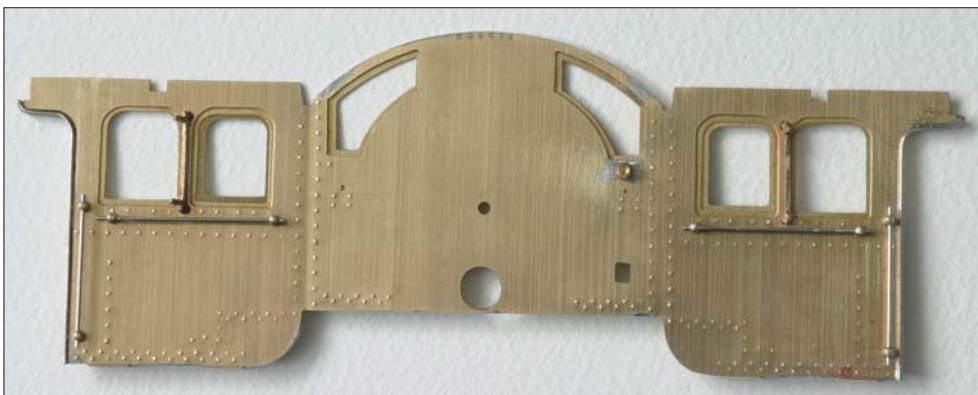
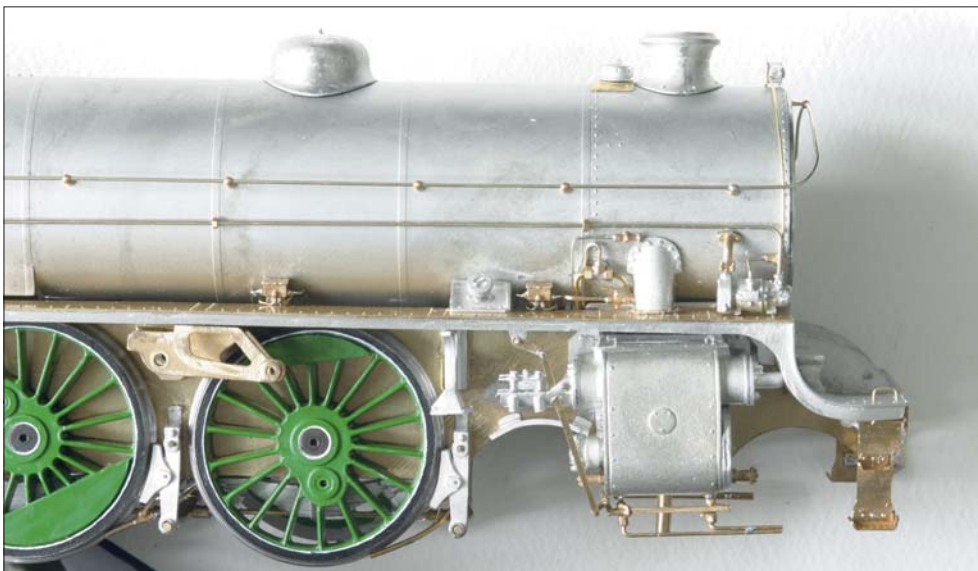
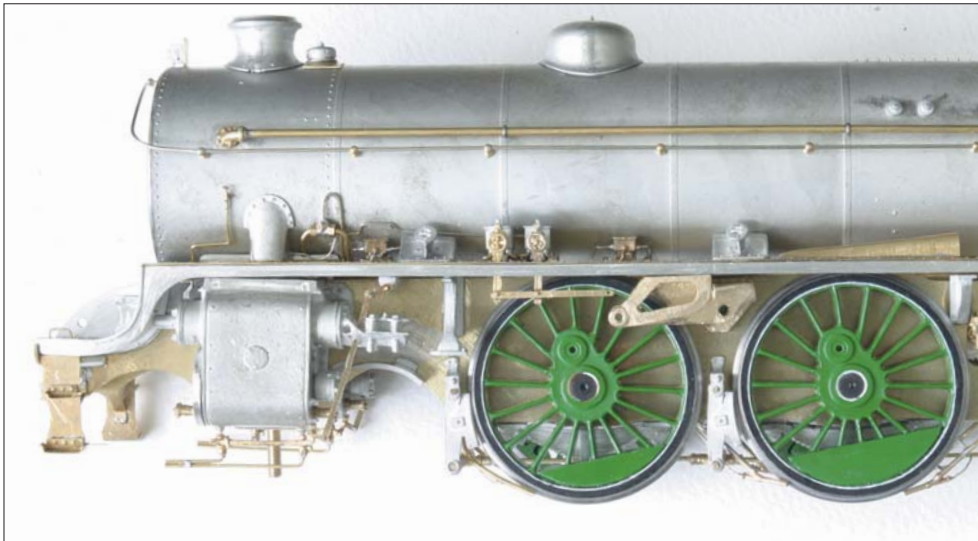
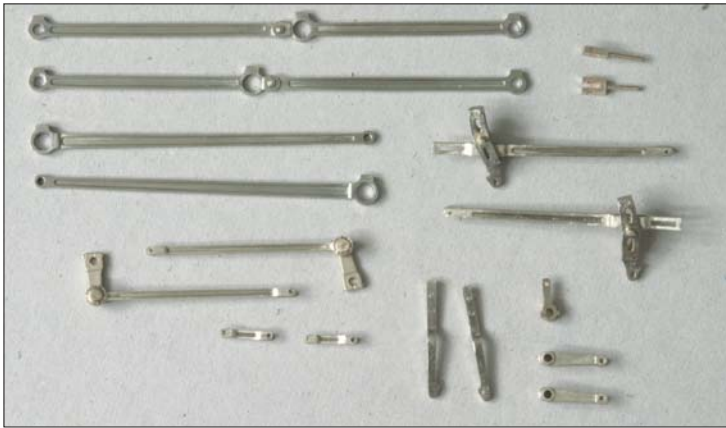
Unfortunately, in this kit, the castings were not of the same quality as those normally found in a DJH kit. Also, the exact location of one part to another is not entirely clear by the exploded drawings, and so a lot of testing is required with the proximity of each part to its neighbour, before final fitting.

As previously mentioned, there are a great number of parts in this kit – dozens of plastic bags each containing several parts – and I found that where you required several of the same item, like spring hangers for the axleboxes, 12 in all, they were spread around six different bags. At this stage, as I was fortunate in having a great deal of space at my disposal, I opened all the bags and grouped the same items together which, for me, made finding the parts much easier. This does, though, leave a lot of parts vulnerable and is not for the faint-hearted.

With all the above taken into account, the tender went together without any further encumbrances. One thing I would say, however, is that, after final assembly, it is virtually impossible to remove the wheels at a later stage, such is the design of the model.

Now this stage was complete, painted and lined, it really 'looked the business' and led the way to start on the locomotive proper.





Above left: motion prior to assembly.

Above right: the cylinder assemblies ready for installation. The replacement piston rods can be seen in each case.

Left and lower left: front end under construction, seen from both sides.

Bottom left: the cab sides and front are a one-piece etching designed to be folded to shape.

I always commence work on a locomotive with the chassis and, again for me, one of the things I love to see is the beautiful engineering of Walschaert valve gear faithfully reproduced on a model. With this model, the gear was fully functional with the reversing handle in the cab operating the rise and fall of the outside linkage absolutely wonderfully. Everything went together well, but was quite time-consuming with all the fettling needed to achieve the result required of such a detailed model.

There were one or two problem areas, however, for which I would prepare prospective builders who cannot resist owning a model of such beauty and quality. As I was going to paint the model, I decided the best way to achieve a satisfactory result would be to break the whole locomotive down into three large sub-assemblies. There would be the chassis with wheels, the footplate with associated fittings, and the boiler with cab.

It was during this procedure that I found some real problem areas with regard to fit. On the chassis, the thing to look out for is the 2mm dia steel piston rods. The instructions recommend cutting them down to a length of 31mm but, in my kit, the two steel rods were only 27mm long and so were not long enough to insert fully into the crossheads. I decided to make two new ones from some fresh 2mm bar stock and everything was then fine.

On to the footplate assembly, and this was where most work was required to achieve a correct fit between the chassis and body. There is a great deal of filing, scraping and drilling to obtain a good fit to all components and this applies equally to the smokebox saddle, which in my case now bears very little resemblance to its original appearance.

The next thing to prepare for is the installation of the motor in the chassis. Although using the recommended motor, two major modifications are needed. The central hornblocks on the chassis are made narrower for



The cab interior, partly complete (above) and finished (below). The reverser handle can be turned, just as on the prototype, and the fire-hole door can be opened.



the fitting of a motor, but they are not narrow enough to allow the motor to fit between them and so, particularly in my case, quite a lot of the whitmetal had to be removed before a satisfactory fit could be achieved. Also the primary shaft on the first gear of the motor protrudes quite significantly on both sides of the gearbox which stops the motor from fitting between the two splash-guards which are fitted to the inside tops of the footplate. Part of the metal must be removed in order for the motor to be lowered into its correct position.

The final area which caused me some head-scratching was the assembly of the expansion links into the motion brackets. When assembled, the expansion links would not fit into the motion brackets, and so I had to remove some of the inside metal from the brackets, bend the outer arms outwards, fit the expansion links and re-bend the outer arms back into their natural position in order for them to be a nice moveable fit.

There is one other point which needs mention, and that is the identification of parts. I did on one occasion find it impossible to locate a

particular item. A call to the DJH factory was required, to the firm's new Technical department, and I have to say that although they could not find the 'thimble' immediately, they were extremely helpful and telephoned me back very quickly with a guide to the correct brass sprue where this illusive bit was hiding.

That about concludes the trials and tribulations of creating what must be one of the nicest and most complete 0 gauge models on the market today and has to be a must for any LNER enthusiast.

If asked, would I build this model again, knowing the degree of difficulty, the answer has to be yes; especially now that I have had to hand it over to its rightful owner.

Now I look back at the photographs, I must have one for myself, and that from a 'dye in the wool' LMS man.

Below: Thompson B1 No.61157, captured in fine fettle over the ash pits on March shed on 29 July 1961. Built in 1947 by Vulcan Foundry, the 4-6-0 lasted in traffic until August 1965.

Photograph: Philip J. Kelley.



The Kingsway Subway

Going Underground on the top deck

JOHN HOWE describes his 4mm scale London tramway model.

London's double deck trams last ran in 1952, yet evidence of their existence can still be seen if one knows where to look. Just north of Holborn Underground station in Southampton Row can be seen the entrance ramp to the unique Kingsway Tram Subway. The ramp can be seen behind iron gates leading from road level down to closed doors, behind which the subway still exists. The ramp is bounded by the distinctive railings, and the tram rails and conduit slot can still be seen, just a little dusty since last being used on 5 April, 1952.

The subway was originally built by the London County Council (then responsible for the majority of London trams) and opened in 1906 for single-deck tramcars only. It ran from Southampton Row and underneath the then newly-constructed Kingsway to emerge on to the Embankment near Waterloo Bridge giving a length of approximately two thirds of a mile.

In 1931, the subway was reconstructed and reopened, now able to accommodate double-deck cars, which were by far in the majority in the London fleet.

In the tunnel underneath Kingsway were tramway stations at Holborn and Aldwych, each being entirely separate from the similarly named Underground railway stations. The tram stations had a platform between the running lines with two staircases giving access from islands in the centre of the roadway above. Near to Holborn Underground station, one can still see traffic islands in the centre of the road where the stairs rose. Look through



the metal grille and the stairs can be seen rising from below. The centre platforms meant that passengers had to leave and board via the front of the tram negotiating the driver's position, contrary to normal practice everywhere else on the system. The subway provided a much-needed link between the northern and southern parts of the London tram network.

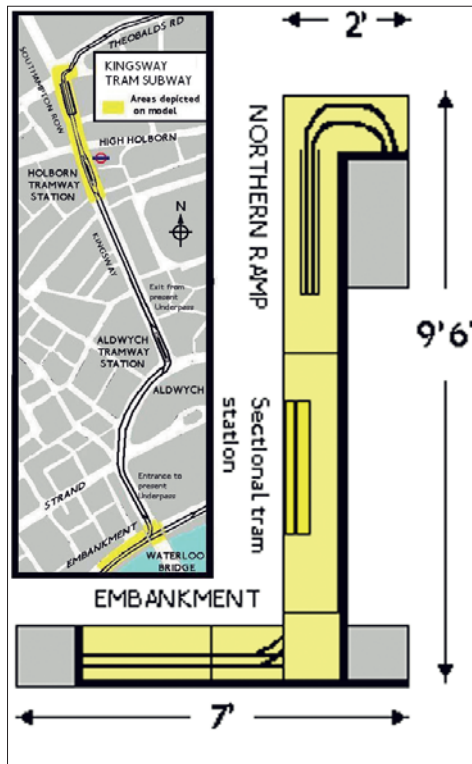
The ramp at the northern end of the subway, in Southampton Row, was a steep 1 in 10 gradient. Tramcars reaching the top of the ramp were faced with an immediate right turn into Theobald's Road at a busy traffic junction, originally controlled by a policeman on point duty and latterly by traffic lights. Inevitably the lights would be against the tram, resulting in the driver having to hold it teetering at the brink waiting for the right of way. Wet rails could add to his problem, and would require the use of sand to enable the wheels to grip. Because of the dangers of runaways, a signalling system was employed that permitted only one car on each slope. Only when the previous tram had reached Theobald's Road would the next one be permitted to leave Holborn tram station. Going south, a tram had to clear Holborn station before the next could leave the loading island in Theobald's Road and dive down the slope.

South from Holborn was a second station, Aldwych, which was beneath Kingsway just before the tracks curved underneath Aldwych itself. They then followed the line of Lancaster Place. With the building of a new Waterloo Bridge, the southern entrance was moved directly under the span, where it can still be seen today, albeit closed off.

Like much of the tram system in London, the subway was not equipped with overhead wires, but used a central conduit between the running rails. A 'plough' contacted two underground power rails and provided the power. At



Right: the stations were in 1930s art deco style and boasted high quality marble finishes. Photographs in the last days show them rather unkempt with torn and missing posters, but I preferred them like this. As always signage was clear and comprehensive. From 1949, blue London Transport bullseye signs similar to the red ones on Underground stations were fitted at two levels for upper and lower deck passengers.



various points on the system, special 'change-pits' were built which enabled the plough to be 'shed', and once the trolley-pole was raised to the wire, the tram could continue on its way. A few London trams were not equipped with trolley poles, thus being confined entirely to the conduit. The subway was served by three routes; 31, 33 and 35, reaching far into north and south London. Services were provided primarily by trams of classes E/3 and HR/2, being those with steel – as opposed to wooden – bodies, to minimise risk of fire. Wooden-bodied trams (without passengers) would have used the subway for transfer from works to depot, as also did members of the service fleet. Tramcar No.1, a prototype of a never-to-be-built fleet of modern cars, which was known as *Bluebird*, was used in later days for special tours including journeys through the subway.

The other modern trams of the London fleet – the well-known 'Felthams' – were too large for safe passenger use through the subway, but when transferred from north London to southern depots, they each journeyed through it, very slowly.

The model

Being faced with a prototype less than a mile in length and entirely underground was an interesting challenge. The 'must have' feature was of course the entrance ramp with its 1 in 10 gradient and distinctive railings. By some selective reduction of distances, I was able to



Left: the descent down the 1 in 10 slope was thrilling, an equivalent to a switchback ride for a penny ha'penny. The tram would rush headlong as though about to do a somersault into the darkness. On the model, Holborn station is reached rather too soon, which explains the light in the tunnel.

Far left: the tram driver holds E3 tram 1999 at the top of the slope using his first power notch. When the signal clears, a deft touch will result in a successful climb to Theobald's Road. If it's a wet day, a foot pedal will release sand onto the rails to assist traction. Background to countless pictures of Kingsway trams is the Central College of Art building that still stands. Many of the noted LCC Tramways posters were designed here.

Above: the southern entrance to the subway was underneath Waterloo Bridge. Other trams continued along the Embankment to cross over Blackfriars Bridge. *Bluebird* tram 1 can be seen emerging from the tunnel and turning right towards Westminster. In the gloom of the subway entrance will be an official equipped with flag and whistle to facilitate E3 tram 185 entering for its run to the north. The sign under the bridge span was illuminated to warn pedestrians and motorists of TRAMCARS CROSSING. The eyes for the supporting chains and the electrical point are still there over fifty years later. Under the tree can be seen the pointsman's canvas hut. He was responsible for directing the appropriate trams through the subway. Wooden cars in particular were not allowed.

come up with a scheme that included the ramp and also Holborn tram station as a first phase. This section fits into a 'footprint' of 8' x 2'. Since making its exhibition debut, the layout has now been extended to show the southern entrance under Waterloo Bridge along with a stretch of the reserved track on the Victoria Embankment.

At the north end of the ramp the rails curve to the right into Theobald's Road with the centre loading island used by southbound trams.

From here, rather unprototypically, the lines turn further right to swing round behind the Central College of Art building to disappear through the backscene to a return loop and passing siding. Beyond the bottom of the ramp going south, Holborn station is encountered rather sooner than it should be, and is viewed through a cut-out in the side of the baseboard. The road surface above the northbound track is removable and can be replaced by a transparent plastic window.



South of Holborn there is no Aldwych station but the trams emerge under Waterloo Bridge to turn right onto the Embankment. Rather sooner than it should, Cleopatra's Needle appears on the riverside and the tracks disappear under Hungerford Bridge into the backscene and a hidden return loop.

Track is standard Peco Streamline with small radius points. Up the ramp and into Theobald's Road the lines were paved with stone setts in the traditional tramway method, between the rails and to a point about 18" outside the rails, which marked the extremity of the area of road surface for which the

tramway operator was legally responsible. On the model I used DIY filler laid just below rail top level and scribed (rather overscale) to represent the setts. The remainder of the road surface was built up with hardboard to a similar depth and the whole lot was painted. The Embankment section has two points (one facing, one trailing, which is left free to move with the passage of the cars) which required careful filling with the use of plasticard to enable the blades to move.

Over the years I've seen many photos of London trams teetering at the top of the ramp with the distinctive Central College of Art



building in the background. This had to be part of the model. Further down Kingsway are Holborn Underground station (entirely separate from the tram station) and also Africa House, a rather grand columned frontage. All of these buildings still exist and so were duly photographed, as was the still extant ramp.

The size of city buildings is only appreciated when one begins to draw out the elevations, and as a result, I did remove the occasional section, and in the case of the frontage over the Underground station, one entire storey. However overall I think the buildings are recognisable. They are built primarily of plasticard with computer-printed window inserts. A trawl of books provided views of the underground platforms. Holborn and Aldwych had tiled art deco finishes but the arrangements of tiling and station signs were subtly different. The station 'bullseyes' were similar to those familiar to present day Underground passengers with the exception that the circles were in light blue instead of red. These were placed at two levels so as to be visible to both upper and lower deck passengers. I prepared suitable tiled wallpaper on the computer. Suitable posters were prepared in a similar way to fit into the tiled surrounds.

The entrance ramp and the pedestrian entrances to Holborn station are bounded by very distinctive railings. These were improvised using 4mm scale station fencing with extra detailing from plasticard. It doesn't bear close comparison to the original but overall gives the right effect. The characteristic light towers (which have since been removed from the real thing) were built from plastic strips of different sections. Also used was a plastic mesh from the local craft shop, which is cheaply available in a variety of sizes and gauges, I think for use as a tapestry base. Mine has a 4mm square grid, and suitably cut was used for the decorative work on the railings and light towers. I've also cut it into strips to make instant ladders.

Above: each tram station had two staircases to give access to the centre of Kingsway. There was no connection to either Holborn or Aldwych Underground railway stations. Between the entrance and the traffic lights at the junction with Holborn was a taxi rank in the centre of the road. On the layout, the staircases are a little too far to the north, having swapped places with the taxi rank. They were in fact further south opposite Africa House, which does appear on the layout. The entrances had similar railings to those around the slope in Southampton Row, a set of which are in storage at Crich Tramway Village, Derbyshire.

Left: Tramcar 1 was built by the LCC (London County Council) for use as something of a flagship for the Kingsway Subway routes after the 1931 reopening for double deckers. With air doors and air brakes, and, originally, a striking blue and ivory livery, it was known as *Bluebird* and outclassed standard London trams just like the Felthams of the MET and LUT fleets. The impending formation of London Transport in 1933 put paid to any further modern trams in London, and indeed the policy of tramway replacement by trolleybuses, was adopted.

Right: a London tram was about 7' wide and guided by its rails two tracks could easily be contained in a 20' wide tunnel. A proposal to use the subway for trolleybuses was not implemented although a prototype was built. This had doors on the offside of the trolleybus platform to enable passengers to alight onto the centre platforms at Holborn and Aldwych Stations. It remained one of a kind running on trolleybus routes in north London, pursued by schoolboys in search of something out of the ordinary.

Below: the entrance ramp in Southampton Row as it appears today with rails and conduit still in situ.

Street lamps on the Theobald's Road loading island and elsewhere were soldered up from individual strands from three-core copper mains cable. On the Embankment section, the riverside wall was constructed using mounting board and wood. Cleopatra's Needle was built from card and two Sphinxes were carved from wood to guard it. Woodland Scenics provided trees for along Kingsway with the trees on the Embankment being built up from multistrand wire wrapped with masking tape and painted before being covered with Woodland Scenics foliage.

Having in the past been a fan of the old Airfix/Dapol 'civilians' to provide a population, this time I bought a bumper box of unpainted Preiser 'general people' in H0 scale. Naturally, rather smaller, these provided a fresh range of poses and types of people which, with careful placing away from any of their 00 friends, are quite effective.

With my first love being London buses, I searched out suitable EFE and Corgi models, and also accurate blinds depicting suitable bus routes, which are available from specialist



companies. I've got postwar RTs on routes 1, 25, 38A, and 68, RTLs on 77A and 155, and an STL and two wartime utility Daimlers on 77, one of which is green having previously served on the Green Line. I've got some continental H0 period cars to go with the H0 population. My friend and fellow operator, Clive Greedus has supplied additional commercial vehicles for exhibitions; one which is usually well-appreciated by London Transport buffs is a UCC Feltham tramcar being conveyed to Leeds for further service, courtesy of a Pickfords low loader.

The trams

On the prototype, only steel bodied cars were allowed through the subway, so my choice of rolling stock was limited. I had a scratchbuilt

model of *Bluebird* (LCC No.1) in store from my last foray into model trams some twenty years ago. Appropriately enough for its name, it wore an experimental blue livery. I'd decided I wanted to depict the subway as it was about 1951, so it was duly repainted in the later standard red and cream livery.

Other than *Bluebird* I had to have E/3s and HR/2s to provide a passenger service. These had more or less identical bodies, differing only in their trucks, the E/3s having 'maximum traction' trucks with wheels of two different diameters, and the HR/2s having equal-wheel trucks befitting their use as 'Hilly Route' trams. With a long obsolete whitemetal kit of an HR2 being unavailable I was stuck.

However plastic E/1 kits are available from the Tower Trams range, now marketed by Bec.



Stock List			
Class	Fleet number	Route	Notes
HR/2 exp	1	'Special'	Prototype with air doors
EH	85	38	ex-East Ham
HR/2r	127	35	Rehabilitated ex LCC trolleyless Hilly Route tram fitted with wooden upper deck as result of war damage
HR/2	149	35	ex-LCC trolleyless Hilly Route tram
E/3	185	35	ex Leyton – last passenger tram through subway
E/3	1995	33	ex-LCC
E/3	1999	33	ex-LCC
UCC	2135	16/18	ex-LUT modern style tram
Service	012	–	Wheel carrier
Service	015	–	Stores van

Supplier and references

Tower Trams
 Made by Bec Kits, 47 Woodlands Road, Lancaster, LA1 2EH.
 01524 69303

London's Tramway Subway
 Published by LRTL (ISBN 0900433523). Now out of print.
Embankment & Waterloo Tramways by Robert J. Harley, Middleton Press (ISBN 1873793413)
Holborn and Finsbury Tramways by Robert J. Harley, Middleton Press (ISBN 1873793790).



Left: rarely seen during daylight hours was the works fleet, often converted from old passenger trams. Here, sand car 015 has just left the subway perhaps having delivered its load to Holloway Depot on the 'northside'. Until the war, most London trams had not had any windscreens: the service fleet never did get any, so the driver could have a quick word with the pointsman as he passed. Drivers spent their working lives standing unless they drove *Bluebird* or a Feltham.

Centre left: UCC Feltham tram on low loader for its long slow journey to Leeds for further service. Ninety Felthams were withdrawn from London service in 1951 and made the trip north to last in service until 1959. They would have travelled from the Penhall Road 'Tramatorium' in Charlton, scene of a more gruesome end for standard London trams, and probably not along Kingsway, but it makes a good talking point.



Bottom left: ex-Leyton E3 No.185 waits at the Theobald's Road island for the signal to descend the ramp. The RT bus behind the tram is on route 38A for Victoria and is one of the early postwar delivery, already outdated as newer vehicles have dispensed with the cream window frames on the top deck.

with SPUDs. I believe that suitable powered chassis to suit eight-wheel trams are available as kits, but for simplicity I'll stick to the SPUDs. These are identical and interchangeable with those I use for my scratchbuilt Underground trains.

With the addition of the Embankment section of the layout, I have now added an ex-East Ham car, which was basically a copy of the standard LCC E1 Class, and also a Feltham. These run up and down the Embankment representing the many services which passed there. At its height the service was 225 cars per hour. A car of particular interest is 127 which was fitted with a wooden top deck as a result of wartime damage, and yet was still allowed to run regularly through the subway on route 35.

Operation

The layout is equipped with a Morley Vector twin controller with handheld units. One controls the subway and Theobald's Road, the other takes care of the Embankment. A bell is used to signal that a tram is waiting to enter the other operator's area.

Each operator also has many electrical sections and with deft manipulation of the switches, an intensive service can be run with trams able to stop nose to tail at the Embankment stops and in Holborn tram station.

The north end of the layout has a passing loop and the Embankment has return loops at each end. Unprototypically, there is a hidden storage siding in the subway which is used to store spare stock.

Conclusion

The layout has been exhibited twice prior to the addition of the Embankment extension, appearing at the London's Transport Museum Depot at Acton, and the Festival of Model Tramways at Kew. For those that remembered riding on the trams, memories were enthusiastically recalled, especially of the thrills of the

These were carefully altered (replace the lower deck sides with flush panels from plasticard, and amend the end upper deck window arrangement) and *voilà*, an E/3 appeared. Scratchbuilt plasticard bogie sides could be added to produce an HR/2. Also left over from twenty years ago were two whitmetal kits of stores van 015 and wheel car 012, which were resurrected and which appear infrequently just like the prototypes, to keep the viewer amused.

Now to my big confession. Apart from the service fleet, London's postwar trams were eight-wheeled and twin-bogied. In the past I'd

found the miniature power bogies used in 00 trams to be less than reliable, and with the 1 in 10 slope I needed something I could count on. I therefore took the decision to use a single Tenshodo SPUD bogie in each tram. The wheels of these corresponded roughly to where the innermost axles of each bogie would have been and with cosmetic bogie frames fixed below the bodysides the 'trick with the trucks' was hopefully not too apparent. The two whitmetal service trams still had their original power bogies and in fact would not make it even half-way up the ramp. These too have been (more legitimately) replaced



Right: car 012 was a 'wheel car' for moving wheels and other heavy items between depots. The load might have a tarpaulin if it rained; the driver certainly wouldn't.

Centre right: with only a few months of London trams left, *Bluebird* could be found with 'EXTRA SPECIAL' on the blind on chartered tours. At the last moment it replaced some fire-damaged Felthams, and took the long trek north to Leeds. As a result it survives at Crich Tramway Village, in Derbyshire.

Below: rather sooner encountered on the model than it would be in real life, is Cleopatra's Needle and attendant sphinx. Passing the subway car stop is EH tram 85, which is a former East Ham car built to resemble the standard London E1. These cars ended up allocated to Abbey Wood depot and survived right to the end.

Bottom right: today the Embankment is a dual carriageway. The now-southbound carriageway was the preserve of the trams, with road traffic confined to what is now the northbound. As some of the tram routes changed to diesel buses, those running towards Westminster used the tram tracks so as to be able to access the kerb. During this period there were two serious accidents as the rival modes of transport came together. An RTL bus with Leyland engine finds itself confined to following trams. Going north is a Feltham tram which is using the Embankment tracks as a terminal loop travelling via Westminster and Blackfriars Bridges in order to return to Croydon. Replacing buses were intended to use suffixes to indicate the route – 155B or 155W – but it all got terribly confusing and was dropped.

dive down the slope into the darkness, and also of the noise.

One observer recalled that the subway had featured in the *Goon Show* when some characters had stolen a tram and hidden it away inside the tunnel in an attempt to ride on 'London's last tram'. He promptly quoted from the script complete with all the silly voices. Perhaps my storage siding in the subway has a prototype after all...

Many who were familiar with the area in more modern times were in complete ignorance of the subway's existence, despite per-



haps having travelled through part of it in the guise of the present day underpass, or even having seen the strange sight of the now disused entrance ramp in Southampton Row, complete with dusty conduit tram track. How remarkable that one should still be able to see the disused ramp in the middle of London

some fifty-three years after the last London trams ran.

The layout with its new Embankment extension will be appearing at Brighton Model World in February 2006. See *Societies & Clubs* for details.



Tarrant Valley Railway

A modular 009 exhibition layout

built and described by members of WIMBORNE RAILWAY SOCIETY.

During 1998, the Society was fortunate enough to purchase, for a nominal sum, part of an existing modular exhibition layout from two ex-Society members, originally built for our first exhibition held in 1993. This section, which became *Tarrant Gunville*, along with two others, formed an extensive railway, which included *Port St. George* (see RM August 1996) as the main terminus. When we got our hands on our 'new' layout, it was a little worse for wear having been stored for a few years. The signal box, platform, cobbled station approach and trackplan would remain with virtually all the other structures and scenery rebuilt.

Steve had purchased one of the other original sections from another society member (Paul) a few years previously and so this was readily available for use as part of a new exhibition layout.

A location had to be decided upon for this layout and so an idea dreamt up by a Society member several years ago would make the perfect setting. A potted 'history' of the railway now follows.

This line is based on the little known Tarrant Valley Railway (TVR), running from an exchange siding just north of Spetisbury on the Somerset & Dorset Joint Railway to Tarrant Gunville and beyond for about one mile for freight traffic to serve some chalk pits. Quarried chalk was the line's main revenue earner, with two other sites opened up along



the railway. Various farms were passed as well and these were also catered for in the freight traffic. The length of the line was approx. 8 miles.

The TVR opened in 1860 as a freight-only

line, but in 1867 a passenger service was introduced. A new station and loop, Stonemere, was opened just outside Spetisbury to offer passengers the chance of a river boat trip along the Stour.





Heading picture: an early morning passenger train crosses the River Stour girder bridge on the approach to Stonemere station, hauled by a Hunslet 2-6-2T. Note how realistic the flowing river looks.

Above: an NGG16 Garratt pauses at Stonemere signal box on gauging trials, with a freight passing by in the loop, hauled by one of the original engines built for the railway.

Photographs by Len Weal, Peco Studio.

The line originally had just three engines and 16 wagons, the rest being bought in second-hand as and when they became available from other sources.

The company wasn't that wealthy and so buildings were mainly constructed by one contractor, with a common style, mostly using wood, with just one or two exceptions. The line's engineer wisely spent more on the track and stock than on impressive buildings.

The railway prospered up until the First World War, when the original source of chalk at Washer's Pit became exhausted and this section of line north from Tarrant Gunville closed. The stub of this line is now the cattle/sheep dock. Running on borrowed time and with the events of the Great Depression, the line closed at the outbreak of World War Two, with all the materials going towards the war effort.

Very little remains today, apart from a few buildings and the telltale scars in the landscape. A more detailed history accompanies the layout at exhibitions along with a map of the line and photographs taken of features and structures in the area concerned which were once 'railway property'.

The model depicts the line as it was during the 1920s/30s and we will now take a trip along the railway stopping off at points of interest. The photographs show the layout in its U-shape formation.

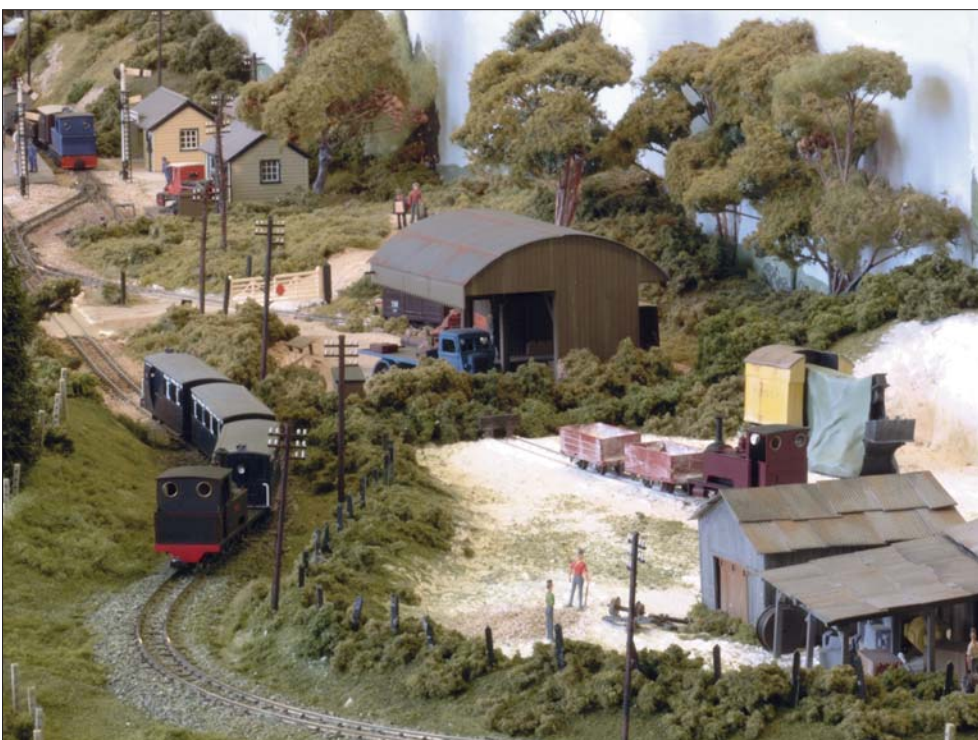
Tarrant Gunville

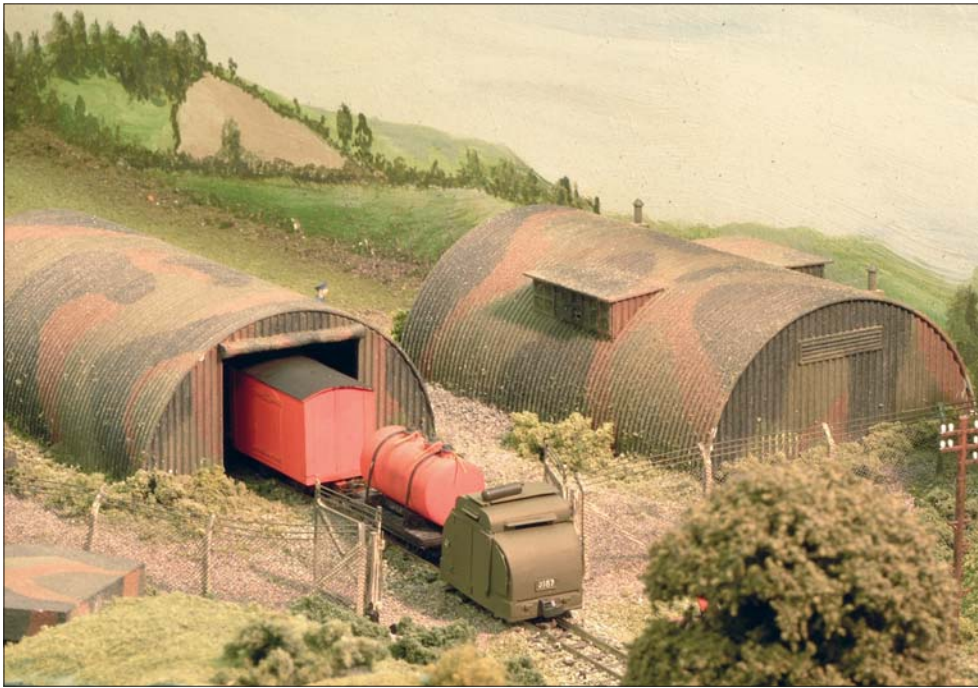
The terminus of the layout consists of two approx. 4' x 18" boards constructed out of 12mm plywood on a 2" x 1" prepared framework. New legs were made again using 2" x 1" prepared timber in an H section and braced diagonally underneath to improve stability. Adjustable feet were added to all the legs to overcome any uneven exhibition floors.

Polystyrene was cut and shaped to create the landscape, glued together with PVA wood glue. DIY filler was then applied to make up the actual contours. Woodland Scenics scatter material and clump foliage were used, stuck down again with the wood glue. This was followed by carefully spraying on a dilute mix of

Far left: the scratchbuilt chalk quarry buildings at Tarrant Rawston are shown to good effect from this vantage point. Three wagons are loaded with some of Dorset's finest, with a further three being pushed into position ready for loading. The pump house and small halt can be seen in the background.

Left: a passenger train, having passed the builders' merchants store at Stonemere, snakes by the quarry repair sheds to the right. The quarried chalk hillside is about to be reduced again when the covers come off of the excavator.





water and wood glue to ensure that all was firmly stuck down.

The cattle/sheep pen, water tower, loco coal dock and signal box are all standard Ratio plastic kits but the latter boasts a fully detailed interior, with lift off roof to view this.

The goods shed, coal office and staithes are by Wills, as is the cobbled station approach. The low wall to the front of the layout is Wills dressed stone walling.

The engine and carriage shed have been remodelled to accommodate our requirements and have been built up from scratch using the Wills plastic sheets.

The station building consists of the Wills wooden waiting shelter and station building kit joined together, but with a new roof added.

Hence all the main railway buildings have a similar appearance. The roadbridge has been constructed out of foam board, which was then covered in stone plasticard. The parapets were finished off with DIY filler, which was scribed when dry. The two sides of the bridge are on separate boards and after assembly a cardboard road 'insert' is slid under the parapets to complete the structure and hide the baseboard join.

Ratio lineside fencing was used and GWR lower quadrant signals, which were reduced in height by about 1" so that they didn't tower above the stock. MSE brass arms have been used. The telegraph poles are once again by Ratio and these have also been cut down to a more realistic height for the layout.



Tarrant Rushton

Our next destination is the airfield at Tarrant Rushton. This section took more time to plan and build than any other, although it is only 4' x 18". A basic stream was cut out of the baseboard, running alongside the line and then underneath and out at the front of the board. The baseboard construction follows the method used on *Tarrant Gunville*. The small railway bridge was made using plasticard I-sections and 00 scale wooden sleepers glued in place on top, with the track sitting directly on to this. An old Airfix control tower kit and a couple of Roco Nissen huts and Wills pillboxes were built and painted by our resident aircraft and weathering expert. NATO brown, black and green Tamiya acrylic paints were used for these to create the camouflage effect. A light weathering wash, again using Tamiya acrylics of one part desert yellow, flat earth, flat black to 10 parts water was then applied. The pillboxes differ slightly, by having a paste of Humbrol no.1 primer mixed with talcum powder spread over the entire surface using an artists trowel which was then 'stippled' with an old paint brush to give a concrete effect. The talcum powder absorbs the paint to give the buildings an older look about them.

The Tarrant Valley air wing is usually on show, with either RAF Moth trainers or the 1918 flying circus in residence, all courtesy of the Corgi diecast range. Ratio high security fencing surrounds the site, suitably sprayed, dulled down and weathered using the dry brush method. Two Dart Castings ground frame kits complete the diorama.

Tarrant Rawston

The quarry section at Tarrant Rawston, comprises three boards, the outer two incorporating the necessary trackwork to enable us to turn the layout into two differing L-shapes or a U-shape

Being a modular layout, the track at the ends of each section are a constant 9" from the front of the board and thus we can produce six different formations, depending on constraints/requirements of the exhibition organiser. This section is 8' long by a maximum of 3' wide. The central quarry board was originally built by Tim Couling as an engine shed for *Port St. George*, using a double skin of ply, whereas the two corner boards again followed the method used on the previous sections. Paul is now the owner of the centre board.

The chalk effect was created using plain filler applied either to the baseboards or polystyrene, with real crushed chalk sprinkled on sparingly while still wet.

The quarry buildings are a mixture of wood and corrugated sheeting which were sufficient

Above: an armoured Simplex shunts its train of supplies into one of the Nissen huts at Tarrant Rushton. Note how the backscene rolls into the baseboard at this point giving a good impression of depth to the grassed runway.

Left: a train of 4-wheel coaches passes the camouflaged buildings of the airfield with a service for Stonemere. Note the high security in place around the site.

to do the job without frills. In model form, the basic frames were made up from plastic sections from the Evergreen range and then clad in individual sheets of Slater's corrugated iron. The tin sheds were all sprayed in Halfords grey primer and given a wash with heavily thinned black enamel. Rust was dry brushed on and clutter is being added to try and recreate the look of a small operation that recycles as much as it can.

Acrylic car primers give a good base coat with enamels and artists' tube acrylics for the final finish, mixing paints to give lighter or darker shades to provide the impression that they have been painted at different times.

The occupational bridge was also scratch-built using an offcut of plywood scribed to give a plank effect, with the supports made from matchsticks and balsa. Plastic fencing was cut to suit to form the railings.

The pumphouse, signal cabin, small station building and barn are commercial kits.

Stonemere

Moving on to *Stonemere*, this has been constructed using an open frame technique for the two 4' x 2' boards. The main frames themselves are formed from 3" x 1" timber. This style portrays a more realistic feel to the way the railway runs through the landscape, rather than vice versa. It creates depth, allowing the river to be naturally below the trackbed and a lighter baseboard, whereby the plywood base only follows the course of the trackbed, supported where appropriate from the cross members of the framework. Also, it permits the viewing public to look up at the trains or from ground level, rather than always looking down on to them.

The station buildings are standard and modified Wills kits. The Builders' Merchants is a Ratio coal merchants store, suitably re-hashed, whereas the signal box is a standard Highley (SVR) product. The level crossing gates are fully working examples, using the simple brass wire in a tube through the baseboard method. Two of the sheep 'move' using the same system.

The railway bridge over the river uses Peco N gauge girder sections, which are the perfect size for 009.

This leads us nicely into how the river scenes were achieved and it is apparently quite simple and not very technical, according to the creator, Steve Flay. The base is plywood and once the direction of flow of the water had been established, a sloppy filler mix was brushed on in that direction. In order to create the ripple effect, the brush was carefully and slightly brushed against the flow and quickly lifted off, resulting in small ridges about 1-2mm high. This was allowed to dry thoroughly, about 48 hours, and dried to an off white/light grey colour. The chalky nature of the ground along the Tarrant was taken into account for the river colour. Cheap ready to use water-based paints were used. The depth of the water by the banks would naturally be shallower than in the middle of the river and so to create this illusion these areas were painted a lighter shade. Black with a little green for the bulk of



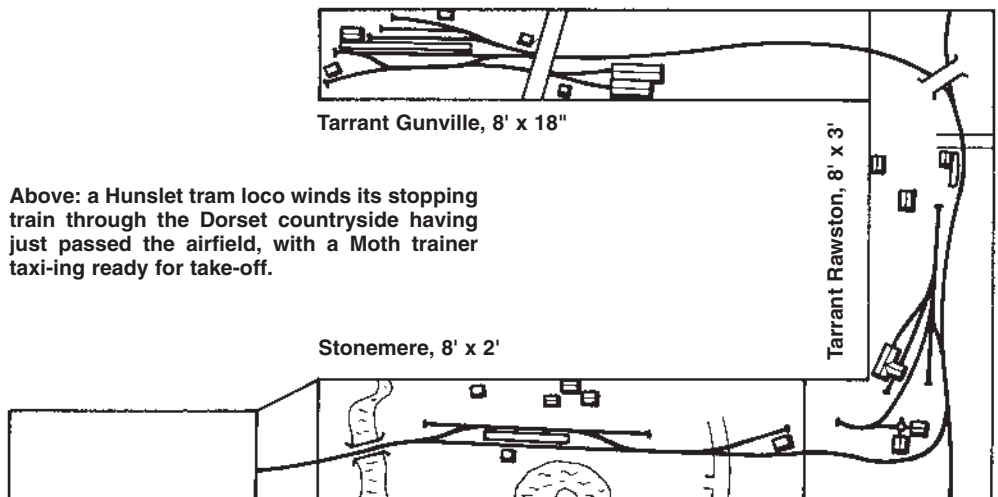
the river and the same mix but with more green and a hint of white for the shallower areas, were mixed at the same time and painted on very quickly so as to merge the colours whilst still wet. This created a gradual colour change from the shallow lighter colours to the darker deeper parts of the river and this was allowed to dry for about 24hrs. The whole area was then painted with three coats of yacht varnish, which results in a very shiny and tough finish. Around the bridge piers and at selected parts of the river bank, small pieces of sifted chalk and chalk powder were glued in place with PVA glue and then small pieces of green ground cover were glued over this to represent weeds growing out from between the stones. The same technique was used to create the 'beach' effect on the inside of the bends of the river. To finish off, Humbrol gloss white paint was dry brushed over some of the ripples to emphasise the flow of the river. This had to be done sparingly and is very subtle but effective.

Fiddle-yard and trackwork

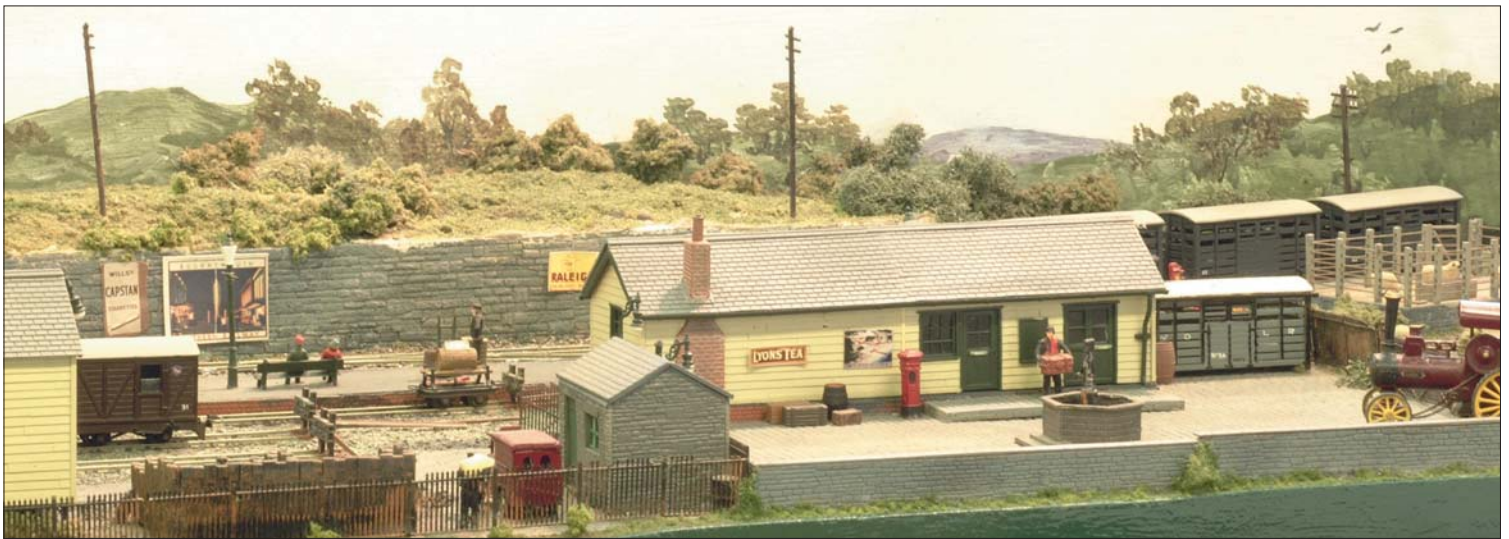
Finally we come to the non-scenic board and the part of the layout on which the public is not supposed to be able to view the stock, the fiddle-yard. Initially this was used for a society N gauge layout but it has been suitably extended and rebuilt to its present guise.

The fiddle-yard's basic construction is as *Tarrant Gunville*, but originally it was only 12" wide, so it has been widened by 6" on the operator's side. This was at a lower level than the baseboard top as a shelf for added storage space rather than sidings and as an extra safety aid to prevent stock from accidentally falling on to the floor. We found we were able to lay five sidings in the fiddle yard quite easily and being 4' long, it was more than adequate for our needs.

All the trackwork on the layout, which is from the Peco range, has been laid on cork to deaden any noise, and ballasted (except in the fiddle-yard) in the usual manner of



Above: a Hunslet tram loco winds its stopping train through the Dorset countryside having just passed the airfield, with a Moth trainer taxi-ing ready for take-off.



watered down PVA glue with a drop or two of washing up liquid.

The fiddle yard has been designed to be able to carry all of our control panels, leads, spares, etc. inside it and is therefore an open rectangular box shape. The top part is hinged up to 45 degrees when at exhibitions so members of the public are able to read about the history and other details regarding the layout. Once all the sections are up in a straight run, the overall length of the layout is 35'.

Layout electrics

Each of the control panels, four to date, has its own power supply for points, accessories etc, and is also fitted with a controller. So this allows any part of the layout to be run on its own, that is without the need to assemble the whole layout if one needs to run a small section.

Each of the control panels has a form of cab control so that the track sections can be switched to local control or the next con-

troller up or down the line, or be switched out so it is then possible to run a train the entire length of the layout by the receiving control panel, (i.e., on *Tarrant Gunville* or at the fiddle-yard). All the control panels are linked together by a standard common control bus power system, and all the operating switches on the layout are colour-coded thus: grey for track isolators; black for points; red for signals; and, blue for track feeds, so that the operators of the layout, no matter on which control panel they are working, know what does what.

The layout's controllers are of a home design and build, which have an output of smoothed dc 0-12 volts with an adjustable current limit of between 0.3 to 1 amp. On each controller there is a hand-held control box for speed and direction and as these controllers are the same they can be plugged into any of the control panels. On *Stonemere* the points are worked by Peco point motors with accessory switches to work 12volt relays for frog switching and to provide feed back to the control panels for route setting etc. On the rest of the layout points are worked by motor drive type point motors, mostly the Tortoise type, again with the accessory switches working the same as *Tarrant Gunville*.

Signals on the layout are from Ratio with Peco point motors on adaptor bases in which the output arm pulls the arm on the base of each signal via wire links. Also fitted to the signal motors are accessory switches which give red/green indication on the control panel as to signal setting.

Backscene

All the MDF backscenes were at first painted with a light blue colour which ultimately would form an undercoat. They were then transformed by ex-Society member and scenic maestro Steve Flay into something less obtrusive, using the following method.

A light blue mix of acrylics and ready to use watercolours was applied, graduated to almost white at the bottom, resulting in a sense of depth to the horizon. The rolling Dorset country scenes are only a few inches higher than the 3D scenery, which gives that real depth feel to the overall scene. The basic hills were very quickly and lightly sketched on to the plain



Left: a general view of Tarrant Gunville, showing the wooden station buildings, as standard along the line. Note the grounded cattle van, with three more behind it in the dock, waiting to be loaded.

Below left: a Baldwin-hauled freight nears journey's end as the signal is cleared for it to pass the carriage shed and enter Tarrant Gunville station.

Right: large Peckett 0-6-2ST No.3 departs Tarrant Gunville under the road bridge, with the horse and cart passing overhead.

sky scene and watercolours and acrylics were used to create these. The colours were carefully mixed so as to be as near as possible to that of the 3D scenery. Once dry, trees were added by using a very quick method called 'dry brush stippling'. With this, shades of dark, medium, and a lighter green were mixed in a palette and a small flat 1/2" artists' brush was used. This was dipped in the medium green and then pressed gently into some kitchen roll to remove most of the wet paint. Then by gently, but quickly, dabbling (stippling) the 'dry' brush on to the backscene, a leafy tree shape was created in just a couple of seconds. In order to make the trees look three dimensional, they needed highlights and low lights. The direction of the sunlight was determined and then it was easy to stipple the darker green on the shaded side and slightly lighter green on the sunny side. A few shadows and other details were painted on in the normal way with a small modellers' brush. Pieces of scenic tree matting were teased out and stuck on some of the larger trees to give them a semi-relief effect which draws the 3D scenery into the 2D backscene.

Each section has its own backscene board but, as the layout is modular, the backscenes had to be compatible with each other at the joints to give a continuous effect along the whole layout.

Locomotives and rolling stock

Locomotives range from freelance designs to proprietary whitmetal kits of North Wales origins and include nearly all the commercial makers, such as a couple of GEM Baldwin 4-6-0Ts and Bagnall 0-6-0Ts. Three Glyn Valley-type tram locos complement our own designs below. There are a couple of standard classes unique to the TVR. These are a Hunslet-styled 0-6-0T tram engine from some patterns which were cast in whitmetal to provide a cheap loco based on the Graham Farish 08 0-6-0 chassis. The other one is a large 0-6-2ST Peckett-based engine, utilising a Dapol/Hornby 'Pug' body cut down to suit the old style Liliput chassis. Unfortunately the newer Bachmann Liliput chassis would require extensive modification to fit. Nameplates have been sourced from the Modelmaster/Jackson Evans range.

One or two strangers also makes an appearance from time to time, including a Backwoods Miniatures NGG16 Garratt, and a narrow gauge version of a 'Shed', No.66 009! Coaches and wagons are a mixture of makes and styles, gathered together from the interests



and whims of Society members who help to operate the layout. The vast majority of the wagons are plastic kits from the Parkside Dundas and Nine Lines ranges and include stock from all the Welsh narrow gauge railways. Coaching stock consists of rakes of bogie and 4-wheel coaches from North Wales as well. All have been weighted with (liquid) lead and appropriate loads have been added in the wagons. There are for example, a set of empty and full chalk wagons which run up and down the layout in the correct directions. Liveries are varied, although common themes are slowly being developed.

Future plans

The central quarry board will be remodelled slightly, with the addition of a passing loop on the 'main line' and a new section will be constructed. This will depict some of the cottages to be found at one of the Tarrant villages, to include a pub and a street scene for the tram locos to feel at home. An extra internal corner board may also be built to enable the layout to be displayed around the outside of an exhibition hall.

Acknowledgments

The age range of Society members who have

got involved with our extensive layout is also quite vast, with persons from 10-60 years of age all contributing with the operating. Thanks must go to all those who have helped out at exhibitions as and when their time permits. The Society would like to thank the following people for their help and dedication in particular Kevin for designing the electrics, John for his bridge building skills, Paul for supplying the 'standard' locos and buildings, Steve for the Blu-Tack, superglue and assorted tools, Bernard for his woodworking and van driving prowess, Tom for painting and weathering the airfield buildings, and Andrew for his green pigs.

A special thanks must go to our good friend Steve Flay who turned the two blue eyesores into the river and backscene respectively to such good effect to give the layout that finishing touch.

Website

Additional information about the Society can be found at our new website, where you can read about the railway's full history and development as well as take a look at other photographs taken in-house. Other projects and goings on can be found at: [http://members.lycos.co.uk/wimborne railway/](http://members.lycos.co.uk/wimborne_railway/)



Westerdale

N gauge with a departmental emphasis

JOHN GREY models and describes his Engineer's trains from first-hand experience.

I have a wish-list of layouts I'd like to build, one of which was *Westerdale*, a secondary main line set in the Northern hills. It has been, and still is, normal operating practice to send slower trains by secondary routes to keep the main lines clear for faster, higher priority trains, even though this involves extra mileage. It does bring trains to places they wouldn't see otherwise.

Westerdale was not particularly high on my priority list, but I saw an opportunity to recycle my old layout, *Carronbridge* (a Highland branch line). Over the years, I have also accumulated a lot of wagons, both modern and steam era, and I wanted somewhere to run them.

From 1977 to 1984, I worked for BR's Chief Civil Engineer's department at Crofton

Above: whilst the 'nuke' train burbles up and over the viaduct, an Engineer's train made up of air-braked wagons approaches the end of the single track section southbound.

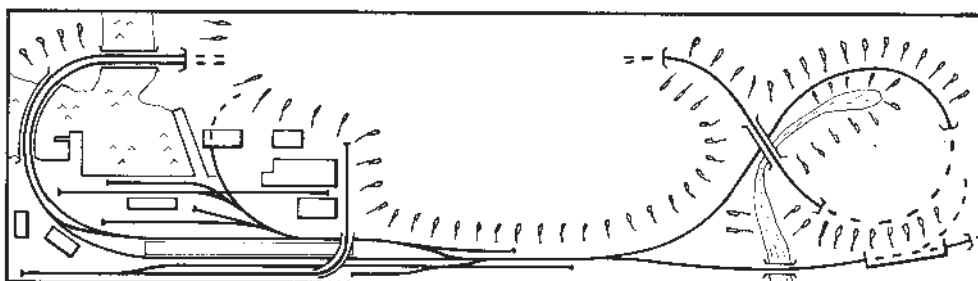
Permanent Way Depot, near Wakefield, West Yorkshire. After I left, I developed a line of etched brass wagons, including some Departmental wagons, in N gauge.

The late 1980s is about as late as you get before nearly all trains become multiple units. Many of the wagons being used by the engineers at this time were former traffic wagons which had become surplus to requirements due to the continuing loss of freight traffic and changes in the nature of manufacturing industries. At the beginning of the 1980s the railways

had more traffic and more classes of engine and a greater variety of wagon types, but everything was in dingy corporate blue and brown. By the end of the 1980s, although there was less freight traffic, there was much more in the way of different liveries. Also, the engineering departments were having to run their own trains to move wagons that had previously been sent 'in traffic'. I don't know if they still do, but they used to call all Engineer's trains ballast trains. Trains actually carrying ballast were called stone trains.

Then I had the bright idea of making all eight trains working out of the automatic fiddle-yard into Engineer's trains. This left room for four trains on the manually operated reversing loop and branch line: a mail train, a freight train, a Regional Railways passenger train and a nuclear containers train.

The term Engineer's or Departmental train covers a wide variety. For example, I once dispatched a train consisting of a Class 40 and two brake vans bracketing a high goods loaded with concrete sleepers. This was going to the site of a derailment where some sleepers had been damaged.



Continued on page 100.

Departmental wagons for Westerdale - 1

▶ Close-up of the S&T train with a Tube wagon loaded with cable drums and a cement mixer wagon, for laying concrete bases on which to stand apparatus cases.

▼ An ex-OBA wagon loaded with crates. Most open wagons put into Engineer's service became ZDA or ZDV. In June 2005, I saw a train passing through Doncaster which had some early air-braked vans still in Railfreight red & grey including one VBA still in brown.



▶ An air-braked van repainted in Dutch livery and an ex-OBA loaded with concrete sleepers. To make up these sleeper loads I cut up some old concrete track, smoothing off the rough edges.

▼ A bogie bolster D carrying 60' rails needs runners either end as a bolster D is only 52' long. For operational purposes, I am supposing that it has been retro-fitted with air pipes to enable it to work in an air-braked train. The runners I made from Peco 15' underframes which I fitted with a sheet of plastic for a deck and some pieces of rail for weight (as did BR).



▶ Two 16-ton minerals being used to carry ballast. As stone is heavier than coal, the wagon on the left is correctly loaded, but the wagon on the right may well be overloaded. These wagons are from my own kits. At the time it was the only way to get an authentic 9' wheelbase coal wagon.

I get asked about the loads in my wagons. Basically I spent a lot of time watching trains go by and remembered anything interesting. The ability just to look at something is one of the advantages of modelling modern. Loading and unloading wagons at Crofton PW Depot helped considerably, of course, in my case.

Photographs by Steve Flint, Peco Studio.



Departmental wagons for Westerdale - 2



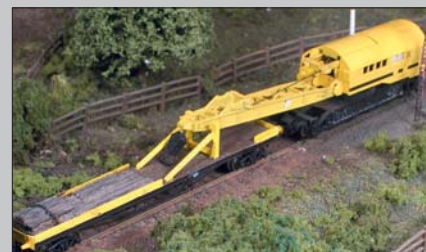
▲ A bogie ballast hopper made from an N Gauge Society kit. Sealions had the TOPS code YGH, H means dual fitted with air and AFI vacuum brakes. AFI was an advanced form of vacuum brakes used on a few wagons in the early 1960s. I found two of these wagons on a second-hand shelf in a local shop.



▼ A Dogfish ballast hopper and a Turbot bogie dropside wagon (Ian Stoate Models) loaded with new ballast.

◆ A train of YAO Dolphin wagons (an LNER design) carrying 60' track panels. The track is made up with code 30 rails on copper-clad sleepers.

▼ A close-up of the Tomix crane. This looks more like a typical Engineer's 10-ton crane than most of those available in N gauge.



On 18 September 1982, I saw off a train which consisted of locomotives 40 092 and 37 126, some 13 track carriers (12 loaded and one empty), two cranes, 12 empty spoil wagons and three brake vans. Normally, spoil wag-

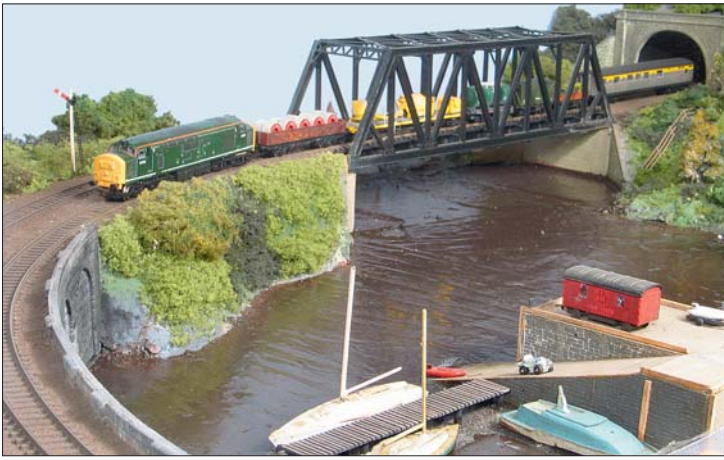
ons and ballast went separately to the work site but occasionally Healey Mills experimented, by coincidence usually when I was subbing for the regular wagon clerk. Stone trains, the ones actually carrying ballast, were usual-

ly fully fitted. Most other Engineer's trains were not. Have you noticed that brake vans have disappeared in the last few years? Trains were often made up in advance and taken out to stabling sidings near the work site. As the work sites were usually out on the line, Engineer's trains often had a brake van at each end to simplify reversing moves. Regular freight trains, which reversed direction part-way through their journey, had the same. Occasionally, plant and machinery were sent to work sites on Engineer's trains, particularly when there was no road access. The loaded spoil train includes a JCB on a well wagon.

One thing I thought about, but passed on because I didn't have the siding space, was an EMU towed by a diesel engine, being delivered from the works. In more recent times, we have seen the utterly unbelievable in the shape of trains going to and from the workshops on road low-loaders.



Left: a Minitrix Class 47 in original Railfreight colours heads south with a spoil train. Another well wagon is being used to bring a JCB back from a worksite with no easy road access. This train is fully (vacuum) fitted and the Guard's van is being used as a staff van.



If you have diversions around engineering work on an electrified line, you have to attach and detach pilot engines, which means in model form you can have electric trains without the headache of installing overhead wire.

Westerdale lives in a garage – which is like a refrigerator in winter and an oven in summer – but this does give a good length of space in which to work

I plan to backdate the layout to circa 1960, which is easy as the countryside in the ‘back of beyond’ doesn’t change much over the years.

The Dutch livery on my Engineer’s engines and wagons is achieved by spraying them grey and then applying blocks of Walthers yellow decals cut to size with a surgical knife and a steel ruler. The application of decal setting solution makes the decal snuggle down like a coat of paint over seams and rivets. Thin orange stripes make good safety stripes as applied to modern diesels. Other colours used in conjunction with TPM replacement window inserts enable me to produce some unusual coaches. Unfortunately, it is becoming increasingly difficult to find old Graham Farish coaches with detachable window strips.

When I converted *Carronbridge* into *Westerdale*, I replaced the original lift bridge with a double track truss bridge and the wooden trestle bridge with a double track stone viaduct. This inevitably changed the style of the layout, but the old lift bridge and trestle were becoming operationally unreliable. As I replaced them, I opened the line out to double track as far as the station. I salvaged the wooden trestles and used them to create a first-floor access to the factory. This industry has undergone nearly as many metamorphoses as Doctor Who. It started out as a distillery, then became a spring water bottling plant (more traffic in and out), and is now a pulp and paper works. It could also be a grain drier or animal food producer.

If I were planning on keeping the layout in its present form, I would extend the siding past the pulp mill into the fiddle-yard so that I could push loads in and pull empties out. The use of an American switcher is unusual but by no means unknown, although they actually work bigger industries like quarries or steel works. I did wonder if I’d made the gradient too steep. The steepness was dictated by the physical limitations of the site. In the event, the

Above left: a green 37 brings an S&T train over the truss bridge northbound into *Westerdale*. I chose a Minitrix coach to make-over into Dutch livery because its removable glazing made repainting much easier.

Above right: a Metals Sector Class 37 shunts the paper mill. The OBAs and the Fisons Palvan (PWA) are from kits I used to sell. The Palvan was placed there to hide the cattle in the pens on the loading dock, left over from when the layout represented the steam era.

Below: the big red switcher pushes timber wagons into the upper levels of the paper mill whilst the Class 27 removes some of the resulting products.

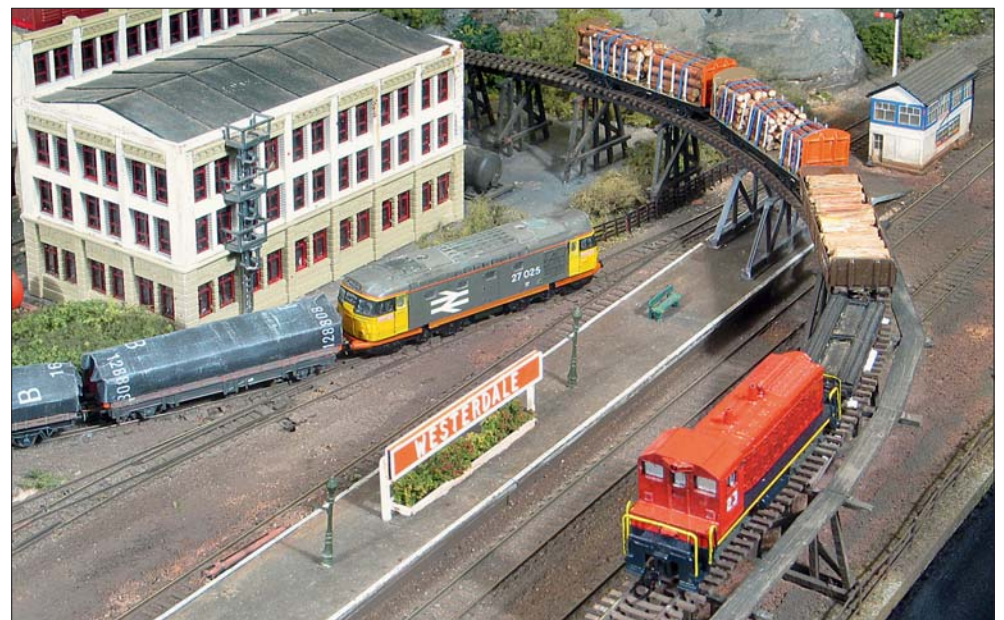
big engine just marched straight up the grade – no worries.

The partial double-tracking did push me towards solving a long-standing problem. Inevitably with such an eclectic mix of engines from many different makes, I found it difficult to find a throttle setting which suited every engine. When two of them were moving at the same time on the same controller, often one would race off and the other virtually stall. In order to keep this under control, I added ballast resistors in series with the motors on my Minitrix engines (5.6 Ohms 0.25 watts). In some cases, it was quite tricky finding somewhere to put the resistors and, in the

case of Minitrix steam engines, I had to allow for the tender pick-ups as well. But it worked well enough. Then along came Bachmann’s version of GF engines which were even slower.

A friend at my local club said that he ran his fast engines one way on one controller and his slower engines the other way on another controller. I found that, with a modest amount of rewiring, I could get the point motor with accessory switches, which I was using to reverse polarity, to switch control of the single track section from the northbound to southbound controller and vice versa. Like the fiddle-yard I did this using reed switches activated by magnets under the engines (or in some cases the first wagon). This is a nice simple system with which to work, the primary problem with it being that the reeds tend to weld up eventually and need replacing. I plan to try the IRDOT system next time (Infra Red Detection of Trains).

Now the faster engines go north and the slower engines go south on a controller turned up. The automatic sequence of trains can be interrupted at any time to shunt the sidings, or to set out wagons to be picked up by another train. A few simple sidings add considerably to the operating potential of a layout and allow you to park the kits you’ve made up that nobody else has where they can be seen and admired.



NSR locos and stock

Modelling the North Staffordshire Railway - 3

NEIL BURGESS relates the locomotive history of the 'Knotty' and describes some models in O.

My own *Lane End* layout has a relatively modest requirement for locomotives. Readers of the first two articles in this series will probably remember views of my B Class 2-4-0T and D Class 0-6-0T, both representatives of the Clare-Longbottom school of small tank engines. Future projects include an A Modified Class 2-4-2T, a rebuild of the earlier small-wheeled 2-4-0T, and an ST Class 0-6-0ST.

These would hardly provide a very entertaining account on their own, so the accompanying illustrations depict locomotives owned by various members of the North Staffordshire Railway Study Group. The Group is fortunate to have many fine modellers, working in a range of scales from 2mm upwards, but these are some 7mm examples, which also illustrate aspects of 'Knotty' locomotive history; appropriately, they are all tank engines. Unless otherwise credited, all photographs are by David Moore, who is to be thanked particularly for producing such good views in less than perfect circumstances.

D Class 0-6-0T No.60. This little engine illustrates the victoria brown livery, used on locomotives and the lower body panels of coaches before Adams introduced the madder lake colour scheme in 1903. The model is owned by Sylvia Saville.

L Class 0-6-2 No.168. The prototype was the first of Adams' big engines, six being built by Vulcan Foundry in 1903. They were a fundamentally successful design and formed the basis for the later New L Class, which were constructed up to, and slightly after, the Grouping of 1923. They also bore similarities to



Above: D Class No.60, displaying the victoria brown livery used prior to 1903.

the Metropolitan Railway Class F engines. The model, another of Sylvia Saville's, illustrates the cast brass numberplates fitted only to these engines, plus the three steam railmotors. The twin cylinders in front of the tank are the steam reverser gear, one of Adams' many innovations.

Below: L Class No.168 and short goods train.

Above right: K Class No.45, contemporary with and similar to the Brighton I3s.

Photographs by David Moore.



K Class 4-4-2T No.45. Another of Adams' designs, this time for express passenger duties, comprising seven engines, built in 1911 and 1912, frequently used on the Manchester (London Road) to Euston expresses via Stoke, where the tank engine would be replaced by an LNWR machine. These were contemporary with the London, Brighton & South Coast Railway 4-4-2Ts of Class I3, which were also designed for short-distance express work. This model is built for three-rail operation and was originally owned by the late G.N. Nowell-Gosling, one of the five authors of the standard history of the North Staffordshire, originally published in 1952 and written under the collective *nom de plume* 'Manifold'. Sadly, Mr. Nowell-Gosling died recently, but his models survive in safe keeping.

New C Class 0-6-4T No.31. The final NSR designs produced in any numbers were two types of 0-6-4T, of which the New C Class had smaller coupled wheels and were designed for mixed traffic and goods work. This is Mick Flye's No.31, of a prototype built in 1914. The chassis was purchased some years ago and the body is the work of the celebrated Barrie



North Staffordshire locomotives

Like most railway companies in Britain, the North Staffordshire began its history as a buyer of locomotives rather than a builder, and up to 1868 its locomotive stock principally comprised the products of firms like Sharp Stewart, Beyer Peacock and Neilson & Co.

In that year, the works at Stoke was able to produce its first engine and thereafter home-built engines had the edge over those 'bought in', and the latter were in any event designed at Stoke.

Between 1868 and 1882 the company employed three Locomotive Superintendents, Thomas W. Dodds between 1870 and 1874, Robert Angus 1874-75 and C. Clare 1875-82. Dodds left the company under a cloud after disagreements about the effectiveness of locomotives fitted with his patent wedge motion and Angus, although having been Locomotive Foreman since the 'Knotty' emerged in 1847, seems not to have been a Locomotive Superintendent in the later sense of the term, both designer and polymaker.

Clare started a process of constructing a family of engines with a significant degree of standard parts, particularly boilers, wheels, cylinders and motion, and his policies were developed by his successor Luke Longbottom, who held office for two decades from 1882. Clare and Longbottom's engines were examples of characteristic British types, four-coupled for passenger and six-coupled for goods work, all with inside cylinders. They were small machines, though adequate for their time, and when John H. Adams became Locomotive Superintendent in 1902 they were becoming outclassed on



Above: the A Class 2-4-0Ts were the smallest of the 'Knotty' passenger tanks, exemplified here by No.35 and clearly proud engineman, pictured in an unspecified location.

Photograph: author's collection.

the heavier trains which characterised the Edwardian period.

Adams' designs were significantly larger than Longbottom's and he introduced bogie engines, both tender and tank, and superheating. On his death in 1915 he was succeeded by John A. Hookham, though the constraints of war and the advent of Grouping meant that his talents were little used in designing new types. Only three wholly new designs were produced after 1912, the New C and New F 0-6-4Ts and the solitary and short-lived Four-cylinder D 0-6-0T, while in 1919 the company bought two standard shunting tanks from Kerr, Stuart of Stoke which it designated the KS class.

Since the North Staffordshire was a small system of predominantly short distances it is unsurprising that most of its stock consisted of tank engines. At the Grouping in 1923 the company handed over 196 standard gauge steam

engines plus three steam railmotors, a battery electric shunter and five narrow gauge steam engines, two from the Leek & Manifold Light Railway and three from Cauldon Low quarries. Of the 196, only a quarter were tender types, comprising five passenger 4-4-0s and 47 goods, all 0-6-0s.

There were 43 passenger tank engines, ranging from the tiny A Class 2-4-0Ts built in Clare's time, to Adams' K Class 4-4-2Ts and New F Class 0-6-4Ts; and 101 goods tanks, including the Longbottom D Class 0-6-0Ts, which, with 49 examples, were the largest single class on the railway. The older engines had often been rebuilt, sometimes several times over, and the locomotive stock displayed a bewildering mix of details and characteristics.

The small size of most classes, with totals often in fewer than double figures, meant that 'Knotty' locomotives fared badly under the tidy-minded regime of the LMS, though E.S. Cox noted that, but for Derby's intransigence, the New L Class 0-6-2T would have made a useful small trip goods and shunting engine for the new company. The complete disappearance of North Staffordshire engines from LMS stock by 1940 meant that only one steam locomotive – New L Class No.2 – and the battery shunter have survived into preservation. No.2 presently resides at Cheddleton on the Churnet Valley Railway and there are plans for its return to steam.

Editor's note – North Staffordshire Railway locomotives which have been drawn and described in RAILWAY MODELLER are Class B 2-4-0T and Class K 4-4-2T (December 1986); Four-cylinder D (October 1999); Classes L and New L 0-6-2T (August 2005).



Walls, of *Wallsea* fame. These were very stylish engines and the model captures both this and the feeling of power they exuded. Once again, the Metropolitan owned two similar engines, which became LNER Class M2 when it absorbed the Met's steam stock in 1937.

New F Class, un-numbered. Another of Mr. Nowell-Gosling's three-rail models, this time of the passenger 0-6-4T. These were used alongside the K Class 4-4-2Ts on Manchester expresses, but had relatively short lives, falling

Above: New C 0-6-4T No.31, designed for mixed traffic duties.

Left: the New F Class was for passenger work.

Below: Family Saloon No.83.

Top right and right: two general service coaches, brake 3rd No.216 and composite No.250.

Below right: Railmotor No.2.
Photograph: John Sherratt.





victim to the march of the much more numerous Fowler 2-6-4Ts of the LMS. All the K, New C and New F engines had gone by 1937.

Family Saloon No.83. The first of three views illustrating some of Sylvia Saville's coaches. This is a family saloon from the later years of the 19th Century, representing an age when large middle-class families travelled with servants to holiday destinations; long before the era of holidays with pay for the masses. The

body of this saloon was sold by the LMS during the 1930s – for £30, including fittings – and still exists, built into a holiday bungalow.

Brake Third No.216. During the early years of the 20th Century, the North Staffordshire began to equip its better trains with bogie coaches. They were constructed by outside builders, including the Metropolitan Railway Carriage & Wagon Company, and were styled with the 'waistless' panelling characteristic of the

LNWR. None of the coaches were fitted with gangway connections, though the lavatory stock had internal corridors. This is a two-compartment brake third with a very large van section.

Composite No.250. Like the other bogie vehicle, this is a product of Lawrence Models and is a splendid reproduction of what were the ultimate general-purpose stock on the 'Knotty'.

Railmotor No.2. Like many other companies around the beginning of the 20th Century, the North Staffordshire experimented with steam railmotors as an alternative to conventional trains in an effort to combat the spread of electric street tramways in towns and cities. There were three such vehicles on the NSR, the engine and carriage underframes being built by Beyer Peacock in Manchester and the carriage bodies by Dick, Kerr of Preston – ironically the firm responsible for many of the contemporary tramcars. They were built in 1905 and were mechanically identical to some supplied at the same time to the LB&SCR. Like all of their kind, they lacked power to cope with steeply-graded lines or the need to add trailers to increase capacity at peak times. They found enough to occupy them up to around 1921, but then saw little further use, being withdrawn by the LMS in 1927. Another of Sylvia's models, this is probably more powerful proportionately than the original!



Scrubbs Lane Yard & The Maltings

009 modules with a light industry theme

JOHN THORNE, creator of the *Ditton Railway Company*, describes his new layout – or is it two?



This is really the story of two layouts. The concept was to model a small industrial yard as it would have been in the 1930s using only a range of small industrial diesels, with no steam locos or regular passenger traffic. The layout would be self-contained including its own traverser and stock storage, and literally could be lifted on a table, plugged in, and trains would run. Thus *Scrubbs Lane Yard* was born.

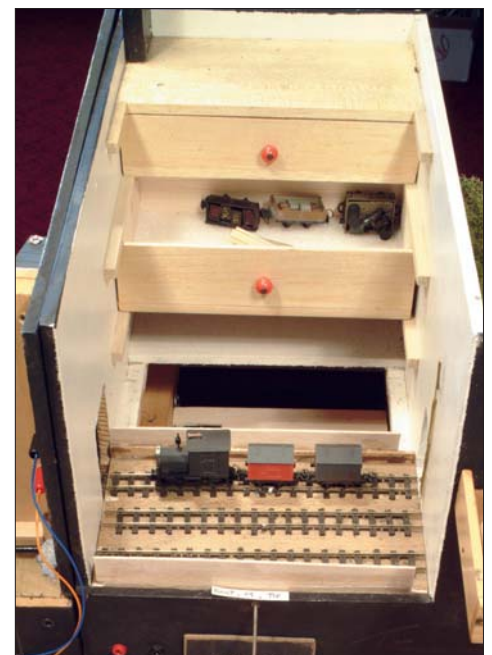
At the top of Scrubbs Lane lies the yard of Ebenezer Figgis – Importer of Agricultural Extrusions, Nerdling, Sussex. The business was established at the turn of the century initially using horse drawn transport but quite soon he laid a 2' gauge railway to connect to the LBSC at Nerdling. Here all forms of agricultural goods are transhipped and taken to the yard for distribution. In return Ebenezer has the contract to export Nerdling's world famous product – forced rhubarb.

The line ran past the local maltings and one evening over that last glass of port Josiah Bullock, owner of the maltings, asked Ebenezer if he would lay a siding into his premises and also down to the local quay to unload and transport goods. A deal was concluded and the line laid; thus was *The Maltings* born.

Left: Scrubbs Lane Yard showing the lane leading to the yard and layout of the sidings.

Below: the small three road traverser with above it the two stock storage drawers, all built out of balsa wood.

Photographs by Len Weal.





Left: a general view across the yard. A van awaits unloading in the bay siding.

Below: this view shows Mr Figgis' latest purchase, a motor van, which is kept in its own shed.

The layout can be operated by one person but is designed for two-man operation and therefore the lines on the traverser are controlled by three-way switches which allow the trains to be isolated from each module and to be controlled by either operator.

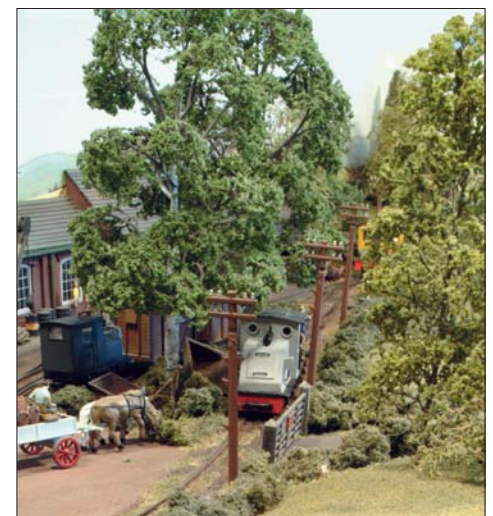
The carcass of each module is constructed from MDF with a framework of 25mm square softwood, and the baseboards are made of 1/4" balsa glued and pinned to the framework.

The track is Peco OO9 'crazy' track; all points are operated by the wire-in-tube method.

Scenery is constructed by pasting paper over a framework of cardboard strips which is then covered with Polyfilla® mixed with white powder glue to assist with its adherence to the paper contours.

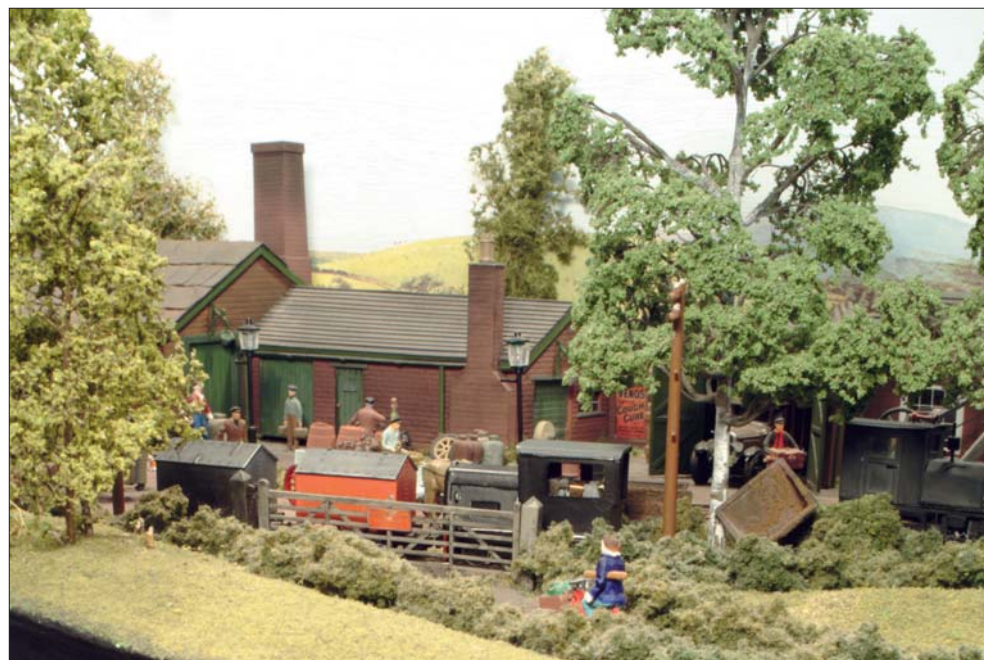
The Maltings connects to *Scrubbs Lane Yard* and again features all diesel operation and its own storage facilities. It has a large buildings complex, and a gradient leading down to a small quayside. With both modules I have tried to avoid the layouts just appearing to be a set of parallel sidings, which did not prove easy given the small size of each, but I think I have succeeded using scenery to help disguise this unwelcome feature. Also on *The Maltings* I have been able to include a small gradient, which again breaks up the flatness of the baseboard. Limiting the number of sidings also helps keep that narrow gauge feeling.

Overall the layout is 7' by 14". There are two scenic sections 38" long and between them is a small traverser 6" long above which are two storage drawers. This traverser also has a second purpose: if a train fits the traverser it will fit on any of the electrical sections on the layout. Trains run off *Scrubbs Lane Yard* onto the traverser, which is used to store trains before they go on to *The Maltings*.



Left: the second crane in the yard.

Above: a Kerr, Stuart diesel awaits its next turn of duty under the trees in the centre of *Scrubbs Lane Yard*.



This surface is then painted with a suitable green emulsion and when this is dry painted again with diluted white PVA glue and the selected scenic material is scattered on. I tend to start with the finest grade material, gradually adding coarser material to provide the longer grass under hedges and round the side of fields, etc.

Most of the trees are made using 'sea foam'.

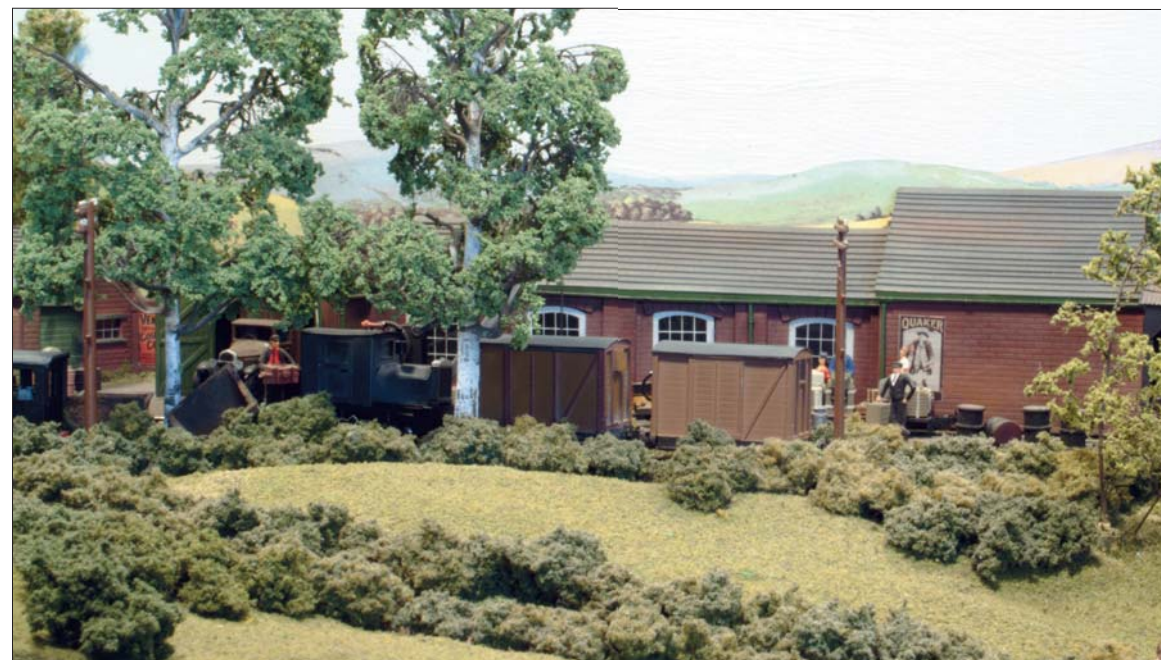
Above: a Hudson Hunslet diesel pushes two small wagons into the bay siding.

Above right: a Planet diesel shunts two vans in the yard.

Right: a scratchbuilt freelance diesel brings the rhubarb train into the yard.

Below: a scratchbuilt diesel based on the 7mm example by Boulder Models heads towards The Maltings.

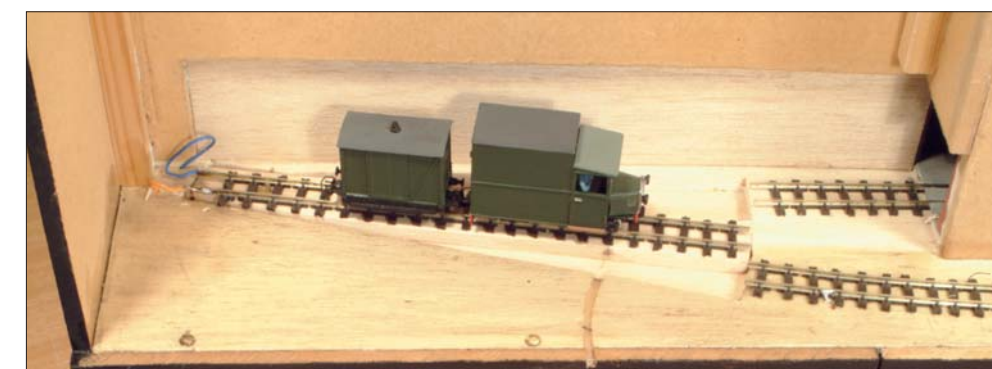
Below right: a Hudson Hunslet diesel makes its way through the countryside and enters the yard.



With the exception of the actual maltings buildings, all structures are scratchbuilt out of plasticard.

The maltings buildings themselves started life as a Metcalfe Models card kit that I have drastically butchered to fit the space I had available. In fact, it was seeing this kit constructed on another layout at an exhibition that actually prompted the construction of *The Maltings* as it was such an attractive building but I am a great member of the 'never make it as is intended' brigade, although not too proud to use an excellent kit as a basis for something else!

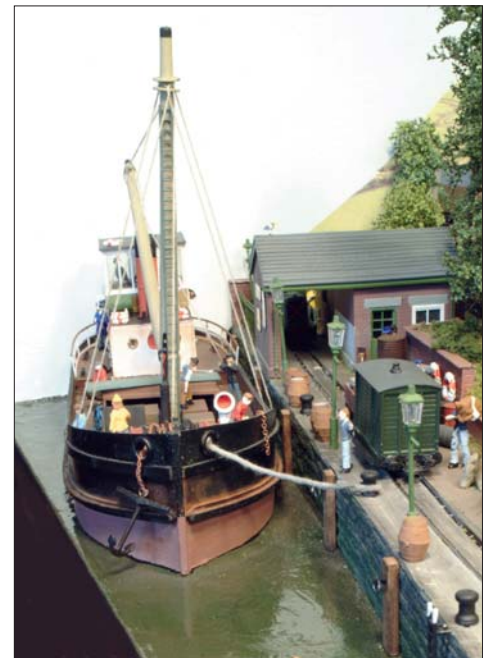
Having purchased the kits I required, I started by cutting out cardboard shapes to match the floor plan of each building. These were then taken to the baseboard and fitted to the available space and once I was happy with this I was able to start on the buildings using parts from the kits. I supported the inside of the buildings by adding extra floors and bracing the walls using triangular pieces of cardboard. Using plasticard I replaced the loading bay, grain hoists, water tank, and walkway using the pieces from the kit as templates. I also rebuilt the roofs using roofing paper stuck onto thin cardboard and then cut into strips and overlaid on each other, and I added extra details such as window sills, lintels, guttering, and downpipes. The final result was extremely satisfactory and has brought many compliments at exhibitions.



Above: The Maltings yard and quayside, looking back towards Scrubbs Lane Yard. Traffic is clearly heavy – a Ruston diesel takes two vans down to the quay headshunt as a Hudson Hunslet arrives with two more.

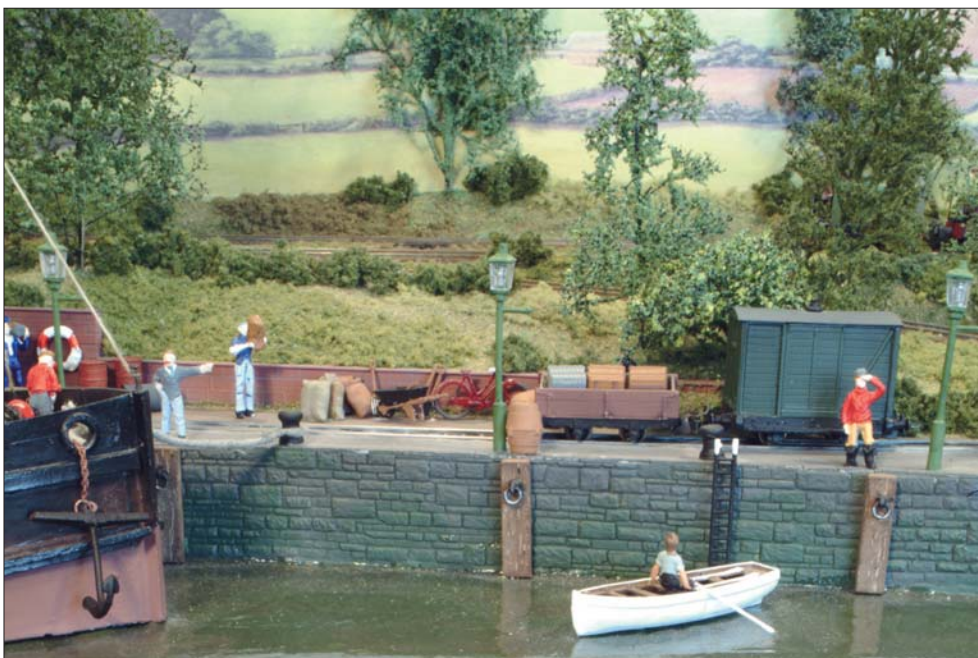
Left: the sector plate behind The Maltings which gives access to the siding where two further trains can be stored – simple, but very effective. A train can also be held on the sector plate itself, ready to bring onto the visible section of the layout.

The little freight railcar, coupled to a matching van, was scratchbuilt out of plasticard, and runs on a Kato short four-wheel chassis.



Above left: a view of the quayside, with a Clyde Puffer unloading.

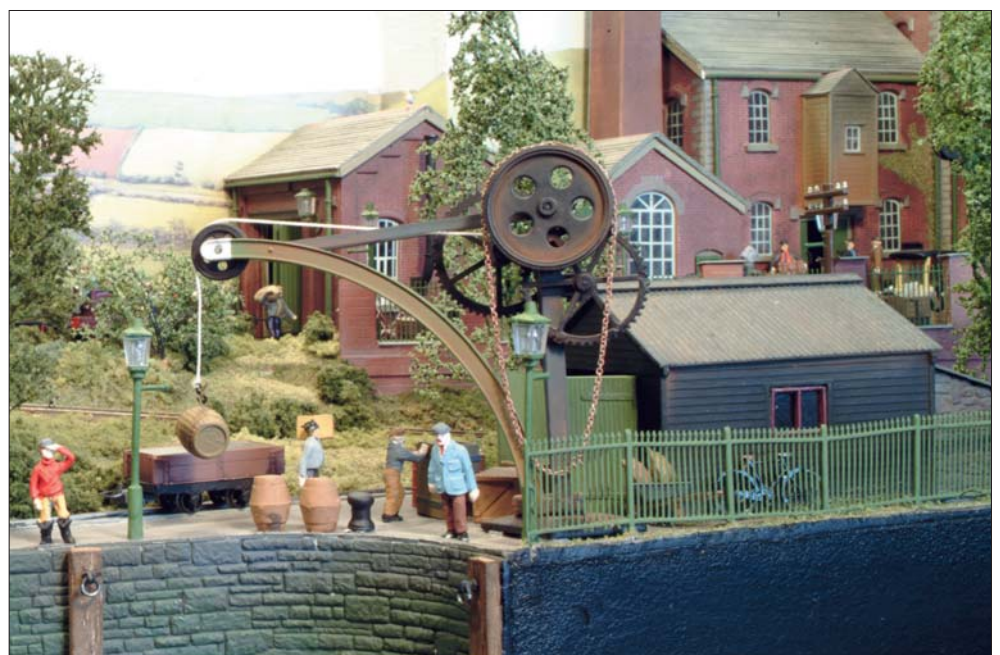
Above: rail vehicles can be brought right onto the quayside for transhipment.



Above: wagons await unloading on the quay.

Right: the crane on the quayside near The Maltings.

Below: A Hudson diesel passes The Maltings with a short workmen's train on its way to Scrubbs Lane Yard.



Right: The Maltings complex, which dwarfs the trains. The buildings in the original kit have been modified and re-arranged.

Centre: much activity in The Maltings yard. A high level walkway runs between the two main buildings.

Below: a Ruston diesel drifts down the incline towards the quayside siding headshunt.

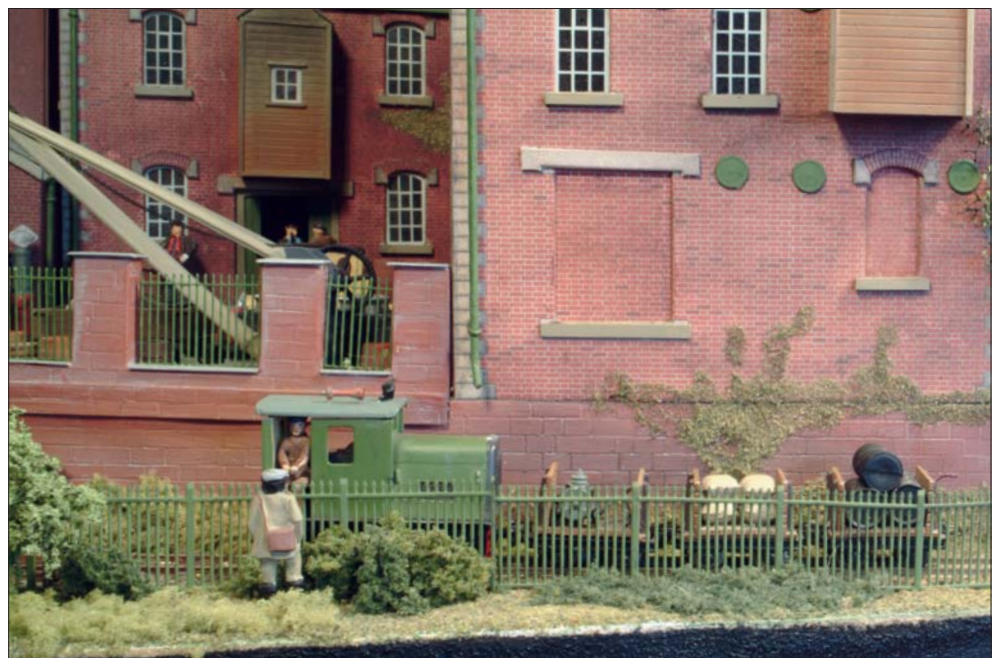
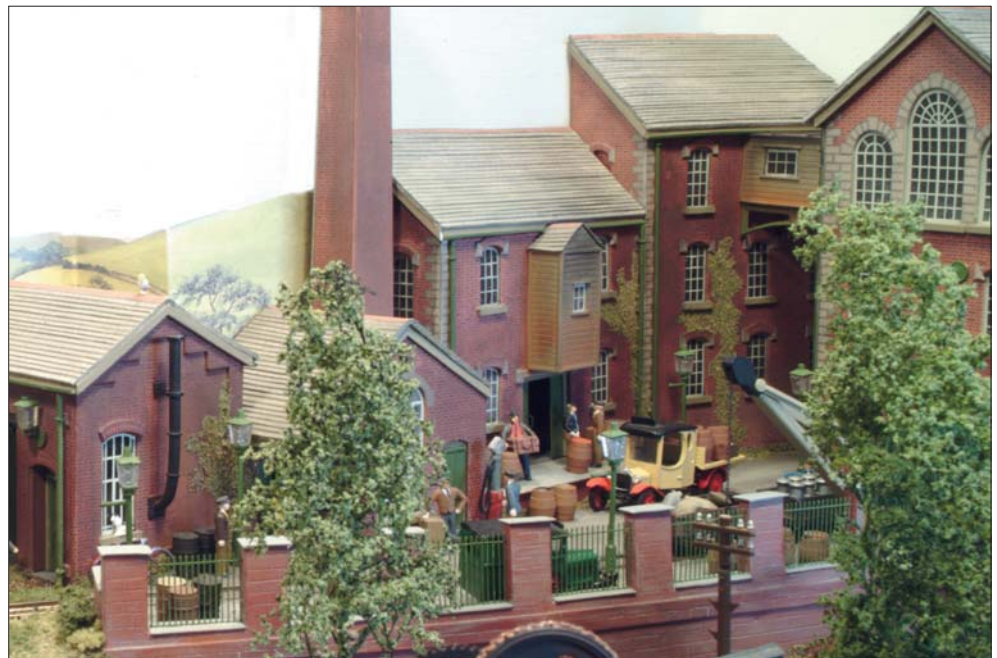
Below right: a Hudson Hunslet diesel waits on the headshunt to move down to the quayside siding with three loaded wagons.

It is also possible to hold three trains out of sight on *The Maltings* (using the sector plate) and these can be substituted for the trains in operation. Given that Mr Figgis exports rhubarb, there is a special "rhubarb train" consisting of a steamer, a custard mixer, and a tank for the *crème anglaise*.

Scrubbs Lane Yard and The Maltings is not a glamorous layout. You will not see classic locomotives hauling long trains of vintage coaches through the English countryside. However, I hope I have captured the atmosphere of a typical small industrial line that existed in the 1930s and if I shut my eyes I can just visualise a small Hudson Hunslet parked in the sunshine, its exhaust gently moving the leaves in the trees above whilst its driver grabs a well-earned cup of tea before taking another load of rhubarb along the line to Nerdling.

Forthcoming exhibition appearances

- 28 January Sodbury Vale MRC
 - 18 February Small & Delightful,
Narrow Gauge South West, Shepton Mallet
 - 26 February Midhurst MRC
 - 19 March TRPS Fareham
 - 8 April Narrow Gauge South, Sparsholt
- Further details of each event will appear in *Societies and Clubs* in the appropriate issue.



Anderstaff Yard

A privatised railway backwater set in the Midlands in the late 1990s

BRENDAN WALSH constructed this EM gauge layout which uses converted proprietary stock.

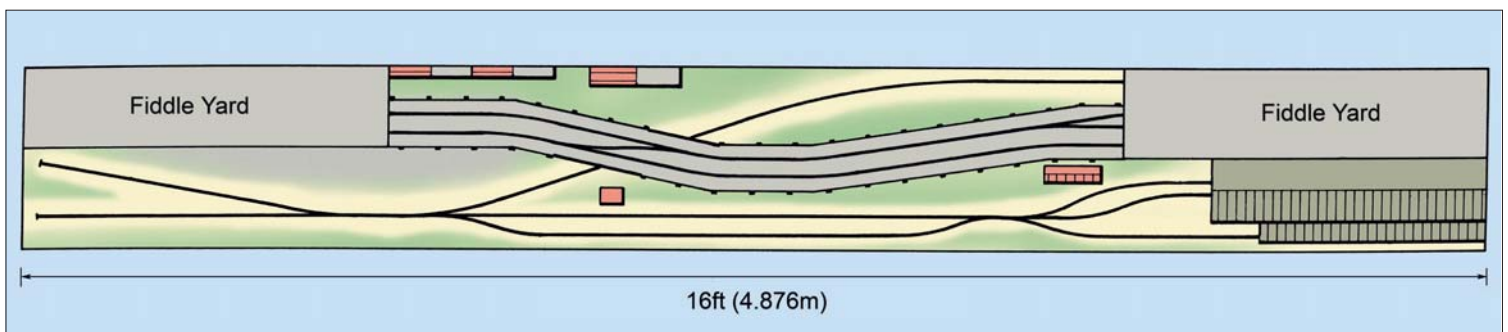


What's in a name? *Anderstaff Yard* is pure fiction although it does suggest an area of Burton on Trent, my home town. It was actually the name of a road in the same geographical area as the current steel terminal. The name having long passed into history, I figured that it would be OK to use as a name for a fictional layout, wrong! I have been told when exhibiting that the layout bears no resemblance to *Anderstaff Yard* even though there never was one. The viaduct and kickback under actually comes from Wolverhampton, although the real

thing is an embankment and bridge with a branch out of the modern steel terminal to rail/canal transshipment shed. On the day we went to photograph the yard the shunter in use was rail blue 08 623, which for many years had been a Burton loco, a tenuous link, but also the prototype Bachmann chose to model as their first 08 – spooky.

Most of us have vast experience of making plans, especially the type that exist in one's head, but the time had come to get to grips with some hardware, namely baseboards. 16' x

2' was to be the finished size, dictated by what can be fitted into the back of a family sized hatchback, but in the event it wouldn't fit! Four-off 4' x 2' baseboards were constructed. These are of plywood with softwood ends, 3 1/2" deep to accommodate Tortoise point motors. Ply was cut to size and then glued up in a purpose-built steel jig. This ensured production of four identical boards. Tops of 1/4" ply were then glued and pinned to the frames and pattern makers' dowels fitted to softwood ends for alignment. Boards are held together using



over-centre clips. Planed 2" x 1" softwood was used for the trestle type legs to give a height of 4'. I find this not only a good viewing level but more importantly a convenient one for working on the layout, a bit like leaning on a bar! In truth the boards have proved susceptible to temperature change. It's amazing how warm exhibition halls can get, not helped by the spotlights used for lighting. A change to fluorescent lighting is under consideration.

Trackwork

With the boards complete it was time for track-laying, not forgetting of course that a trackplan would be required. As already mentioned, the layout features a viaduct. This carries a double track secondary main line with a branch on a falling gradient which, by the magic of the cassette fiddle yard, reappears under the main line to access the headshunt, loop, and sidings at the front of the layout. The plan for the sidings is loosely based on Burton Steel Terminal. Burton does not have a headshunt, just a shunting neck to accommodate a loco. The headshunt is the up slow line with trains setting back over the up and down main and the down slow into the loop. Prototype fidelity, economy, ease of construction, reliability? If you forget the first one the next three will probably suggest code 75 rail on pcb sleepers. It certainly did to me and that was the direction in which I went. I will not be giving a blow-by-blow account mainly because it has been surpassed by better methods giving all the above, not just the last three.

Although not strictly track, an important element of the layout is the use of 'cassettes' which are used for train storage and reversal. The layout requires a large number due to limited siding space for goods trains and the desire to have a good selection of units and wagons available for running. Everybody seems to have their own method, some working better than others. Mine are 6mm acrylic sheet and 15mm x 15mm aluminium angle, both available from your local DIY superstore. The angles are fastened using M4 countersunk screws. The use of csk head screws is important to avoid axleboxes clouting protruding heads. One small addition was required. An end stop is provided to avoid overrunning stock dropping to the floor. This was following an unfortunate incident at the 2003 Burton Railway Society Railfair, when Phil Eames drove a Bachmann 158 (his own!) off the end

Left: on a steel trip working, 37 412 enters the yard where it will run round its train of steel empties before heading for Calcutta Sidings. 170 515 rumbles over the viaduct slowing for Anderstaff Park.

Top right: 37 412 on infrastructure duty travels along the main line, whilst 47 782 runs round in the lower yard.

Centre: 156 422, one of the last to retain Super Sprinter livery. This Lima example was improved by the addition of the Hurst Models underframe kit.

Right: Loadhaul survivor 56 106 has just been cleared to leave the yard to join the main line at Anderstaff Junction.





of the layout. The unit dismantled itself in an instant but the only damage was a broken motor cradle which was available as a spare from the manufacturers. A lucky escape!

Power to cassettes is provided by bulldog clips which also ensure alignment.

Wiring

Wiring is 'conventional' if there is such a thing. It might even be 'CAB' control, an oft-used term but I have never been certain what it actually means. With the exception of the headshunt all isolation of sections is done via the auxiliary switches in the Tortoise point motors.

Three controllers are used, one each for the up and down main line and one for the branch and sidings.

Scenery

The main scenic feature is the viaduct which uses Wills components. The difficult bit was representing blue brick, navy blue & black being mixed to achieve a passable representation. I have since discovered that Precision produces a blue brick off the shelf.

Above: DS10-powered 56 106 needs full power as it eases its train of loaded BYA steel coil wagons round the curve to the headshunt.

Right: 66 135 freshly outshopped, in fact so fresh there was no time to fit the brake pipes. It has been through the shops again, so is now complete with missing pipes including the sandpipes!

Track was sprayed using Railmatch track colour. This provides a good base for further weathering for which I use Humbrol Enamels and can be done after ballasting. Two types of ballast are used, Green Scene 408 for the main line and Wickes kiln dried sand for the sidings. In order to darken the sand a tiny amount of black powder paint is added. The ballast is

then carefully positioned dry and consolidated using, dare I say it, 'the usual method' PVA, washing up liquid...

Buildings are based on local examples, constructed using styrene sheet and brick overlays. Something I have found to be of great assistance with building construction is the digital camera.





Grass is bleached and dyed pipe lagging with surgical lint being used for the shorter varieties. Like most other things on the layout this is glued down with PVA glue, perhaps model shops should sell this product by the gallon!

Locos and stock

The original motive power was Lima based but following the purchase of a Heljan 47 most were sent to the Anderstaff CRDC! The running quality of 47 782 has yet to be surpassed. The fleet now includes Bachmann 37, 66, 158, 170 and a Hornby 31. These are all good performers, light years ahead of the pancake-motored models of yesteryear. There is one survivor of the Lima cull, a 156, a good model when fitted with Andrew Hurst's excellent underframe detail kit which unfortunately doesn't improve the running. A Mainline 56 is also on the books fitted with a Hornby 58 bogie with DS10 motor. Performance is acceptable if a little underpowered.

Goods rolling stock was at one time mainly kit built, Cambrian being the main provider. In recent years the ready-to-run products have, like the locos, taken a giant leap forwards. If I had to single one out it would be the Bachmann BYA, a superb model. Most kits and RTR are running on Alan Gibson wheels. A1 etched bogies are used on kits that require them, MJT three point suspension, Bill Bedford springing, you name it.

The coupling I prefer for auto use is the Sprat & Winkle. They have proved reliable in

use but they do have to be stored carefully to prevent damage. Within wagon rakes are three links, Kadee® buckeyes etc. The auto couplers are activated by permanent magnets concealed in the ballast at strategic locations. Probably the biggest drawback is the 'goal-post' on the front of locos, although dead easy to make and fit from 0.5mm brass wire.

Conversion to EM

I try as far as possible to make loco wheelsets 'in house'. This means access to a lathe and of course the ability to use one. Since I have both, this is the road I go down. Without going into too much detail I use Heljan wheels turned down with pressed-on Alan Gibson steel tyres. This is OK for Heljan and Bachmann products but not Hornby which need the supplied wheels reprofiling to EMGS standards, spacer bushes to maintain the increased back-to-back plus an equivalent amount off the carrying stub axles. I am of course hoping the promised Class 60 uses the same setup. The Bachmann units retain the supplied wheelsets, reprofiled and spacer bushed to 16.5mm back-to-back.

Where next?

As with most model railways things do not stand still and there is always something that can be improved upon. In order to allow one-man operation, one of the fiddle yards will have to go. This will be replaced by a single line with a point to allow reversal. A platform will be built for added scenic interest and give

a reason for a train running into a dead end off a double track main line. The alternative would be to make the layout a continuous run but of course that would preclude getting it all into the back of the car. As things are at the moment it has a kind of big layout feel, with a maximum train length of 48", with the advantages of a small portable layout. Please feel free to ask questions if you see us at a show somewhere, Phil will keep the trains running while I have a chat!

The layout is booked to appear at the Normanton & Pontefract and Glasgow shows this month. See Societies & Clubs.

Top left: 47 782 shunts empties whilst a relic of the yard's former glories disappears beneath the undergrowth.

Top right: VGA vans, one of Bachmann's early forays into contemporary modelling, await unloading under the steel terminal canopy.

Below left: the yard still boasts a coal merchant. It is many years since coal was delivered by rail but the siding survives, occasionally used to stable an engineers train.

Below right: still registered for use on Railtrack metals, Barclay 0-6-0 No 5 does the odd spell of shunting when no main line loco is available. A Mercian Models kit, the eagle eyed amongst you will note that it has Romford wheels with the securing nuts filled with Plasticine.

Photographs by Steve Flint, Peco Studio.



The Alderney Railway

The only working railway in the Channel Islands

MYLES MUNSEY provides an unconventional subject for this month's plan.

The island of Alderney forms part of the Bailiwick of Guernsey. It is a small but extremely attractive island featuring towering cliffs, sandy beaches and numerous remains of Victorian and German fortifications. There is only one main settlement – St. Anne with its own harbour called Braye.

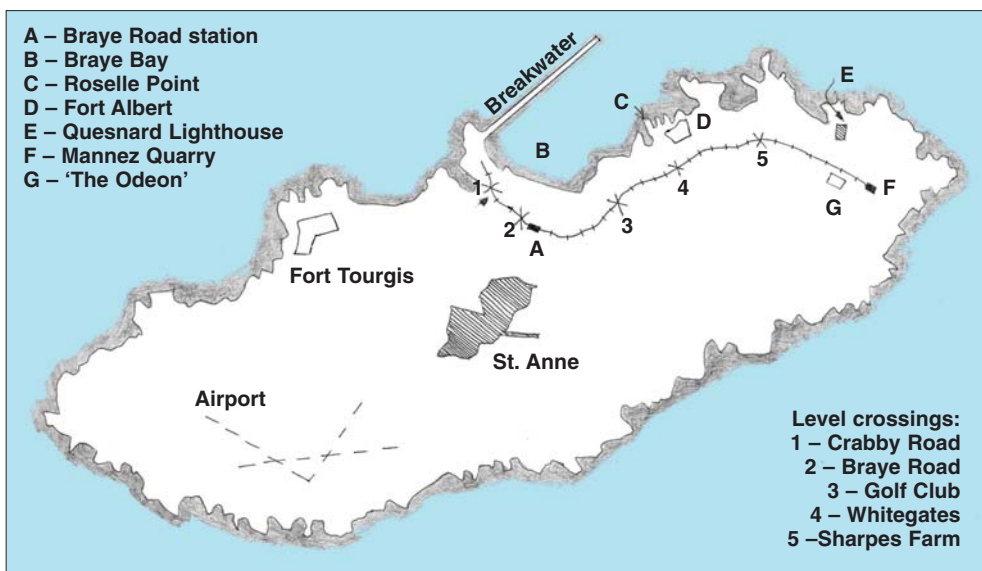
Given that Alderney is just 3 1/2 miles long by one mile wide, it is surprising that it boasts the Channel Islands' only working railway. Admittedly this operation is low-key and generally restricted to weekends – but no matter, this charming little island line packs in a lot of charisma and plenty of beautiful scenery into its short 2 mile length. Alderney is a place with almost constant sea views and these provide wonderful photographic opportunities.

There have been rails on Alderney since 1847 when it was deemed necessary to construct a naval harbour at Braye. As stone was needed for the construction and subsequent maintenance of the breakwater, a railway was mooted running eastward from Braye Harbour to Mannez Quarry to tap the rich mineral deposits notably quartzite.

Quarrying was suspended during WW2, following which the Germans decided to lift the track and sell both Alderney's locomotives for scrap.

Above right: a panoramic view of the quarry taken from a precarious position next to the 'Odeon'. There is a lot of interest in this view. *Elizabeth* prepares to back down to Braye with empty coaches to start the day's workings. Visible above the carriages is the pond and on the horizon it is possible to make out the French coast!

Below left and right: the 16.00 Braye to Mannez passes over White Gates crossing; soon afterwards the return working passes the next crossing down the line, at Sharpe's Farm.



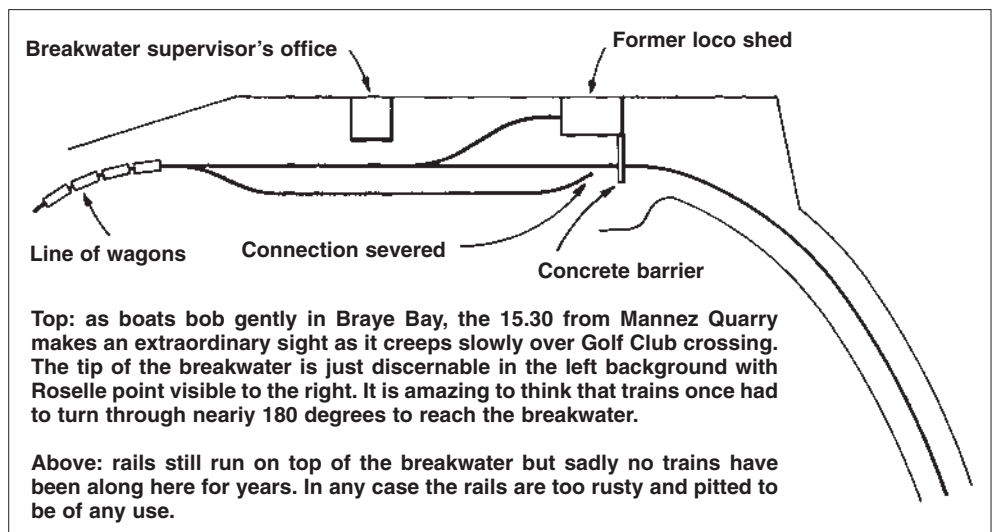


Route

As the remote surroundings of Mannez Quarry are where the line's active rolling stock is kept, it seems appropriate to start a description of the route from here. With a possible model in mind, Mannez Quarry contains many points of interest so will be examined in further detail later on in this article. Leaving the quarry, the line turns sharp left and skirts a bracken covered upland before passing through a succession of public road and footpath level crossings. Each level crossing affords excellent photographic possibilities. Fort Albert comes into view as does the Alderney Golf Course, then at Whitegates crossing the railway starts to descend towards Braye Bay. Although the line is some way distant from the coast at this point, there are nevertheless spectacular views overlooking the ocean. Near Golf Club crossing the full extent of Braye's breakwater can be seen and it is amazing to think that the line turns through nearly 180 degrees to reach that point.

The line squeezes through the residential district of Newtown before coming to a halt at Braye Road Station. Although trains have made occasional forays beyond Braye Road crossing, this rarely happens nowadays as the section between here and Crabby Road Crossing is very overgrown. Just past Crabby Road Crossing is a line of wagons blocking further progress, and this effectively denotes the limit of current operations.

A low concrete wall has been built across the track level with the end of the loco shed so that passage onto the breakwater is now impossible. That facet is somewhat irrelevant however as the rails on the actual breakwater itself are thoroughly rusted, pitted and quite unusable.





Left: *Elizabeth* and her diminutive train at rest in the quarry. The passengers have gone on a tour of the lighthouse.

Below: this 8 tonne Cowans-Sheldon steam crane was built in 1944 and came to Alderney in 1949. It was originally used for construction and maintenance of the breakwater. It now lies idle on its own short section of track. The underframe of *Molly 1* is coupled to the crane.

Bottom left: this pair of 4-plank opens was later used to bring stone down for maintenance of the breakwater in a technique known as 'foreshoring'

Bottom right: this strange-looking item is actually a side-tipping wagon. A fuller explanation is in the text.

Photographs by the author.

Surviving rolling stock

The passenger train is powered by D100 *Elizabeth*, a Vulcan Drewry diesel locomotive built in 1949. The public is conveyed in two ex-London Underground Northern Line cars.

Surviving rolling stock on Alderney item status & location

Locomotives

Molly 1 Underframe only, Mannez Quarry
Molly 2 Awaiting repair, Mannez Quarry
Elizabeth Serviceable, Mannez Quarry

Passenger rolling stock

1044 Ex-Northern Line trailer
 Serviceable, Mannez Quarry
 1045 Ex-Northern Line trailer
 Serviceable, Mannez Quarry
 Wickham Railcar 1
 Serviceable, Mannez Quarry
 Wickham Railcar 2
 Serviceable, Mannez Quarry
 Wickham Truck 4
 Serviceable, Mannez Quarry
 Wickham Truck 5
 Serviceable, Mannez Quarry
 Wickham Railcar 7
 Serviceable, Mannez Quarry
 Wickham Railcar 8
 Serviceable, Mannez Quarry

Wagons

Cowans-Sheldon crane
 Unserviceable, Mannez Quarry
 4 plank open wagon
 Unserviceable, Braye Harbour
 4 plank open wagon
 Unserviceable, Braye Harbour
 AL.36 side-tipping wagon
 Unserviceable, Braye Harbour

Inside the stock storage shed at Mannez can be found *Molly 2*, a Ruston & Hornsby locomotive built in 1949 which is even fitted with brackets for carrying a lifebelt. This may seem like overkill but is a throwback to the days when *Molly 2* used to work on the breakwater and there has been at least one instance of a locomotive slipping on wet seaweed and falling into the sea! The 1959 Northern Line cars came to the island by ferry in May 2001 replacing two cars of 1939 vintage.

As well as the vehicles which are supplied for public use, four semi-derelict wagons still survive. Two open wagons that were formerly used for breakwater maintenance are parked about 100 metres seaward side of Crabby Road level crossing. The builder's plate on one

of them reads 'Hyde 1943'. The other was unidentifiable. There was also a strange side-tipping wagon (AL.36) that was used to discharge rocks bagged up in anti-submarine nets over the harbour wall.

A very peculiar item of rolling stock sitting on its own section of isolated track may still be seen at Mannez Quarry. An 8 ton Cowans-Sheldon steam crane built in 1944 came to Alderney from Aden in 1946 and could be seen for many years trundling along the top of the harbour wall. Alas this operation is no





longer carried out and as the crane is very dilapidated it is marked 'DANGER'. Marshalled next to the crane are the remains of *Molly I* which consists of little more than an underframe and the cab casing.

Current operations

Generally the railway only operates at weekends from May to September though additional trains are run at Easter and during Alderney week which falls at the beginning of August. There are normally just three runs at 1400, 1500 and 1600 returning from the Quarry half an hour later. The running time is 14-15 minutes. The locomotive is always coupled to the quarry end of the train, which means that the train is hauled from Braye to Mannez and propelled in the other direction. For descending from Mannez to Braye, although the loco provides the power, control is effected from the driving trailer using bell signals to communicate with the driver.

Due care and attention and plenty of whistling must be exercised at each level

crossing which is essential as they are all of the open type, sometimes with very limited visibility. Skill is also required to ensure that passenger trains line up with the diminutive platforms at either end of the line. These are just long enough to be alongside the solitary operating door which is then opened to allow entrance and exit.

Above: ex-Northern line car 1044 pokes out from behind the bushes. The ocean and the lighthouse form an extraordinary backdrop.

Right: 'The Odeon', an occupation-era ship-crossing observation tower above the quarry.

Below left: these functional buildings herald the approach to the breakwater. The supervisor's office is in the middle distance, identifiable by the hazard signs on the wall. Further on where the lorry is parked is the entrance to a former locomotive shed.

Below right: Mannez Quarry is just around this right-hand bend with the lighthouse looming large in the distance.





Key to coloured plan

1. Stock storage shed
2. Pond
3. Miniature railway
4. Platform
5. Level crossing
6. 'The Odeon'
7. Isolated section of track with rolling stock remnants
8. Quesnard (Mannez) lighthouse.

Above left: following a downpour the last train of the day leaves Bray Road station to the quarry.

Above right: entrance to the quarry at Mannez, with the crane in the middle distance.

Below: *Elizabeth* arrives at the quarry, overlooked by the forbidding 'Odeon' on the cliff edge in the background.

Mannez Quarry – modelling possibilities

As the only useable pointwork on the island is at Mannez, and the setting is quite spectacular, this location is deemed more suitable for a model than Bray Harbour. Consequently, I have prepared a coloured plan in some detail of Mannez Quarry and an outline sketch of Bray Harbour.

The quarry is overlooked on the seaward side by the 109' high Quesnard (or Mannez) lighthouse and to the north by a German occupation five-level naval direction finding tower, jokingly known by the locals as the 'Odeon'. It is possible to walk up to the 'Odeon' using a rough track and gain a panoramic view overlooking the quarry but do not stray too near the cliff edge.

The track layout at the quarry is simple, but in keeping with minimum space requirements. Entering the quarry, the single line splits via a right-hand turnout into two long parallel roads and level with this point there is a short section of track occupied by the Cowans-Sheldon crane and *Molly 1*. The passenger train keeps to the left-hand track as this is where the short stepped platform is situated. Having alighted, passengers are able to use a network of paths between the boulders to visit the lighthouse or the miniature railway.

The stock storage shed is at the end of this line and indeed is entered by the other road as well. A further right-hand connection leads to a short siding passing to the side of the stock shed. This siding looked very unused although there was a wagon underframe nestling in the weeds.

Since active quarrying ceased, the whole of the Mannez quarry site presents an air of surrealism. A lot of the available space is given over to rock scree from the cliff face and large areas of brambles. This is not to denigrate it – it all adds to the atmosphere and at times it is rather like standing in a *Dr. Who* set! A rummage through the undergrowth revealed discarded wheelsets and bent wagon chassis. From another perspective, it makes an extraordinary sight to see former LT stock poking out of the undergrowth with the lighthouse and ocean in the middle distance. The scene could be modelled from either side with either the lighthouse or the cliff face forming a backdrop. Either would be effective, but I personally favour the latter option as this gives a chance to model the quarry wall which would





Above: the facilities at Braye Road may be limited but the setting is most attractive.

Below: between Sharpes Farm Crossing and the quarry is one of the few straight sections of track on the line. Note that it is laid in concrete sleepers.

then be used to frame the layout. The 'Odeon' could easily be made from a block of suitably shaped balsa.

Exclusive first editions

This company produces London Underground Northern Line 1959 stock which would be very suitable for a limited space model such as this. There are five models from which to choose.

- 80402 Driving Carriage 'A'.
- 80501 Driving Carriage 'D'.
- 80502 Driving Carriage 'D'.
- 80602 Non Driving motor car.
- 80702 Northern Line 1959 Trailer car.

Useful publications

Online video & the Huntley Archive Volume 3. This has an interesting clip of the Alderney Railway filmed in 1991 and featuring a cab ride from Mannez Quarry to Braye.

The Alderney Railway. Dr Michael Taylor. Available from the Alderney Railway Society (address below) or the Alderney bookshop, 39 Victoria Street, Alderney Channel Islands.

Festung Alderney. The German defences of Alderney. Trevor Davenport. Available from the Alderney bookshop, 39 Victoria Street, Alderney Channel Islands.

Acknowledgement

The author would like to express his thanks to the Alderney Railway Society, P.O. Box 75, Alderney, Channel Islands for providing much useful source information in connection with this article.



Right Away



...an exchange of railway modelling ideas for beginners of all ages

Structure modelling – 7

A makeover for a Metcalfe LNWR signal box

Another in this series of conversion projects by **PAUL A. LUNN.**

This signal box kit, PO233, measuring 96mm long by 50mm wide is a beautiful little building based on a London & North Western Railway design. It includes a lineside hut, a fuel store and what Metcalfe describes as a first venture into plastic components for the stairs and finials.

What do you get when you open the packet? The kit consists of:

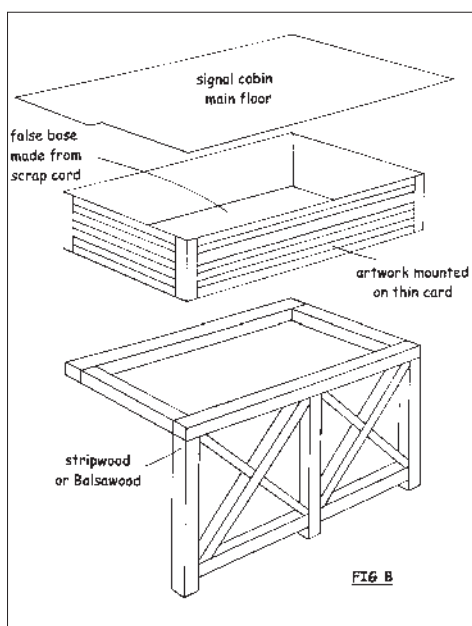
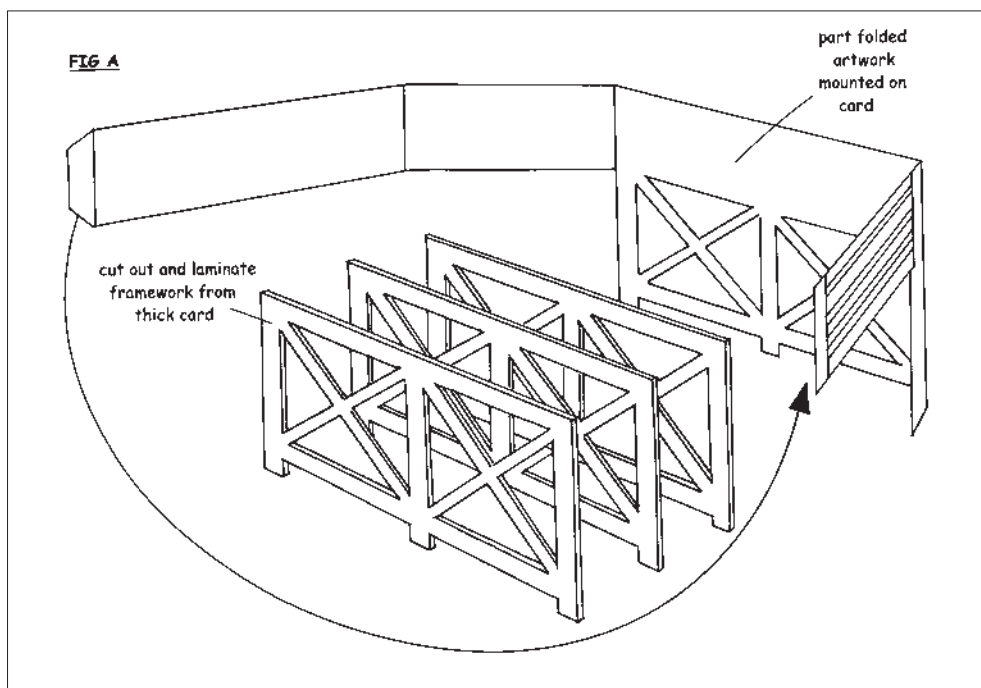
- ✪ One sheet of card folded in half comprising signal box walls, main floor, hut and fuel store walls plus a number of sundry items all printed in full colour.
- ✪ One smaller sheet of card with bases and roofs printed in varying shades of grey.

- ✪ One small sheet of thin card consisting of red and blue/grey ridge tiles printed in full colour.
- ✪ One set of pre-printed windows.
- ✪ One set of plastic parts wrapped up inside the bases and roof sheet, so be careful when you open it up.
- ✪ One set of instructions including a pre-printed sheet to roll up as chimney pots/pipe.

Below: 3D impression of the box as modified. The prototype structure was let into a cutting side, hence the lack of rear legs.

Artwork by the author.





signal cabin main floor (labelled on the main sheet of parts) this is then glued to the new lower part which can be made in one of two ways:

- Slightly more complex is to mount the artwork or a full colour copy on to card, laminating legs to give the correct thickness (see Fig.A). The number of laminations will depend on the thickness of card used.
- More simply, make up a frame from below line X on the artwork from stripwood or balsa wood of the correct thickness using the artwork as a template. Note that the wood grain and finish of stripwood is usually much finer than balsa and therefore to be preferred for construction purposes. Whichever you choose, the wood will need to be coloured a shade of green to match the Metcalfe kit. Add the timber boarding artwork above line X, already mounted on card to the top of this structure. Finally add the upper part of the box (see Fig.B).

In either case the plastic steps provided will be too short. Metcalfe may be persuaded into selling a second stair sprue though I cannot guarantee this. If successful, you can join the two stairs together having removed the top post on either side of one set where the join is to take place. The stairs will now be too long and will need cutting to length. This is best done by measuring in situ from the box to your baseboard. It might of course be easier to fabricate a complete new staircase from Plastruct parts. Alternatively, the easiest and cheapest solution is to use the stairs from the kit to a higher outcrop of rock perhaps with a footpath to a nearby overbridge.

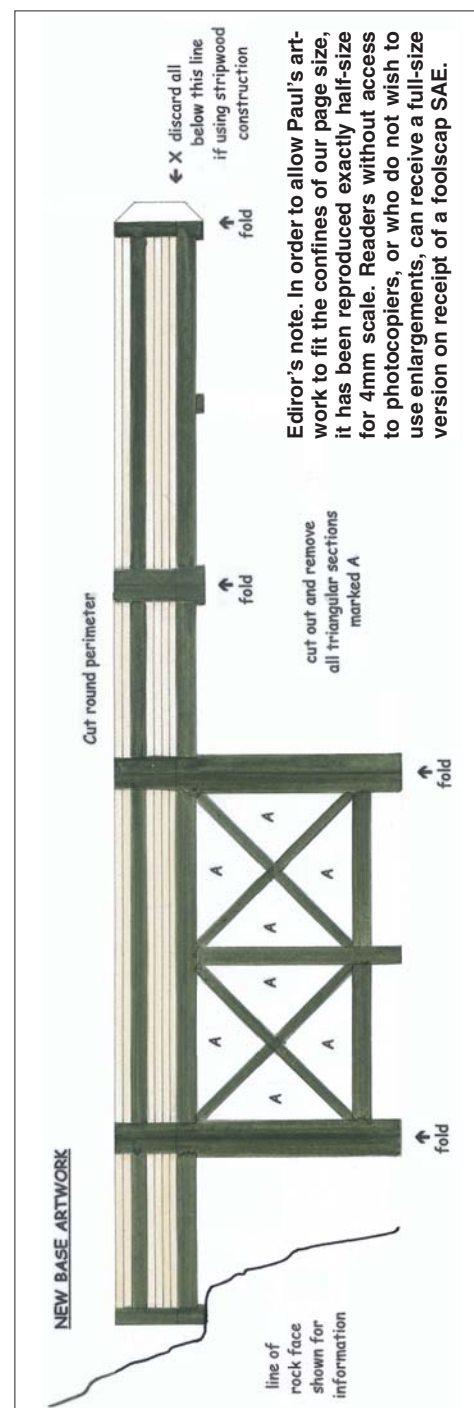
Wires and rods can be represented from Micro Rod and Micro Strip. Choose a number of strips/rods that suit your location. The more points and signals you have the more strips and rods you will need. Cut them long enough to fit vertically between the underside of your new false floor and the baseboard. Hold them together with a thin piece of plastic sheet run-

Modifying the basic kit

As it comes, the kit is quite excellent in its appearance. That said I'm always on the lookout for adaptations that would make a variation to what the kit designer planned.

An old newspaper cutting reminded me that virtually the same box, or should I say in so far as the upper part (operating room) is concerned, existed at Menai Bridge station. It differs in that the lower part consists of a timber framework rather than a brick base (see 3D illustration). It's what the Signalling Study Group, in its book *The Signal Box* described as a box built on a difficult site, where a normal signal box could not be built on the side of a cutting and was simply supported at the lower edge on timber columns. This did however bring its own problems in carrying rods and wires for operating signals and points down to rail level.

I have provided artwork for the lower section of the building at the same dimensions as the kit. Having assembled the upper part to the

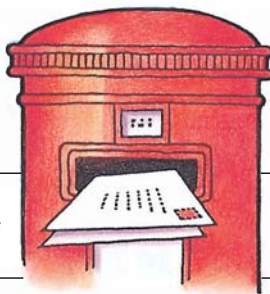


ning horizontally. The whole thing looks a bit like a comb with long teeth. Add a second strip across the bottom to hold everything in place. The final position of the whole assembly should be central of the box when viewed from the front and so that you can see all of the strips and rods. From back to front the assembly will need to be fixed behind the wood frame, approximately a quarter of the way back, beneath where the levers would be if you have decided to make a representation of this feature.

There you have it – easy! What do you do with the spare brick base? Stick a water tank on top...

- | | |
|---|---------------|
| <i>Part 1: Elevated water tower</i> | <i>Oct 04</i> |
| <i>Part 2: Hornby goods shed</i> | <i>Jan 05</i> |
| <i>Part 3: Metcalfe industrial building</i> | <i>May 05</i> |
| <i>Part 4: Hornby Dunster signal box</i> | <i>Aug 05</i> |
| <i>Part 5: northlight shed</i> | <i>Oct 05</i> |
| <i>Part 6: Peco Manyways houses</i> | <i>Dec 05</i> |

READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

MATTERS M&GN

With reference to the December issue, and your review of the new Ivatt Class 4 from Bachmann we, the M&GN Circle have only one real complaint; no tablet catcher on the tender. What an omission on a loco with obvious M&GN connections, i.e. shed plate and running number. The Whittaker tablet apparatus was as much a part of the Joint as the diamond fencing and the Great Northern somersault signals.

The Midland & Great Northern Joint Railway was the principal gateway to East Anglia from the Midlands via Bourne and Peterborough, then through to Sutton Bridge and into Norfolk. From South Lynn station it then ran onwards to Melton Constable, the Crewe of East Anglia, where the line divided to reach Cromer, Great Yarmouth and Norwich – all in direct competition with the Great Eastern Railway.

Between the wars its mainly single line was fully occupied with numerous holiday expresses, the most prestigious being the 'Leicester'. Goods traffic was mainly agricultural with year-round outwards seasonal traffic: first flower bulbs, then soft fruit, potatoes, vegetables, plums, apples and pears. Next came the autumn fishing season, and finally the year ended with the sugar beet traffic.

'The Joint', as it was known, was renowned for the smartness of its engines and the friendliness of its staff. East Anglia was the place to see an interesting variety of rolling stock and elegant 'yellow' locomotives. Alas, all came to an end with wholesale closure in February 1959. However, in August that year a handful of enthusiasts formed the M&GN Circle to provide a means of bringing people interested in the Joint together to collect and exchange information. A monthly Bulletin is sent to all members, and now some 45 years on our next Bulletin, dated December 2005, is number 537.

The Circle has amassed an enormous amount of information. It has collected no fewer than 25,000 photos and 1,000 drawings of the Railway. It also boasts a private Archives centre – all exclusively available to members. Indeed, the M&GN Circle has succeed-

ed in making the route one of the best researched in the country, having benefited from the membership and contributions of many ex-Joint railwaymen.

Genuine enthusiasts are always welcome to join; membership is £15.00 per annum. Further details are available from G.L. Kenworthy, 16 Beverly Road, Brundall, Norwich, NR13 5QS.

MALCOLM H. BANYER,
Public Relations, M&GN Circle

DCC – TWO OPINIONS

Like David Plume (December 05) can I also put my head above the parapet and own up to operating with Zero 1 in the early 80s? Faced with a long convalescence after a severe virus attack I decide to build a layout in our spare bedroom to keep me out of mischief.

As my place of employment was at an engineering works across the road from Hornby at Margate I became aware of the development of Zero 1 and had access to on-the-spot advice. Right from the start a continuous copper bus was installed with numerous droppers along the whole length of the track. After some initial problems and by the time Hornby had issued a number of service bulletins making modifications to the installation wiring, extremely good running was achieved particularly with Ringfield motors. However quality control was not Hornby's strong point at that time and performance varied motor to motor. Mainline motors also ran well.

The layout was dismantled in 1986 and put into store along with the Zero 1. Last winter the layout was rebuilt and installed in my son's loft for my, his and our grandchildren's benefit. After a great deal of track cleaning and also servicing of the original locos, the Zero 1 controller was connected to the bus and switched on. All worked with very little problem. This says a great deal for electronic equipment that had not had power through it for 19 years. Subsequently the original Hornby

Below: in spotless condition, Ivatt 4MT No.43159 from Yarmouth Beach shed passes East Rudham with the 13.45 Birmingham-Cromer/Great Yarmouth express on 21 May 1958.

Photograph: Ted Tuddenham, courtesy the M&GN Circle.

Fowler 2-6-4T has had the Zero 1 module replaced by a ZTC 214 and the difference in performance of the X04 motor is astonishing. This only reflects the strides that have been made in electronics in the last 20 years and ZTC's willingness to provide modules that will work with Zero 1.

Like so many British developments Hornby was away ahead of its time but the Hornby of that period was still very much in the toy train market rather than the scale one. Unfortunately this led to the demise of Zero 1 as it appeared too complex for the target market.

I cannot comprehend how anybody building a layout from scratch today can contemplate using anything but DCC. It is so simple and at the same time so wide-ranging in what it can offer the serious modeller. It is a great pity that for the last 25 years DCC in the UK has suffered from the traditional British reluctance to accept change and adopt anything new. And I am not an electronics engineer.

DAVID KELSO

With so much emphasis now being placed upon the merits of 'going DCC' in the hobby, as extolled month upon month in most of the major model railway publications worldwide, I have to ask just what percentage of 'average' modellers have actually forked out large sums of cash for these systems, converted their loco fleets and feel that the exercise was truly worthwhile?

Having spoken with the sales staff from several major DCC manufacturers/importers at various UK model railway shows, I can certainly see benefits if you have a large, multi-track layout, wishing to run several locos simultaneously or in multiple-working. I can also see the opportunities which some DCC systems offer if you want to use loco add-on functions such as lights, sound and maybe point control. But I suggest that many, many of us 'ordinary enthusiasts' delight in building small layouts, whether by design or necessity and, speaking entirely personally, I just cannot see the worth of DCC here.

A couple of wires soldered or crimped to a 50p on-off section switch or to a point solenoid isn't a major wiring project in my book! It's an intrinsic part of the many enjoyable disciplines which form the hobby, surely, along with wood-working, scenic modelling, kit building etc? And what of the locos that are not DCC-ready or those that are unable to accommodate a digital decoder? Many of us, especially those into middle age or more (the majority of enthusiasts these days in the UK?), have loco collections which may include cherished models produced many years ago and which simply cannot be converted to DCC without considerable cost and effort.

So, is DCC a case of 'Emperor's

New Clothes' perhaps, with some manufacturers charging more for their DCC-ready models than many of us really want/need to pay? And what will be the next 'fad' to replace DCC in 20 years from now? Now there's a subject for discussion on these pages...

JULIAN ANDREWS

ON PRIVATE OWNER WAGONS

I have enjoyed the series by John Arkell on PO wagons very much. The October 2005 issue shows one of my favourites, Powell, Gwinell & Co Ltd. I have a 4mm scale model made from a Cambrian kit (now long since unavailable) and the 'PG' logotype in the centre of the white side door diamond is a crimson colour. If you look at Keith Montague's book on Gloucester RC&WCo wagons, plate 474, you will see the prototype of my model. It is quite clear that the logo is a paler colour than the black of the wagon side.

White letters with red shading were common on black wagons and the shading shows up clearly on old photographs as grey. Whether the 'PG' was crimson, bright red or red oxide, I doubt we shall ever know at this stage.

The wagon in the Arkell picture is No.111 while the Montague photo shows No.1121. I believe that P,G&Co used to number its wagons with a '1' before and after the true number, so that the two wagons are actually numbered 1(111) and 12 (1121)! Many coal merchants liked to pretend they had larger wagon fleets than they really did and practiced various forms of this innocent deception.

TONY EAST

GMT AGAIN

I was delighted to read John Tomlinson's article in the December issue. He has clarified things of which I was unaware, and made me think a little further. I never knew that he took over the baseboards, and seeing the photos brought back lots of memories. I can see the curve in the siding at *Coppenhall End* where Arthur's wagons were pushed off the baseboard. I am so glad that John had a further ten years use from them.

John's comment that he was given the lever frame from *Coppenhall End* set me thinking, and after a bit of digging in store cupboards, I have now found the lever frame from *Merrill's Bridge*. I had completely forgotten that I had it. I have also looked for the signals I have, but can't actually find them (put away in a safe place). I now realise that they must be from the *Merrill's Bridge* end, and not the whole layout, as I had always assumed. I can't remember who gave me either the lever frame or the signals to look after (it's along time ago, and I must be getting old!).

It was marvellous to see the photo of the 'Scot' in steam as recently as August, and I must compliment John on the conversion to gas firing and radio control. It looks like it still has my original paintwork which seems to have lasted pretty well over the forty years.

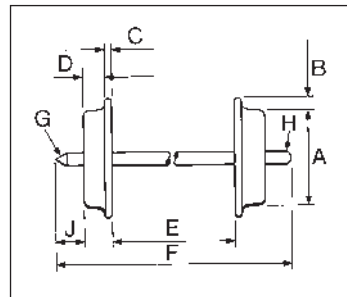
Finally, the exact location of the 'Cloughton' in America is known, and, I have offered to give advice to help its new owner get it working if he so desires. As for *City of Chester*, I have no idea what happened to it. Someone out there must know!

DAVID GETGOOD



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Bachmann releases Virgin Trains 'Thunderbird' Class 57 in 4mm scale



As heralded last month, Bachmann has released its first tranche of Class 57 'Thunderbirds' in 4mm scale. The prototypes were described in detail in our March 2005 issue, in the review of the Heljan take on the same animal. In the intervening months, however, it appears that some of the Virgin-liveried fleet of 16 locomotives may be deemed surplus to changed requirements; we shall see.

Comparison with the Danish firm's model is perhaps unavoidable. Given that many will find so little to choose between the two, we suspect that personal preference will be the arbiter. Certainly there is nothing like the step-change which occurred when the Heljan Class 47 was placed alongside its counterparts from other stables. Both these 57s are excellent in looks and performance.

The prototypes are 63'6" long over buffers and 9'2" wide over handrails, which equates to 254.8mm and 36.8mm respectively in 4mm scale. Both are spot-on for length: the Heljan 57, derived (like the real things) from earlier 47s, is a tad wide, but by scarcely noticeable amounts. The Bachmann 57 fitted the preset vernier gauge like a glove.

The Bachmann 57 has see-through fan grilles – with fans that rotate when



blown on – and metal radiator mesh. At this, No.1, end a driver figure is visible through the flush-glazed cab windows. (Both nearside droplights are modelled open.) On the cab front the horizontal metal handrail has been whitened, but all others are bright. The bufferbeam has orange conduit in place – for ETH and control connectivity on the real things – and a metal scale coupling, à la Hornby 50s etc. The detail parts bag contains further bufferbeam details, such as brake pipes, and slimline tension lock couplers. These slot into the bogie-mounted NEM pockets at each end.

Painting and finishing are excellent. The small inscriptions and workplates are crisp, and the nameplates – after Scott Tracy of the *Thunderbirds* series – are factory-fitted etched miniatures. Only Bachmann (to date) has secured the rights from the copyright holders to reproduce these distinctive



plates in model form, a factor which may sway those interested in the modern railway scene but who are yet to roster a 57 on their layouts.

Performance is very good. On the Pecorama 'Loft' layout, with its 1:36 gradients and 3' curves, the Bachmann 57 took ten coaches with ease. As an aside, it started off at only 1.85v, where it took 2.8v to get the Heljan model moving. The Bachmann 57 is driven on the inner four axles, as is the case with its 55s and 37s. Beneath the fuel tank can be seen the switch to change the lighting from 'day' to 'night' settings, as explained in the instructions. The paperwork, however, does not illustrate the additional screws (one at each end) which need to be removed in order to detach the superstructure from the chassis. The digital command control socket, 8-pole dual inline NEM652, and blanking plug is atop the cast metal chassis weight. (The Bachmann 57 tips the scales at 554g, vs. 688 for the Heljan model, but as indicated performance is excellent.)

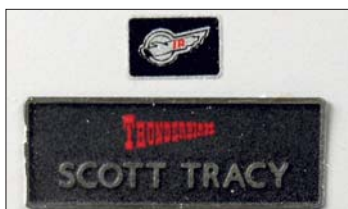
Bachmann intends to release First Great Western and Freightliner green 57s in due course.

For 00

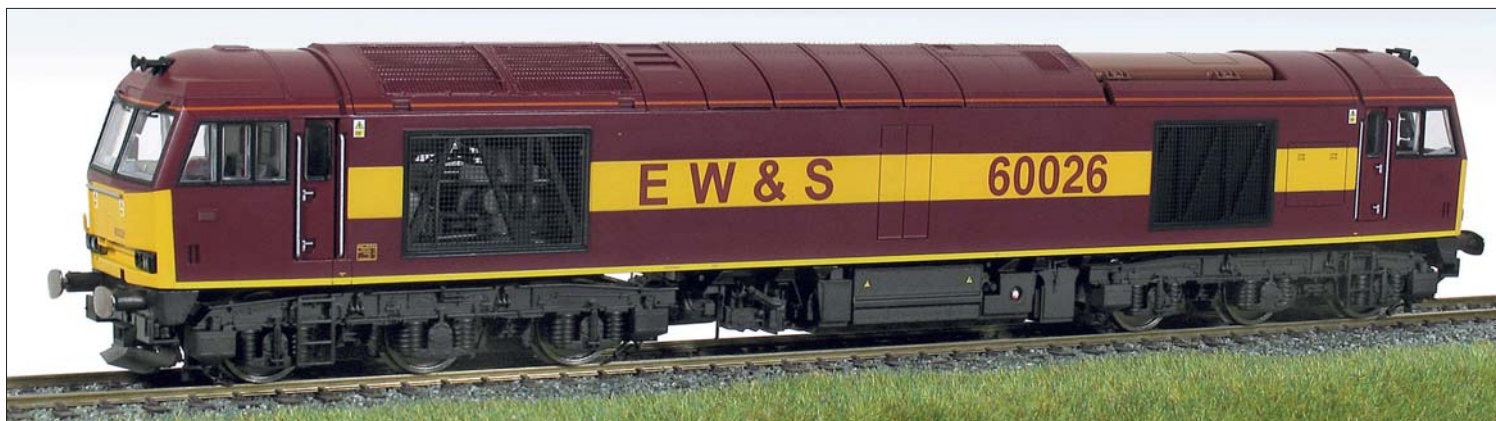
SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
ref.32-751, £67.95

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Brush Class 60 in OO from Hornby



Production samples of the brand new Brush Class 60 in OO from Hornby were handed to the modelling press at the Warley Show: stocks of these models should be in the shops by the time these words are read.

One hundred of these angular Type 5 freight hauliers were built at the famous Falcon Works of Brush in Loughborough between 1989 and 1992: after initial problems the fleet became good workhorses for the coal, construction, metals and petroleum business sectors of British Rail. 'Shadow' and real privatisation split the class members and reunited them (LoadHaul, Mainline and Transrail, then EWS respectively), but recent times have not been good to the 60s. Many have seen storage, but at the time of writing 75% of the fleet at least is in use at any one time.

The Hornby model is packaged in the usual two-part insert, with plastic protectors at each end to keep the 60 safe. Lifting it out, the first thing that strikes is the see-through section of the bodyside: that's see-through the locomotive! The equipment cabinets etc are very finely moulded, and both grilles are formed of fine mesh. The view right out to the other side is as per prototype, with only the wiring from the pickups visible, on our sample, to remind the eye that it's a model! It might prove possible to 'cheat' these away behind the cabinets: if they were not sleeved in red material it might help.

The plain, uncluttered bodyside is, apart from the grilles and a pair of central doors, punctuated only by the cab doors at each end. These are flush-glazed, like the cab, and can be opened. The cabs themselves are exceptionally well done. There is not just a driver's desk, but full-depth seats and control pedestal right down to the cab floor. This is topped out by sections of the pedestals, and the rear bulkheads, being picked out in red.

On the roof the exhaust silencer moulding has been undercut, so that it appears to be attached to the roof by the anchor points each side and nowhere else. The upper grilles atop the radiator are finely meshed, and the lift-off roof panels look as though they can be removed.

On the underside the fuel tank and brake equipment are crisply moulded, as are the bogies. The pipe runs on these are very fine, there are sand-pipes and brake shoes in line with the wheels, and the access steps are



appreciably thin. At each front, a NEM pocket awaits its slimline tension lock coupler (they are in the detail parts bag supplied with the model). Bufferbeam pipes are also supplied separately for the modeller to fit, and the scale couplings which made their debut on the 50 are also supplied in the bag. They locate in ready-formed

square holes on each end. If these are to be used, a pair of fully-formed is supplied too, to replace those with slots provided to allow the tension locks to swivel. The buffers themselves are sprung: on our sample a couple were a little loose in their shanks, which allowed the heads to swivel off-true.



Lighting is directional, and is by bright white LEDs. The changeover switch for daylight and night-time lighting configurations is on the underside of the fuel tank.

Performance is excellent: a very creditable 10 coaches were hauled up the Pecorama 'Loft' layout with ease. The model boasts all-wheel drive and pickup, and weighs about 670g. It has an NEM652 socket for a DCC decoder.

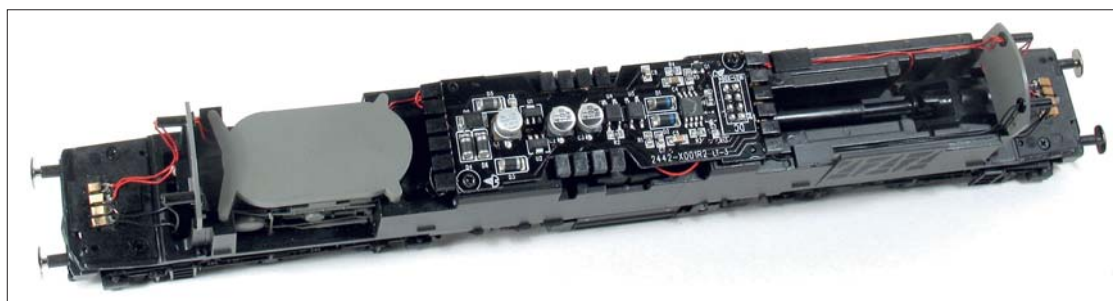
Livery is the early form of EWS scheme, with the ampersand in the company's initials. It has been reproduced very well, with a crisp definition between the overall maroon and cream striping. Other liveries to come include LoadHaul black and Mainline blue.

For OO

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE ref.R2488, £89.99

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Drummond M7 0-4-4Ts in N new from Dapol



New to the Dapol N gauge stable is the ex-LSWR M7 0-4-4T.

Introduced by Dugald Drummond for the L&SWR between 1897 and 1911, this class of 105 0-4-4Ts finally became extinct in 1963, undoubtedly fulfilling any modeller's desire for a locomotive type with a long service life.

The tiny model measures about 2³/₄" long over buffers. The body is well proportioned, detailed and finished, but one notices at once the apparently undersized coupled wheels. In this small scale the prototype wheel diameter must be taken across the flange rather than the tread unless the splashers are going to be much oversized. On the model, the coupled wheel diameter over flange is 11.2mm, which is only 0.298mm short of the scale 5'7"

wheel diameter of 11.498mm. Notwithstanding this achievement, the model's wheel diameter over the tread is 10mm, inevitably resulting in a 'small wheels' look, rather like an Adams O2.

The dome incorporates the characteristic safety valve columns which are nicely moulded with open tops, although the chimney is less successful, looking to our eyes rather more North Western than South Western.

Details such as handrails, whistle, boiler feed pipes, tank fillers and sandboxes are very well carried out for this scale. The fitting of brake blocks, hangers and associated linkage to all four driving wheels is also an achievement, particularly as the rear ones are almost completely hidden behind the footsteps. Likewise, the basic back-

head detailing is only just visible in the gloom of the cab.

The wheel spokes are not pierced through, an acceptable and cost-related compromise in this small scale.

The painting and printing of both livery versions is convincing, although the splasher lining on the BR version seems not to be in perfect register if viewed under a glass. The Maunsell liveried version, in which the lining is carried up to the cab cantrail, reveals that the junction of bunker side top edge and sidesheet of cab is modelled as a right angle rather than the radius it should be, approximately matching the tankside to cab sidesheet join. Of course this error is not noticeable with the BR style of lining.

Performance was a little uneven on

our samples at first, but with use the models will be fine. Haulage capabilities will be adequate for tasks appropriate with the real things. In addition to the driven wheels, the trailing bogie can also collect current through strips which swivel with the bogie. These strips are rather thin.

For N

SAMPLES SUPPLIED BY
Dapol Ltd., Gledrid Industrial Park,
Chirk, Wrexham LL14 5DG

PRICES £64.95ea

WHEEL DATA

B. 0.5mm, C. 0.7mm, D. 1.3mm,
E. 7.4mm.

Seacow ballast hopper new in 00 from Hornby



Hornby has released the first examples of its new-tooled Seacow ballast hopper in 00, in EWS maroon. Coded YGB under TOPS, these ballast wagons have a 40-ton capacity: although once confined to the Southern Region, Seacows now roam far and wide alongside their similar (but dual-braked) Sealion cousins.

The Hornby model is finely moulded and finished very well. Printing is first class: the legible works plates on the model identify Hornby's muse, DB980238, as being part of a series of 245 built in 1981-1982 to Lot 3966: BR Ashford was the wagon's builder.

Hornby has captured the prototype's welded construction excellently, the single line of rivets along the body centreline being the only such details

on the wagon, save for a few more inside the ends. Seacows are air-braked with vacuum through-piping, and the requisite reservoir and pipework is very neatly represented. The handbrake wheels are at the same end, and correctly are at different heights either side. The protective mesh above each walkway is very fine,



as is the floor grating at the non-braked end. Stanchions, handrails and supports are commendably thin and correctly shaped, including the 'joggled' handrail around the outside of the brake cylinder. The hopper door-controlling handwheels are fine mouldings.

The model runs smoothly using the standard Hornby metal wheelsets in crisply moulded French-pattern Y27 bogies. Brake shoes are set well back, and are in line with the wheel treads. The buffers are sprung. Slimline tension lock couplers are fitted, and are able to swing from side to side around the bogie pivot. A degree of self-centring is possible thanks to a springy plastic 'tail' which bends in the opposite direction. The couplers are fixed to

the pivoting arms, so the whole device, tail and all, needs to be unscrewed if they are to be substituted for other types. Doing so would allow the handbrake rodding – even the gearing that links the rods is represented – to be completed.

As well as EWS, Hornby offers these excellent models in Transrail and Departmental finishes, with three fleet numbers for each.

For 00

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE

ref.R6286A, £18.50.

WHEEL DATA

B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



BRCW Class 33 in 00 from Heljan

Samples of the first run of the new Class 33 in 00 from Heljan are now in the shops.

The two review samples are, uncommonly for blue and green diesels, representative of the same timespan – roughly 1968-73 – where green locos with full yellow warning panels rubbed shoulders with those in Rail Blue but prior to renumbering under TOPS. Thus there's every reason to run the two in double-harness, and Heljan makes this especially easy in the details package, of which more anon.

Both 33s represent the 'standard' 33/0s, sensibly given the relatively limited spheres of operation of the 33/1 (push-pull) and 33/2 (Hastings gauge) variants, at least until recently.

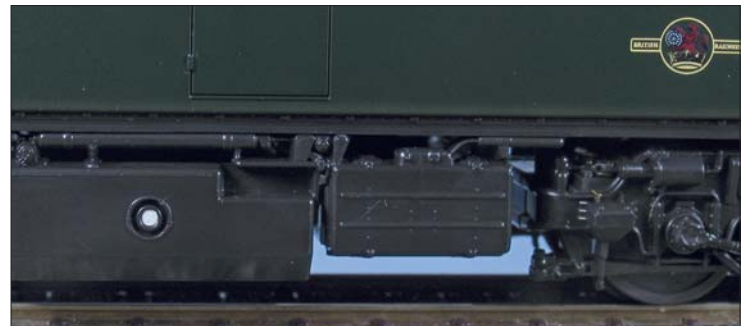
The Birmingham Sulzers' history is well known. They were the first ETH-only diesels on BR, and in later times worked regularly into 'off-region' places such as Crewe. They could run at 90mph, but the best fun to be had behind a 33 was at the stately, regulation 4mph along the Weymouth Quay Tramway. The locos were stalwarts on the Waterloo-Exeter line, and made regular appearances even after the introduction of the Class 50s: pitting a Type 3 against Type 4 timings on a testing road, however, was always a tall order for these Bo-Bos.

On the model the little things that shout '33!' catch the eye, such as the



two cab front handrails which extend back along the sides to the cab doors. All handrails are formed from metal wire. Also, the cab front glazing is flush but the sides – correctly – are not. A representation of the driver's desk and instrument panel is provided inside each cab. The driver's side droplight in each cab is lowered: a common theme in Heljan diesel models.

Between the sprung buffers at each end are factory-fitted brake pipes, scale coupling and train heating cables. Slimline tension lock couplers



are provided in the parts bag: they fit the NEM pockets at the front of the bogies. Also in the parts bag are three-part (one moulding) snowploughs. Instructions are provided to allow correct placement of these parts.

Headcodes are included, and the instructions advise on the production of a tool (unbent paperclip) to assist in their placement. As well as plain white blinds, and the red 'tail lamp' equivalents, are inter alia codes 62 (Waterloo-Exeter) and 11 (Brighton-Plymouth), the latter being regularly a double-headed 33 turn. Hence the remarks above...

Painting and finishing are excellent, as we would expect. The demarcation between yellow cab surrounds, green bodyside and grey roof was very fine. The roof on the green 33 is in two shades of grey, to represent plain and translucent panels on the real things. The roof hatches – quick-release on the real things – surrounding this darker section are very well produced. Horns are visible within their crisply moulded housings: only the truly fastidious will replace these with fully-rounded brass horns.

Hopefully this enterprising Danish firm will release 33/1 'Bagpipes' and 33/2 'Slim Jims' in due course: the latter variant will require substantial changes to the superstructure, but given the speed at which Heljan developed this project in the first place, the mouldings for a 33/1 cannot be far away...

Performance is, naturally, excellent. The 33 coped well with 9 on over the Pecorama 'Loft' layout and its testing gradients – just like old times! It is DCC-ready, with an 8-pole dual in-line socket (NEM652) atop a cast chassis.

For 4mm scale

AVAILABLE FROM
Heljan UK, c/o Howes Models,
12 Banbury Road, Kidlington, Oxon.
OX5 2BT

PRICES
£TBA.



Bachmann Mk.I Pullman First new in 4mm scale

Hot on the axleboxes of the Kitchen First (see last month), Bachmann has released the second of the five car types in this fleet of luxury vehicles, the Parlour First.

The prototype chosen, No.326 *Emerald*, was one of seven Parlour Firsts turned out of the Metro-Cammell works in time for the 1960 introduction of these Pullmans on the ECML. The car, on which was revived the name of a 1910-built car, is preserved in the care of the NRM.

The model is fully up to the same high standard of finish as its predecessor. The interior lighting is effective, and the layout – where the gangway crosses sides after being mostly a centre



aisle – has been followed faithfully. This is true down to the odd-shaped tables where necessary: the correct provision of curtains to the windows on each side, opposite the doors to the com-

partments, and not to the narrower corridor windows has also been captured in miniature.

The model also has air brake equipment if representing an SLOA Pullman:

note its positioning, as mentioned in the instruction sheet, as this was different on Parlour Firsts compared to the other cars.

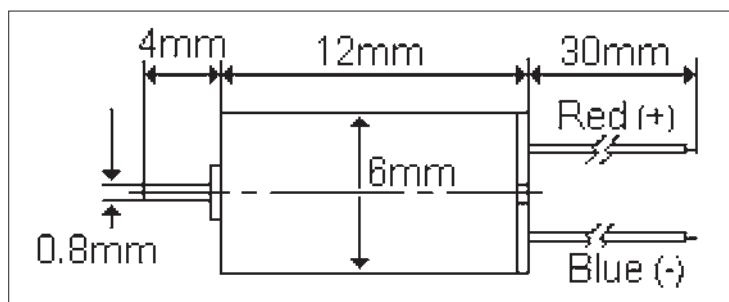
For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
ref.39-290, £25.95

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Micro motors from Nigel Lawton



Nigel Lawton recently commissioned this 6v micro motor from a supplier in Hong Kong. It represents the culmination of two to three years of working with this supplier to find a way, both technically and commercially, to produce micro motors which are better suited to model railway use than the standard 1.3v types. Having ruled out 12v motors on technical grounds (the smallest 12v motor the firm was able to make was the 10mm x 12mm motor which Nigel already sells), a compromise was sought which would still allow the motor to run on 12v by using a dropper resistor. This 6v motor, 12mm long by 6mm diameter, is the result.

No fixing holes are provided, so the

motor would have to be secured in a suitable mount.

The shaft is 0.8mm diameter and projects 4mm from the end of the casing. A shaft adaptor to convert to 1.5mm diameter is available for 50 pence, but can only be supplied with a motor.

Connections are via light captive multi-strand leads c.30mm long, colour-coded red and blue for positive and negative respectively.

The current draw is about 50mA at 6v and a 150ohm resistor rated at 0.3W is sufficient to drop a standard 12v DC controller's output to the 0-6V range needed by the motor. A 'conventional' or 'standard' resistor with wire leads is provided with the motor; a

sub-miniature 'surface mount' chip resistor with a small piece of 0.8mm thick printed circuit board material to use as a mounting pad is offered as an optional extra. This small resistor allows the 6v motor to be used on 12v even within the smallest of vehicles, and is employed for this purpose in Nigel's O&K diesel kit (ref.RL1c).

6v motor upgrade kits were recently sent out free of charge to all those who had bought the O&K kit (except for a few exhibition customers who could not be traced) as a way of thanking them for buying the model when the motor solution was still not ideal. The 6v motor makes a big difference to the controllability and although a dropper resistor is still required, the amount of

power this must dissipate to be effective is much lower than for the 1.3v motors which required a 3W resistor and would have heated up a small vehicle like the O&K to the point where the whitmetal components might have melted and the paint peeled off! By contrast, the O&K with a 6v motor and chip resistor dropper is now only warm to the touch after several hours of running at full speed on 12v.

This micro motor should be of interest to a wide range of modellers, from Z through 2mm and N to 3mm and 4mm.

The 1.3v motors will not be stocked any longer and are being sold off at £3.00 each.

AVAILABLE FROM
Nigel Lawton, 77 Katherine Way,
Seaford, East Sussex, BN25 2XF
NigelLawton009@fsmail.net
<http://www.geocities.com/nigellawton009/VeeTipper.html>

PRICES
Micro motor – £6.50.
Surface mount resistor – 50 pence
Shaft adaptor – 50 pence (only with motor).
Postage & packing – 75pence UK,
£3.00 rest of world.

New Farish CK and POs in N

Graham Farish has increased its selection of BR Mk.I body types with the corridor composite (CK). This part of the fleet is (like the earlier BSK) now offered to the correct 1:148 scale: the venerable Minitrix model of the CK, which has been around since 1967, is to the continental 1:160 ratio.

The prototype for the GF model we received is Western Region chocolate & cream liveried W15770, part of a

batch of CKs built by Metro-Cammell. Our sample, in common with some other Mk.I's from GF, was bereft of an interior.

Four more 8-plank Private Owner wagons have been added to the fleet: two, 'Stamford' and 'Modern Transport' carry coke extension boards, whilst the others, 'Wood & Co' and 'Charles Ward' commemorate two of the many London coal merchants. Three carry



legible Chas. Roberts worksplates, and the 'Wood' wagon – although lacking them – was built by the famous Wakefield firm too.

For N

SAMPLES SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICES POs: £4.85ea (wPOs with
coke boards £4.95ea)
Mk.I CK: ref.374-252, £12.50

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



Hornby releases LMS Period III coaching stock in 00

Samples of the first in the new series of LMS standard coaches in 00 from Hornby have arrived in the shape of the Diagram 1930 corridor first of 1934-38, available in both LMS and BR(LMR) maroon finishes.

The stock fits neatly the Period III classification engineered by the late David Jenkinson and Bob Essery: the author's definitive work on LMS stock (*The illustrated history of LMS standard coaching stock, OPC*) has a 4mm drawing of the body on p.112 of volume II (ISBN 0860934519), which the Hornby model matches exactly. Glazing is near-flush, and painting and lining are excellent. The LMS crest is a particularly fine piece of printing, as are the smoking and non-smoking window labels.

On the roof and at the ends the water fill pipes are represented by metal wire, standing proud of the superstructure. The gangway covers are planked as per prototype, and the buffers are sprung.



The underframe features finely moulded truss rods, battery box and brake equipment. The dynamo is mounted on a delicately detailed mount, so take care to avoid damage to it through handling too roughly.

The bogies are new, and represent the standard 9' wheelbase type. NEM coupler mounts on spring-centred arms carry slimline tension lock couplers, which can be changed to the

customer's preferred type easily if desired.

Other points deserving of praise are the door grab handles, which stand proud of the bodysides; the roof vents, which are very neat; and the steps at each right-hand end of the coach side.

Corridor 3rds, corridor brake 3rds and full brakes are also in the pipeline, making it a very fine start to the year for the LMS/LMR enthusiast.

*SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX*

*PRICES
LMS livery (ref.R4230) – £28.99
BR(M) livery (ref.R4234) – £28.99*

*WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.*



Three-arch viaduct kits and more in 4mm from Wills

New to the Wills range of scenic items is a three-arch stone viaduct kit (ref.SS80) for 4mm scale.

The kit – note, incidentally, the attractive new packaging – contains crisply moulded plastic parts. The arches span a scale 35', and the piers are a scale 41' from floor to base of the capstone from which the arches spring. The piers, and the viaduct's track base sections, can be narrowed for single track use by cutting the relevant parts carefully along the factory-formed grooves. Be sure to discard the correct piece to the scrapbox; the groove does not run in the centre of the parts!

The undersides of the arches are in brick-patterned plastic sheet: the mouldings are in terra-cotta coloured plastic.

The capstones are ingeniously supplied in two halves, which help to locate the tops of the piers and the ends of the arches, and give strength to the structure. Equally ingenious is the design of the parapet walling, which locates via pins and holes into the inner face of the arch moulding, the two being held in place by the coping stone piece.

Extension kits are available, taking the form of an additional arch and pier (ref.SS81), and two piers (ref.SS83). Finally, the arch parts, with bespoke wing walls, are available as a kit for a low structure without piers, suitable for a canal/river bridge (ref.SS82).



Trade orders for this attractive range of civil engineering items are handled by Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA. Private customers can obtain them from their local Wills stockist or direct from the factory. It is anticipated that N gauge versions of these kits will follow in due course.

For 4mm scale

*AVAILABLE FROM
Wills Kits, Ratio House, Mardle Way,
Buckfastleigh, Devon TQ11 0NR*

*PRICES
three-arch viaduct – £19.00
arch and pier – £7.50
two piers – £8.50
canal/river bridge – £7.50.*



Interlocked mechanical lever frame from Modratec

To many modellers, locomotives are the heart and soul of a layout. To others, though, operation is the Number One: a key part of this latter focus is full, interlocked, traditional mechanical signalling. On the 'real railway' this is probably the longest-lived technology: anyone in today's surviving mechanical signal boxes will be right at home should a time machine roll them back a century. Fair enough, the train he or she would shepherd through the section would be a world apart – a 'Precursor' not a Pendolino, for example – but the levers, bells and other instruments would be the same.

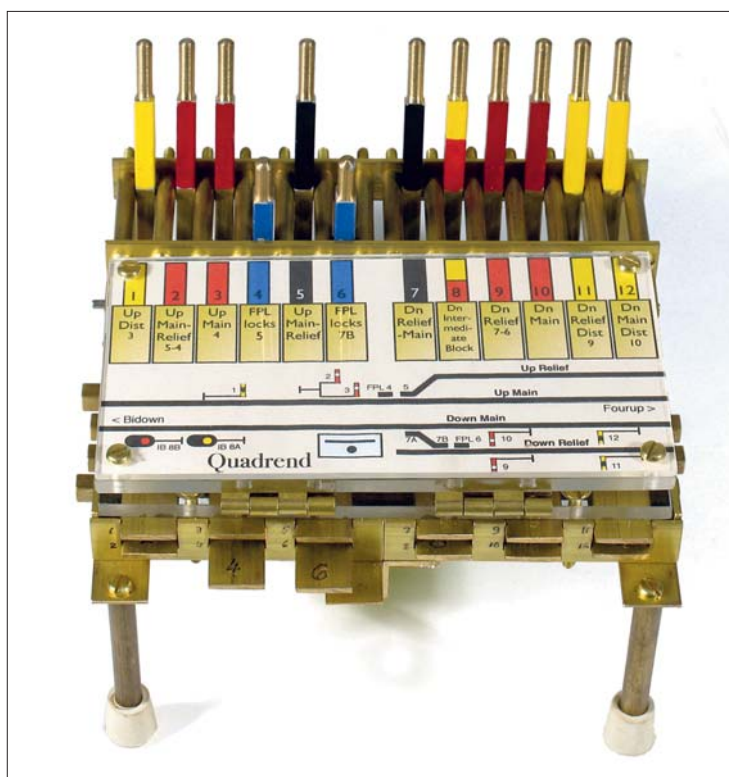
Such technical sides to mechanical signalling can be daunting, so many make do with traditional electrical switches and so on. However, the task of making a proper frame, with tappets and sliders working in concert to prevent a conflicting move or unsafe working method being executed, has been made considerably easier thanks to Modratec of Australia.

The firm was kind enough to let us borrow the display sample it had on show at the Warley National Model Railway Exhibition. It is a 12-lever frame, set up to control the convergence/divergence of a two-track to four-track section of main line. The outer boundaries of the frame's control area are the three distant signals: both sets of points have facing point locks, the crossover in the Down Main being worked from one lever, as is common practice. The lever 'plates' give sequence order in the usual way, and the arrangement of tappets and sliders ensures nothing untoward can happen. (We tried; we failed, of course...)

The levers can operate the point tiebars and signal arms via the tried and tested wire-in-tube method – components for which Modratec can supply, including cross-baseboard linkages etc. – but they also actuate micro-switches located at the end of their travel. These can be used to operate accessories, and also colour light signals. (The churlish might unkindly point out that the lever on our sample, 8, for these lights should have a half-height handle as a reminder that the lever is just a big switch.)

The frame illustrated is simply an example: Modratec sells components to enable the modeller's own track plan to be recreated, with full locking as appropriate. Frames are supplied in multiples of six, up to a 60-lever installation: beyond this lies the realm of special orders.

The design of each frame is achieved via the free download of a program, SigScribe4, from the Modratec website. (See below for



details of how to obtain locking plans and frames if internet access is not available.) This allows a modeller to draw in the required track plan and the program calculates the rest. From this is generated the construction manual, unique to each frame, which is delivered to the purchaser via e-mail.

SigScribe works on both Mac and PC platforms.

Don't forget that to try and signal an entire station from one frame might not be to advantage: apart from the size of frame required, there was a rodding length limit of around 250yd on the prototype, so it might be better to use

SigScribe to design 'East' and 'West' boxes, for example. Then, genuine or electronic 'slotting' of signals can be included, either to be a challenge to the sole operator or a rewarding co-operation between two signalmen/women. ('Signaller' has no place here...) There are many home-and-distant signal kits on the market: this range of products will allow them to be operated as the real things were.

The parts are supplied 'blank', the purchaser having to drill holes as necessary – guides are supplied – and tap some (M3). A drill press would be an advantage. A small amount of hack-sawing and filing is also required.

Locking plans can be designed by post: send a sketch of the area to be signalled to the address below, and Modratec will work out the design required and send a quotation.

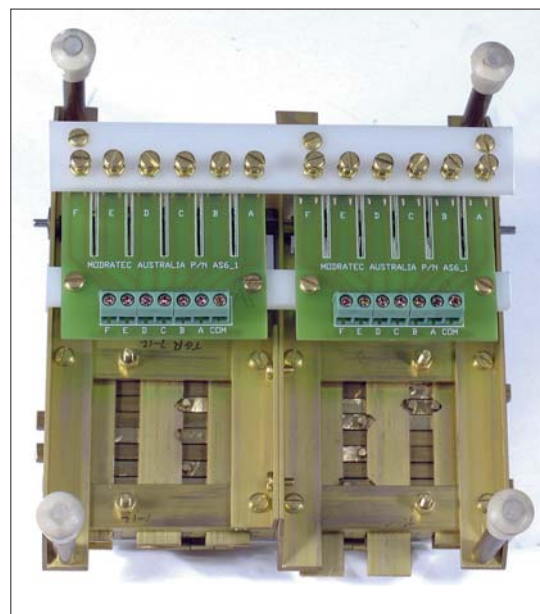
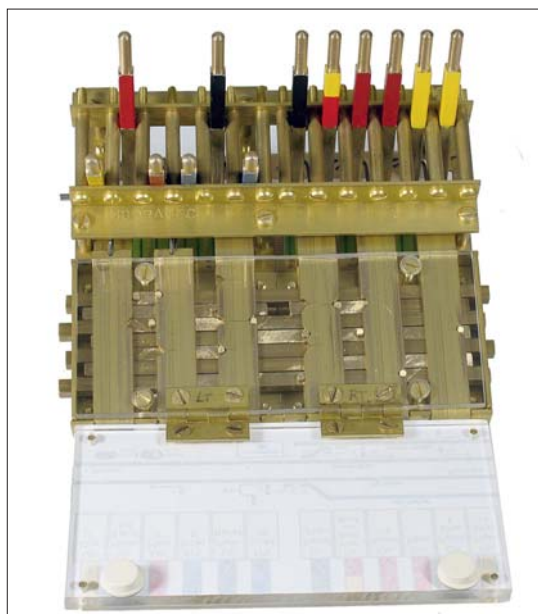
Pricing naturally depends on complexity and size. The 12-lever frame illustrated costs Aus\$96.00 including auxiliary switches. Modratec charges Aus\$10.00 for a construction manual in printed (i.e. not e-mailed) form. Postage and packing is extra.

Modratec can accept payment by credit card via its secure website, or by mail order.

For all scales

MANUFACTURED BY
Modratec, P.O. Box 2205, Graceville
4075, Queensland, Australia
www.modratec.com

SAMPLE PRICE
In text.



Viva estate in 4mm from TPM

A new addition to the Carkit-4 range of road vehicle kits from Taylor Precision Models is this model of a Vauxhall Viva estate, produced c.1967-70.

As usual with this range, the kit comprises a well-produced one-piece resin body, whitmetal castings, a fret of etched parts (wing mirrors etc) and clear, easy to follow instructions.

For 4mm scale

AVAILABLE FROM
Taylor Precision Models, Unit 235,
Stratford Workshops, Burford Road,
London E15 2SP

PRICE
ref.67V36, £9.00.



Book Reviews

First Generation Southern EMUS

Kevin Robertson
Ian Allan Publishing Ltd.,
4, Watling Drive, Hinckley,
Leicestershire, LE10 3EY.
282mm x 213mm 80pp
Softback £12.99
ISBN 0 7110 3087 1

This album is in the publisher's *British Railway Pictorial* series. It is a nostalgic treat for those of us who used BR Southern Region 40-50 years ago and less, and really knew no other railway. The book's publication is timely because 2005 marked the final withdrawal of the numerous slam-door classes which were part of everyday life on the Southern for so long.

The well-chosen photographs are arranged under the following headings: *Pre-Grouping and Early Southern Railway Suburban Stock* (mainly 4-SUBs, 2-NOLs and their LB&SC and LSW predecessors), *Southern Railway Semi-Fast and Express stock* (2-BILs, 2-HALs, 4-LAVs, the PANs, CITs and CORs etc), *Steel-Bodied Suburban and Semi-Fast Stock* (postwar SUBs, the EPBs and HAPs), *Departmental Units*, and *BR Main Line and Semi-Fast Units*, the CEPs, BEPs, CIGs, BIGs. REPs, VEPs and TCs, etc.

Apart from the well-captioned photographs, there is an Introduction, a Bibliography, a list of EMU vehicle classification codes (MLV, MS, BUF, etc.) and an extensive listing giving Southern Region EMU number series, with types, origins, formations, dates introduced and out of stock, etc.

This album is well presented and printed, and reasonably priced. It would make an excellent present for anyone of the Southern persuasion at this sad time.

The Snape Branch

Peter Paye
The Oakwood Press,
P.O. Box 13, Usk,
Monmouth, NP15 1YS.
209mm x 140mm 120pp
Softback £8.95
ISBN 0 85361 641 8

It is perhaps surprising that this goods-only Suffolk branch which lasted in service until March 1960 seems to have attracted scant modelling interest over the years, and this despite J15s, short trains, timber river bridges and attractive Maltings architecture. Snape had more features in a small space, in fact, than any railway modeller might be entitled to expect unless, at least in later years, he wanted a passenger station, signal box, signals even, or a loco shed. So minimalist was the branch that there were no conventional run-round facilities at the Maltings, and trains were propelled along the branch from Snape Junction - just the thing for a 'shelf' layout. There is an account and several photographs of the REC *Suffolk Venturer* five-coach special that was stranded on the branch on 30 September 1956, involving E4 No.62797 and J15 No.65447.



Clapham Junction in 1959 with ex-SR 2-BIL units, 2037 leading, captured on film by Frank Hornby.

The author provides much information on the history and operation of this intriguing little branch, its timetables and traffic and locomotives and rolling stock. There are several dimensioned diagrams of typical GER locomotives and goods vehicles which worked the line. Track diagrams include the out-lines and positions of the important buildings. All the monochrome photographs (there is colour only on the cover) are well reproduced and generously captioned.

This well researched and readable line history carries number 229 in the *Oakwood Locomotion Papers* series.

Robert Stephenson: Railway Engineer

John Addyman
and Victoria Haworth
North Eastern Railway Assoc. &
The Robert Stephenson Trust,
31, Moreton Avenue, Stretford,
Manchester, M32 8BP.
300mm x 205mm 172pp
Hardback £19.95
ISBN 1 873513 60 7

In the 150 years since Samuel Smiles wrote his *Lives of the Engineers*, Robert Stephenson's reputation has suffered by much of his credit being transferred to his father George, but at the time of his death (October 1859), Robert was considered a far greater engineer than his father or any of his contemporaries. In fact, his outstanding accomplishments dictated that he should be buried in Westminster Abbey.

Readers who are familiar with previous NERA publications will expect a first class volume and they will not be disappointed. The book describes Stephenson's ambitious and advanced civil engineering at home and abroad including the difficult bridges over the Tyne, Menai, Nile, and St. Lawrence. Also discussed is his influence on the development of locomotives from the crude products of the 1820s to the capable machines of two decades later.

After an account of Robert's early life and education, his work and journeys in Columbia and North America (1842 - 1827) are described in some detail and, up to 1833, his involvement

with several early small railways is recorded, including Canterbury & Whitstable, Leicester & Swannington, and the Stanhope & Tyne.

The chapter on locomotive development 1803 - 1846 includes many sketches and drawings and an account of the Rainhill Trials. We are reminded, as if that were necessary, that the renowned 'Fireflies' of the GWR were very close relatives of the Stephensons' 'North Star' and that Robert and I.K. Brunel himself enjoyed a cordial and mutually respectful relationship until the death of both engineering giants in 1859. A key difference between them, of course, was the question of gauge, with Stephenson the protagonist of standard and Brunel of his own broad gauge.

Later chapters deal with the larger lines and works engineered by Stephenson, including the London & Birmingham Railway, the Chester & Holyhead Railway, and the tubular bridges and, in the 1850s, work in Switzerland, Egypt and Canada.

Because this is a biography as well as an engineering treatise, many details of Robert's life are given, including the loss to cancer of his wife Fanny (he never remarried), his role as Commissioner for Health in Towns, and as MP for Whitby for twelve years. Unfortunately his huge contribution to society was cut short by his death at the relatively early age of 56.

The book contains around 110 monochrome photographs and line drawings, together with four pages of colour illustrations.

The book is a comprehensive biography of a great man - not just a great engineer - and maintains the very high standards of recent NERA publications.

The Lincolnshire Potato Railways

Stewart E. Squires
The Oakwood Press,
P.O. Box 13, Usk,
Monmouth, NP15 1YS.
209mm x 140mm 160pp
Softback £12.95
ISBN 0 85361 646 9

This is the second, revised, edition of a work first published in 1987. As is often the case, the first edition sparked off a great deal of additional information on this somewhat esoteric branch of railway history. In fact, over 140 route miles of 2' gauge track once existed,

laid on farms in at least fifty separate locations from Alkborough on the banks of the River Humber to Crowland in the south.

Since the first edition of this book was published, light semi-permanent railways such as these have become both more modellable and more modelled, not least thanks to the writings and commercial support of Roy C. Link and others, so the well-drawn maps and trackplans published here will appeal to a wider audience.

The chapter headings covered by the author include the Fens and Marsh of Lincolnshire, Railways and Farming, Railways for Reclamation and Drainage, the Rise and Decline of the Potato Railways, and the Farm Railways Described - fifty of them! The ex-War Department rolling stock used at Nocton is looked at in some detail, as are the locomotives employed on the Dennis estates.

It is good that this treatise on English 'field' railways has been revised and remains in print. It is number 163 in the *Oakwood Locomotion Papers* series.

Scottish diesels

A colour portfolio

David Cross
Ian Allan Publishing Ltd.,
4, Watling Drive, Hinckley,
Leicestershire, LE10 3EY.
190mm x 245mm 80pp
Hardback £14.99
ISBN 0 7110 3082 0

This new addition to the publisher's collection of landscape format colour albums once again ventures north of the Border (see *Heyday of the Scottish diesels*, reviewed in RM February 2003). The author presents a varied selection of his father's, his own and other photographers' work from (chiefly) the 1970s. From the suburbs of Edinburgh and Glasgow we travel far and wide, including the former Highland main line and the route to the Kyle of Lochalsh. Only the lines to the Far North miss out: we travel the 'Sou-West' to Stranraer and down the Nith Valley, and look at the East Coast Main Line.

Power is the usual varied mix of the time, from Type 1s good (20s) and not so (17s); through 26s and 27s up to 'Deltics', 50s - in pairs - and 47s amongst others. There is a scattering of DMUs, both for local work and main line duties, and a few of the loco-hauled trains are freights.

Locations were clearly well chosen, and includes the Clyde bridge at Crawford which has become a Cross landmark. Many of the views are of the 'train in the landscape' category: the splendour of the trains' surroundings is apparent in all.

Captions are lengthy and update the reader on the locomotives' careers since the photographs were taken. The hypercritical might rail at the captions on pages 71 and 72 which both begin 'no book on Scottish diesels could be complete without' and cite two different topics!

Enthusiasts and modellers will find much food for thought in these pages. Anyone interested in stunning scenery and 'real trains' will want to make space for the book on their shelves.

The Warley National Model Railway Exhibition 2005 was once again an extremely successful and totally enthusing event. Exhibition Manager Paul Jones reports that the attendance was 18,100, slightly down on the previous year's record of 18,400, but nonetheless a very satisfactory and consistent result, given the less favourable economic conditions compared with last year.

Our congratulations go to Paul and his hard-working team for a terrific show with a varied and high quality content.

In his post-show letter to us, Paul notes that problems were encountered by visitors arriving by train (which included your editor). Due to NEC restrictions involving *The Clothes Show live*, taking place in adjacent halls, those attending the model railway exhibition show could not use the 'Skywalk' through the NEC to the Halls. As a result, shuttle buses were employed, but unfortunately the demand for the buses exceeded supply, particularly on the Saturday morning, resulting in long queues. Paul apologises to those who had to queue, and notes that, with hindsight, more buses should have been provided. He

adds that this problem will not arise next year as the exhibition is scheduled to be held in Hall 1 of the NEC which is at the foot of the escalator from Birmingham International station.

During the course of the exhibition judging for several competitions took place, and on the Sunday afternoon a number of presentations were made as a result.

The Bachmann Cup for the best layout in 3.5/4mm scales was won by *Dewsbury Midland* (below left) from Manchester MRS. On the Society's behalf, Dave Douglas received the award from Pete Waterman.

The Calvert Cup for the best 2mm/N gauge layout was won by *Shaweport* (below right) built by Stephen Farmer who was presented with the award by Pete Waterman.

The Virgin 7mm Cup for the best 7mm scale layout was won by *Sellindge* (bottom left) built by Warley member John Smith, who received the cup from Pete Waterman.

The Virgin Modern Image Award for the best modern image layout in any scale was gained by *Morwenston Riverside* built by Redruth MRS (bottom right), and Nigel Glasson received the award from Pete Waterman.



The RAILWAY MODELLER 'Right Away' Trophy was awarded to *Common Lane Wharf* (above) built by the late Steve Best of the Hull MRS. The trophy was presented by the Editor to Neil Ripley (right), Mike Heaven (left) in Steve Best's honour and memory.

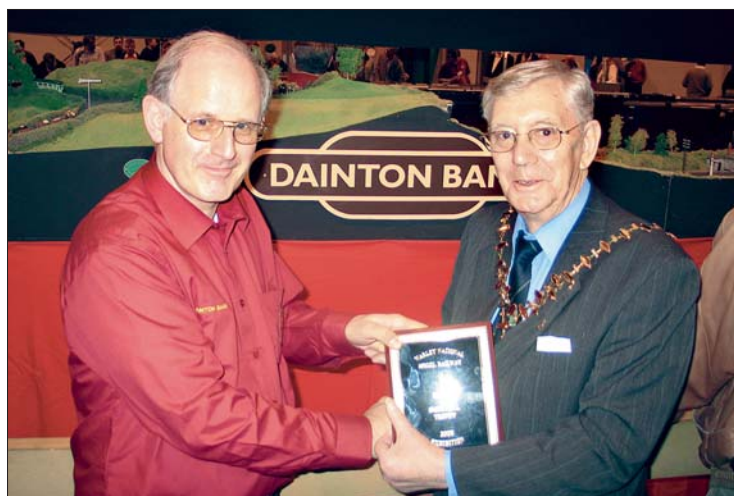
The Mayor of Sandwell's Trophy for the layout that most entertained the Mayor went to *Dainton Bank* built by the Pendeford Group. In the photograph (right), Mike Heaven (left) is seen receiving the award from Councillor Bill Archer.



Bachmann

From this busy stand we were able to borrow several pre-production models for photography. The 00 gauge Fairburn 2-6-4 tank is bound to prove a popular subject, as the 250 prototypes could be seen working well outside the Midland region. The writer regularly saw one on the SR in the 1950s, and an example (42073) has been preserved on the Lakeside and Haverthwaite railway. The sample we saw represents this loco in its lined BR black livery with late crest.

Another exciting new item is the new BR Standard 9F 2-10-0. This portrayed 92116 in BR black with early emblem, coupled with BR1C tender. The model will be DCC ready, and the etched smoke deflectors are an attractive fea-



ture. Other versions of the 9F will eventually join the range, including the green-liveried Evening Star, and each will be paired with the authentic tender variant. The drive is in the locomotive, but we will have to wait until review samples are received before the pulling power and curve holding abilities of this 'Spaceship' are revealed.

Hornby

Hornby were delighted that samples of their brand new model of the Class 60 diesel had arrived just in time to be displayed at the show; the model is fully reviewed elsewhere in this issue.

Heljan

Two variants of the brand new model of the Class 33 diesel were evident, which had reached the shops just before the show; the model is fully reviewed elsewhere in this issue.

Bratchell Models

New is a kit for Class 150/2 DMU; we illustrate a single car (i.e. half the set) in the turquoise and white Anglia livery. The two-car standard kit features injection moulded flush glazing.

Bratchell Models, P.O.Box 22, Watford, WD17 3WA.

www.bratchellmodels.com



Model Irish Railways

Assembled kits from this stable included an Anhydrous Ammonia bogie tank wagon and a barrier wagon with water container, to be released soon. Model Irish Railways, 12 Lynedale Grange, Portadown, BT63 5XB.

Townstreet

A sandhouse with chimney and sandbin is new in this large range of 4mm scale stonecast buildings. Townstreet, Greenhead Tower, Greenhead Gill, Grasmere, Cumbria, LA22 9RW.





Graham Farish

A named green diesel is quite an event, and we were able to photograph the new Class 44 'Peak' as D1 *Scafell Pike*. With headcode discs, etched plates, and flywheel drive to both bogies, this is an impressive model of a classic locomotive. We look forward to reviewing a sample model of these hefty 1Co-Co1s very soon.

Also on show was the new 46 tonne glw VKA sliding wall van in EWS colours.

Graham Farish, Bachmann Europe PLC, Moat Way, Barwell, Leicestershire LE9 8EY.



ATM

A new model of a bogie china clay slurry tanker in N, representing the 'Silver Bullet' design, was displayed by these specialists.

ATM, Unit 235, Stratford Workshops, Burford Road, London, E15 2SP.

Deluxe Materials

Pride of place on the Deluxe Materials stand went to a diorama demonstrating the potential of their new Scenic Snow. This enables the modeller to create dramatic snow scenes in minutes. It facilitates the depiction of various realistic snow effects such as newly fallen, melted, slipped, and frozen on houses, roofs, trees, and vegetation.

Scenic Snow is a natural companion to Scenic Water, Scenic Fibres, Scenic Rust, and the other Scenic products in the Deluxe range. It has been developed to meet the demands of the many modellers who want to add more realism to their projects.

A Scenic Snow 100gr pack contains Scenic Snow flakes, Scenic Glue (bond), and frozen sparkling agent, and should cover up to approximately 5sq.ft. It comes with full instructions in English, French, Italian and Swedish.

Deluxe Materials products should be available from all good model shops; they are distributed to the trade by Gaugemaster.

Deluxe Materials

www.deluxematerials.com



Dapol

Two new versions of the N gauge 45XX Prairie (reviewed in our September issue) were seen, in unlined GWR and British Railways liveries.

Advance samples of further new versions of the Class 66 diesel, in GBRf and 'Medite' liveries, were also available for inspection. George Smith of Dapol was at pains to point out that these were 3D 'proofs', for evaluation, and that some adjustments and amendments were still to be made.

Most exciting was the sight of a pair of pre-production samples of the latest versions of the 'Dogfish' ballast wagns (reviewed in January 06).





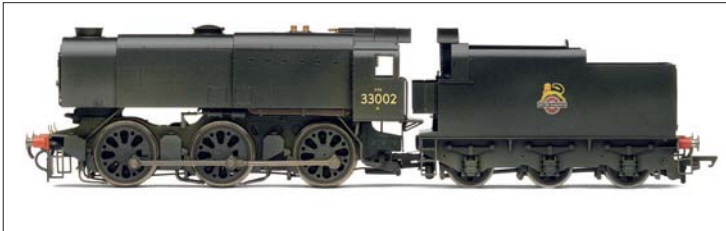
Kit clinic

Once again Maggie Gravett and her staff presided over her class of young modellers (lower left) who worked under her genial and ever patient supervision. Sponsored by Peco and Squires, this popular feature gives youngsters the opportunity of assembling a simple plastic kit, perhaps for the first time. As average assembly time is about an hour, Maggie's class has an element of the *crèche* about it, which many parents appreciate.

Fleischmann village

In conjunction with Modelmasters, Fleischmann brought a Bavarian atmosphere to Birmingham. The centrepiece of the 'railway village' was the enormous Winter Wonderland factory layout (above) with its realistic covering of snow which did not at all impede the reliable running of the trains, and actually enhanced the realism of the Kibri buildings, Herpa vehicles, Heico wagon loads and all things German!





Hornby 2006 programme

The annual Hornby press briefing was held on December 14 at a pleasant hotel on the seafront near their Margate headquarters and the ever-enthusiastic Simon Kohler outlined a programme full of interest and variety.

In his usual engaging and straightforward manner, Simon dashed a few hopes by informing us that there would be no EMU nor yet a 'Blue Pullman' in the OO range this year, and there were no immediate plans to enter the N gauge field.

Locomotives - steam

The M7 0-4-4T and even the 'King Arthur' 4-6-0 have featured before from either Hornby or its predecessors, but these splendid Southern subjects will be manufactured from completely new tooling and, if the latest products are any guide, will no doubt do full justice to their beautiful prototypes.

Another Southern loco but from the BR region due this year is the 'West Country'/'Battle of Britain' rebuilt Light Pacific. How strange that as youngsters we were so upset by the alterations to our beloved 'cans'. Nearly fifty years later they seem even better looking than a 'Brit', talking of which: there will be a new 'Britannia' Pacific, initially 70013 *Oliver Cromwell*, and it will have more and finer detail than the previous Hornby versions.

Unfortunately, so far all these proposals are only represented by prototype photographs.

Re-numbered, re-named and re-liveried locos for the coming year, a small selection of which is illustrated on this page, include the unrebuilt 'West Country' class 4-6-2 34092 *City of Wells*, and MN class 35019 *French Line CGT*, a 'Terrier' 0-6-0T in BR lined black as 32678, and the class Q1 0-6-0 as 33023 and a weathered 33002; the 'King' class 4-6-0 as 6006 *King George I* and 6007 *King William III*, 'Castle' class 4-6-0s 4081 *Warwick Castle* and 5077 *Fairey Battle*, a 'Grange' class 4-6-0 as 6877 *Llanfair Grange*, and 'County' class 4-6-0 1007 *County of Brecknock*; a Fowler 2-6-4T in BR lined black with late crest as 42327, Stanier Class Fives as LMS 5036 and BR 45156, and Stanier Pacifics 46248 *City of Leeds* in BR maroon and 46237 *City of Bristol* in BR blue; the B17 'Footballer' as 61648 *Arsenal*, the class A3 4-6-2 60073 *St. Gatien* with GNR tender, and the A4 as 60029 *Woodcock*.

Locomotives - diesel and electric

The Virgin *Pendolino* is a new model which will be available as a four-car train pack and will also form the focus of new decoder-fitted DCC train sets; at this stage the project was illustrated only by a stylised prototype picture.





From former Lima tooling, the following should become available during the year: the Class 101 three-car DMU, the Class 156 two-car DMU, and the Class 121 'bubble-car' single unit; the GW diesel railcar; and locos of Classes 73, 59, and 67.

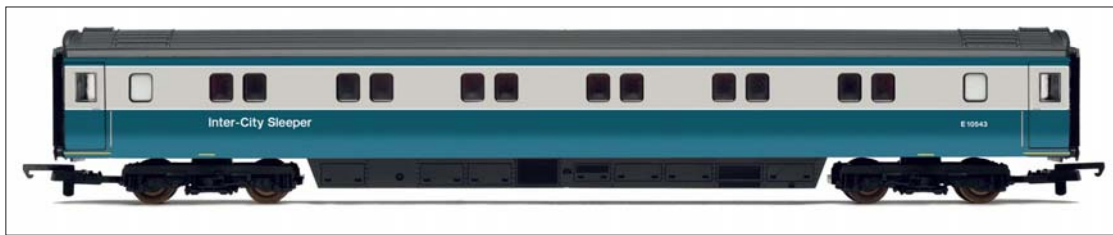
All these will be powered by new mechanisms with five-pole skew-wound can motors; they will have DCC decoder sockets, pickup on all wheels of power cars, working lights, and sprung buffers where possible.

The Class 73s will be 73101 *The Royal Alex* and 73107 *Spitfire*. The 59 will represent 59102 in ARC colours while 67027 will wear EWS livery.

Quite a number of other existing models will be issued in new liveries or with alternative numbers.

Rolling stock

Among the most significant new introductions will be items from former Lima tooling; these should include the MkIII coaches, including sleeping cars, pressurised tanks (PDAs and JCAs), and the very useful CCT Utility van in maroon or blue.



DCC

In a major development, Hornby plan to launch their own Digital Command Control (DCC) unit in September. It uses the Xpress net protocol, compatible with Lenz and ZTC.

The *Select* (above left) at around £65 will control up to eight locomotives via an alpha-numeric keypad with a 1 amp controller. An additional 4 amp booster can be added.

The *Elite* twin control unit (left) with 4 amp transformer at £120-£130 can be used in conjunction with the *Select* which is then used as a walkaround handheld unit. Both devices have a 'favourites' selection system, and the *Elite* incorporates a USB socket for interfacing with a PC.

Loco and accessory decoders will be available separately.

Live Steam

New to the live steam selection will be a double-tendered *Flying Scotsman*, to celebrate the fortieth anniversary of that engine being so equipped.

Scaledale

In this popular 00 scenic series, some models will have metal detail parts. In response to requests, the bases of buildings will now be made completely open, allowing the interior of the buildings to be detailed or lighted.

Interesting developments in this range are *Scaledale Cut*, a modular canal system with lock, associated buildings, and canal boat; and *Scaledale Civic Amenities*, a road system with traffic signs, signals, etc.

Low relief buildings will also be introduced to the range.



Model railway training courses 2006

The model railway training courses run by Dr Michael Watts in the Peco Lecture Theatre have proved so popular in past years that three new sessions are planned for the coming year, in spring, summer, and early autumn.

During the long weekend of Friday 12-Sunday 14 May the topic will be *Track and Control*; between 18 and 20 August it will be *Track and Wiring* (with at least half a day devoted to Digital

Command Control), while the ever-popular *Baseboards and Scenery* will form the subject of the course on 29 September-1 October.

Leaflets with further information, and a booking form, can be obtained from Pecorama, telephone 01297 21542, or e-mail pecopubs@btconnect.com

In the past these courses have been booked up quickly, so a prompt response is advised!

Canterbury show – note new venue

There will be a new venue for the Canterbury model railway exhibition on Saturday 21 and Sunday 22 January.

The new location is St.Anselms School, Old Dover Road, Canterbury, CT1 3EN. The show will be in two halls where fourteen layouts and twelve trade stands will attend. The opening times are 10.00 until 17.00 Saturday and 10.00 until 16.30 Sunday. Admission is £3.00 adults, £2.00 senior citizens, £1.50 child (5-16) and

family (2+2) £8.00.

There is plenty of free parking on site and pay parking in the Dover Road Park and Ride next door which provides a service to the city centre. Other bus routes are 16, 16a, 17 and 115.

Refreshments will be available and there is disabled access between the halls.

For more details, contact the Exhibition Manager, Mark Pledger, on 01304 825233 (evenings).

Brambleton club 50th celebration

The annual Brambleton MRC exhibition will have an extra dimension this year. Although it is the 38th annual show, the club has actually been running for fifty years. Back in 1947 the club was originally a boys' club, but in 1956 the MRC was formed.

As part of the club's efforts to make this exhibition a bumper show, they are trying to contact as many former members as possible in the hope that they can join in with events planned.

The show will take place on Saturday 21 January at the Harpenden Public Halls, Southdown Road, Harpenden, Hertfordshire. It will open from 10.30 until 17.30; admission is £3.50 for adults, £2.00 for senior citizens and children.

Refreshments will be available.

Harpenden Public Halls are at the St.Albans end of Harpenden High Street just beyond the Harpenden Arms, two minutes walk from Harpenden Thameslink station.

There will be twelve layouts present in both popular and unusual gauges with trade and preservation society support.

The club boasts an outdoor O gauge layout on an 1/8 mile loop of double track with nine stations. A 16mm garden layout has also been constructed and now extends to almost 200 yards.

If you would like to be re-united with erstwhile members or find out about the club's 7mm or 16mm activities, call Harvey Foster on 07930 883831 or see www.brambleton.co.uk

Bremen competition results

The European Narrow Gauge Railway Modelling Championships were held during Euro Modell 2005 Bremen during the weekend of 18 to 20 November.

Congratulations to John Varley of Leeds who achieved third place in the class for layout under 10m² with his 009 *Ghylldale*, which depicts an imaginary 2'3" gauge common carrier in winding dales on the coastal fringe of the North York Moors between Whitby and Scarborough.

Competitors from Holland, England, Switzerland, Germany, and Slovenia took part and the winners were chosen by a jury of experienced modellers.

First prize in the small layout class



went to Franz Stellmaszyk from Köln (above) for his large scale *Vulkanbahn* (which has featured in CONTINENTAL MODELLER, December 2004). Second prize was won by Helmut Walter from Stadtdendorf with *Gipsbahn*, which took first prize last year.

Large scale details from Perfect World

Perfect World Products announces some new 16mm and G scale accessories. There is a station lavatory (WM30 £9.95 unpainted, £14.95 painted), complete with high cistern and a proper pull chain action.

The village or station pump (WM31, £6.95 unpainted, £9.95 painted), usually for equine use, makes an attractive

model. In the garden, this can help to set the scale of a railway.

The pigeon crates, complete with birds (RC33, £TBA), were once a common component of platform clutter.

Perfect World, Pine Cottage, Gribthorpe, near Howden, East Yorkshire, DN14 7NT.

brian@perfworld.freeserve.co.uk

Model Rail Scotland

Model Rail Scotland takes place over the weekend of Friday 24 to Sunday 26 February at the Scottish Exhibition Centre, Glasgow.

The show will be open from 10.00 until 20.00 on Friday, 10.00 until 18.00 Saturday, and 10.00 until 17.00 on Sunday. Advanced ticket holders can enter 15 minutes prior to the scheduled opening times.

A total of forty layouts will be on display, many of which will be visiting Scotland for the first time. Commercial stands and demonstrations will be plentiful too.

Admission: adults £7.00, senior citizen £5.00, child £4.00, family (2+2) £18.00.

Advanced tickets are available through the Model Rail Scotland website via Ticket Master or by post. Send a cheque or postal order made payable to 'AMRSS' with a large stamped self-addressed envelope to: AMRSS, P.O.Box 19564, Johnstone, PA6 7YP. Allow 21 days for delivery. Closing date for postal applications is 3 February.

Further information is available from www.modelrail-scotland.co.uk

Loch Lochy makes its debut

Loch Lochy, the latest 7mm layout from Ian Futers, will make its debut at the Brandon, Suffolk, one day show organised by the Thetford Model Railway Club on Saturday 11 February.

The layout features a station which could have existed if the original plans of the West Highland Railway had come to fruition in the late 1880s. A branch off the main Glasgow to Fort William line would have left Spean Bridge and traversed the two miles or so to the shores of Loch Lochy, where there would have been connections with the steamers on the loch.

The political climate of the time meant that the short branch was never built although a line was eventually laid to Fort Augustus in 1903.

It is assumed that the line survived the Beeching cuts of the 1960s and is therefore operated with typical stock found in the Highlands during the mid-1970s period.

Loch Lochy will also be at Nottingham in March and York over Easter where it is hoped Ian's new book, *Modelling Scotland's Railways*, published by Santona Publications, should be released.



London International Toy Fair 2006

The London International Toy Fair takes place between Wednesday 25 and Saturday 28 January; the venue is ExCeL in London's Docklands.

The event is for trade buyers and media representatives only. It will be open from 09.00 until 18.00 on Wednesday to Friday, and from 09.00 until 17.00 on Saturday.

This exhibition is where buyers find out which toys, games, and hobbies are set to excite and captivate consumers in 2006. Over 250 exhibitors from multi-national and independent manufacturers use the Toy Fair to

showcase their products. Although model railways play a much smaller part in the show than hitherto, exhibitors include such companies as Hornby and Bachmann who aim to sell their products in the wider toy market.

Official press day is Wednesday, but representatives of the press are naturally welcome at any time.

Registration is free: e-mail toyfair@grayling.co.uk before 13 January.

Telephone: 020 7255 1100.

Please note that the event is not open to the members of the public.



www.perfworld.freeserve.co.uk

Paypal is available for overseas orders.



SHOP NEWS

OPEN

Access Models

Congratulations to Access Models of Newark and Grantham which is presently celebrating its 25th anniversary.

The shops are located at 43-45 Castlegate, Newark (01636 673116) and 16 Market Place, Grantham (01476 592001).

Make a scene after Christmas!

Now that you have finished that box of Ferrero Rocher chocolates from Christmas, why not use it to enter a modelling competition?

The World of Model Railways and *Locomotives International* magazine have organised the Mevagissey Railway Modelling Competition for which entrants have to build a model railway scene in a Ferrero Rocher box. Any size or shape box can be used, but the model must fit in a single box

with the lid closed. The diorama may include figures, kits, or parts of kits.

There are five categories from Junior to Professional and the prize winners will receive valuable vouchers to exchange for models stocked at Mevagissey.

For an entry form and all the details, send a stamped self-addressed envelope to: The World of Model Railways, Meadow Street, Mevagissey, Cornwall PL26 6UL.

New owner for Highland Railway kits

Andrew Copp has taken over the range of Highland Railway etched brass kits introduced by Alistair Wright of 5522 Models.

The range will continue under the name *Lochgorm Kits* to include the locomotive, coach and wagon kits for the former Highland Railway as well as

the beginners' etched fret for the LMS D2079 and LNER 'COUB' vans. They should be available from January.

For details of the range, a price list and ordering information, send an SAE to: Andrew Copp, 3 Broomhill Court, Keith, Banffshire, AB55 5EL.

www.lochgormkits.co.uk

Mind the gap!

The gap that exists beneath the buffer beam on later Roundhouse models provides an easy way of fitting and converting between the different types of coupling used on narrow gauge garden railways. However, there is now a buffer beam overlay available for

Lady Anne, *Billy*, and *Katie* to cover the gap if required. The overlay also provides full buffer beam rivet detail. A pair of these etched brass overlays is £7.00 painted or £5.85 unpainted.

Roundhouse Engineering Co. Ltd., Units 6-7, Churchill Business Park, Churchill Road, Wheatley, Doncaster, DN1 2TF. Telephone 01302 328035.

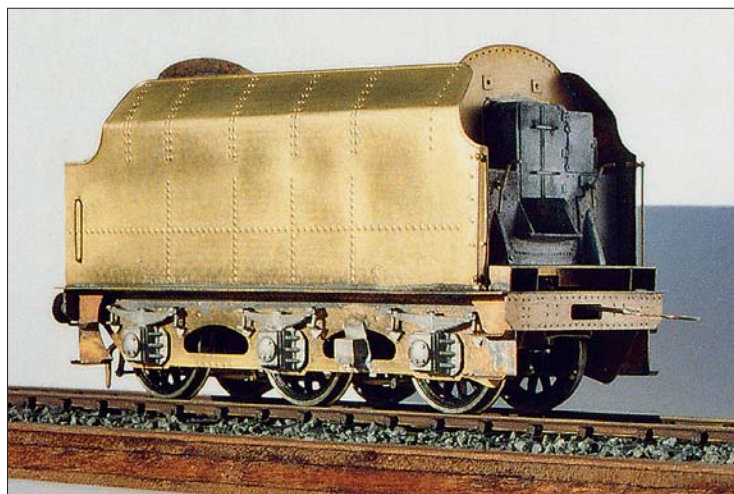
4mm tender for Coronation from Comet

The next releases from Comet Models are the tenders for the last two LMS/BR Coronation Pacifics, 46256 *Sir William Stanier* and 46257 *City of Salford*.

These differ from the previously released version by having a low front cut-out to the side sheets, and roller bearing axleboxes.

As usual, construction is principally of etched brass, with cast whitmetal parts for the solid details. Full instructions are provided.

Comet Models, 105 Mossfield Road, Kings Heath, Birmingham, B14 7JE. Telephone 0121 242 2233. sales@cometmodels.co.uk



New premises for Yorkshire Woodcraft

A new workshop and retail outlet, near the Wensleydale Railway, is planned for Yorkshire Woodcraft. The premises are currently under construction and it is hoped that they will be open by Easter.

The company has produced a baseboard unit in the form of a trolley. The three-unit construction allows an oblong or L-shaped board to be made, complete with backboards. The two outer sections are stored within the trolley which acts as the centre part of

the baseboard. When the layout is required, the outer sections are attached to each side of the trolley and stand on legs. The trolley is available in three sizes. The maximum dimensions for the largest layout is 1200mm x 2300mm. Two smaller layout trolleys are also available.

For full details of prices and dimensions contact: Harold Cabourn, Yorkshire Woodcraft, 276 High Street, Northallerton, North Yorkshire, DL7 8DN. Telephone: 01609 777214.



New Gauge 3 releases from GRS

Garden Railway Specialists has recently added another wagon to its range of Gauge 3 rolling stock items, in the form of a GWR Fish Van (Bloater) to Diagram S6.

This van is only available in ready-to-run form. It is made from a cast resin body, whitmetal underframe, and has Slater's wheels. Price: £149.00.

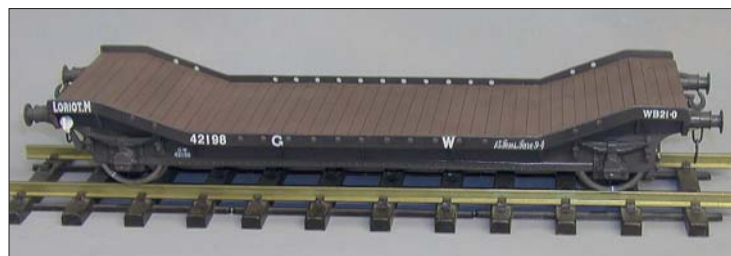
Also announced is a GWR 21' wheelbase Machinery Wagon (Loriot M), to Diagram G14, available as a kit, a further addition to their growing range of standard gauge G scale (G64) rolling stock. Running numbers are in the range 42197-201. The Great Western intended the Loriot well wagon with ramps for use with agricultural machinery and road vehicles. The Loriot M appeared in 1925-7, and with a rating of 20 tons, was the last Loriot with end platforms. The various diagrams arose from the differences in width, buffing and draw gear, load rating, size, and whether straight or

curved. Loriot M's lasted well into BR days.

For those interested in the latter, BR produced in 1949 an unfitted 'Lowmac' WE as it became known. These vehicles, built to lot 2087, had a running number series 905000-905019 and were nearly identical to the Loriot M, except that they had standard brake levers instead of the Churchward type.

The wagon kit consists of a one-piece resin body with whitmetal castings and etched brass underframe. It is particularly easy and quick to build. Instructions and waterslide transfers are included, but wheels are left to the customer's choice. Screw couplings and transfers complete this easy to assemble kit. The customer will need to supply paint and adhesives to complete. Price: £85.95.

Garden Railway Specialists, Station Studio, 6, Summerleys Road, Princes Risborough, Buckinghamshire, HP27 9DT. Telephone 01844 345158.



New battery loco for 16mm scale

Brownwell is the first battery locomotive produced by the Chidham Light Railway. It offers an ideal introduction to 16mm garden railways. Built to run on 32mm gauge track, the loco is driven through a nylon-enclosed gearbox to all four wheels. Control of the speed is achieved by twisting the exhaust, and a single DPDT switch in the cab.

The power is from four AA batteries. The body and chassis are etched brass with laser-cut buffer beams. The price is £200.00 plus postage and packing. Rechargeable AA batteries and charger are £15.00 extra. Chidham Light Railway, 86 Wendover Road, Havant, Hampshire, PO9 2DW. Telephone: 02392 455060.

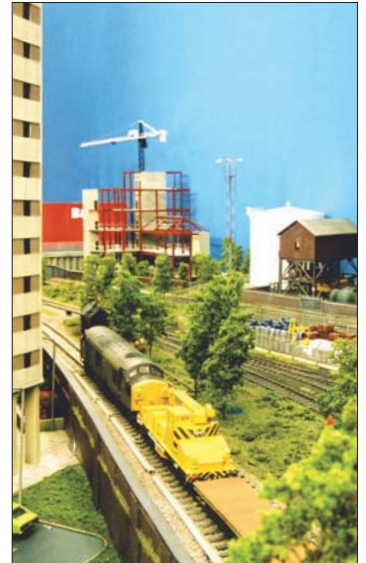


Farkham on show

Fans of modern image modelling may like to know that the 4mm scale layout *Farkham*, featured in our April 2005 issue, is due to be at the Tonbridge show on 22 and 23 February. More details in *Societies & Clubs*.

Above: for the train spotter who makes the difficult rail journey to Farkham, there are great rewards in the amount and types of traffic passing through. Standing at the end of the platform, reasonable photos can be taken of approaching trains. 47 298 *Pegasus* passes through with an international Railfreight Distribution service.

Right: the first floor resident in the tower block at Farkham has the ideal abode for a railway enthusiast, although 37 095 passing on an engineers' train, may require the volume to be turned up on the television! Photographs: Alex Hall.



Deeper whistle from DJB

DJB Engineering has produced a deeper-sounding whistle for use on live steam locos such as the Roundhouse *Carrie*.

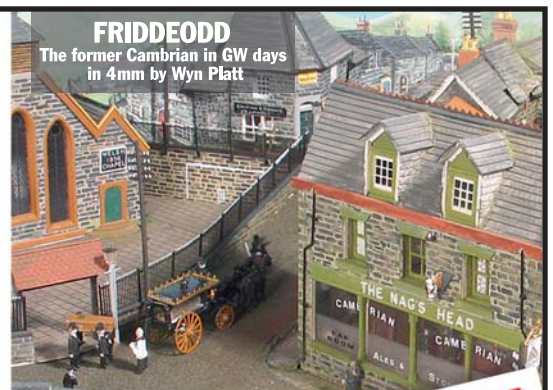
The idea of the 'Bangham' resonating whistle is that it has a small visible whistle to mount outside the cab and a discreet resonating chamber and operating valve inside the cab. This larger system gives a more realistically pitched note.

A range of whistles is available. Full details and audible samples can be found on the website:

www.djbengineering.co.uk
DJB Engineering, 17 Meadow Way, Bracknell, Berkshire, RG42 1UE.
Telephone 01344 423256.



JUBILEE SIDINGS
A small 4mm layout
by Dave Tailby



FRIDDEODD
The former Cambrian in GW days
in 4mm by Wyn Platt

MODELLING IRISH RAILWAYS
Colm Flanagan shows you how in 4mm scale

Coming next month

- **LOCH LOCHY** The latest essay in O from Ian Futers
- **CORRECTLY COVERED** John Rodway discusses wagon sheeting
- **RETURN TO ASHBURTON** A GWR revival in N, by Richard Bardsley

plus all the regular features

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JUBILEE SIDINGS
– Compact 4mm BR-era Layout



MODELLING IN CLAY
– Using DAS™ for Stonework





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 Published on the second Thursday of the preceding month.

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Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

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A time and a place

The chief requisite for a variable era layout is in the design of the scenery – a ‘set design’ to borrow a theatrical expression. In other words, no obviously modern structures (none on Jubilee Sidings) or other trappings of one era over another. Jubilee Sidings takes the idea further by being variable in place as well as time. Thus it is not tied down to any particular BR region, so could host a wide variety of stock from the same period but not the same geographical area.

Why would a variable layout be built? In short, variety! It could be a useful diversion from the main project, or be spurred on by giving in to temptation and buying something out of period or region but which is too good to resist – a Hornby 60, Bachmann Ivatt 4 or Dapol Class 66 for example. (The variable layout does not have to be the same scale as the ‘main’ one.) Careful choice of scenic items will allow easy alteration of period, and the rolling stock will do the rest!

By kind co-incidence, as these words were being written ‘upstairs’ here in Beer, work commenced ‘downstairs’ on the replacement of one of the Pecorama exhibition layouts. Gone is the G scale layout in the garage setting, to be replaced by an OO layout, the centrepiece of which will be a viaduct that will be constructed from the new Wills kits (see last month). The intention is to have two eras’ worth of stock running when the layout is complete. At time of writing work had progressed to the baseboard stage.

Go Great Western ...

Notwithstanding the LMS/ex-LMS material on offer from the trade, and the mouth-watering new Southern models proposed by Hornby, it is clear that the Great Western is as popular a subject now as it ever has been. Richard Bardsley assesses the practicalities of modelling the GW in N in this issue, and staying with this scale Roger Miller gives a step-by-step guide to installing a DCC decoder in the Dapol 14xx – it can be done!

Amongst the majors in 4mm, the reworked ‘King’ from Hornby should be worth the wait – with working rocker arms, perhaps? – and, albeit untouched since its last release, the Dean Single Lord of the Isles

should evoke more than a few memories. Also in the Hornby range is the ex-Lima single railcar, which is also to receive a mechanical upgrade: these popular branch line units will therefore gain a new lease of life amongst the new generation of fans of the ‘Great Way Round’.

It seems to us that only Hemyock runs Ashburton close in terms of popularity amongst modellers of these ‘pretty’ Great Western branch lines, and their termini. Perhaps the fact that both were not just closed and lifted, but overwhelmed by roads is part of the process that spurs us on. (Severed by the M5 and buried beneath the A38 respectively.)

Free booklet with this issue!

All being well, with this issue of RM there should have been the latest of our booklets in the ‘shows you how’ range, on baseboard construction. If by chance the bagging procedure has sent your copy out without one, contact our Technical Advice Bureau at the usual address, or telephone.

Next month in RM and CM

In the April issue of our sister magazine CONTINENTAL MODELLER the regularly well-detailed and thorough report from the Nürnberg trade fair will appear. News of UK-outline interest will appear in the companion issue of RM, wherein also there will be a selection of scenic items that are not specifically ‘foreign’.

Also in next month’s issue we will have a fold-out scale drawing, of the well-known

and well-loved Gresley A3 Pacifics, drawn by our Bob Phelps. Look out for the April issue, out on 16 March!

Cover: **08 718** was originally a Fort William-based shunter and is seen here moving a BR Palvan and BR ventilated van into the short siding close to the fish processing factory on Loch Lochy, by Ian Futers.

Photograph: Steve Flint, Peco Studio.

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Ffriddoedd Branch

An L-shaped OO layout 17' x 8'

This terminus, set in the pre-war years, was built and is described by **WYNN PLATT**.

Originally proposed as the grandiosely named North & Mid Wales Extension Railway with the intention of running from the coast to join up with the Cambrian Railways, this independent concern suffered financially from the outset. The line was completed by the GCR but operated by the Cambrian which was later absorbed by the GWR at the grouping in 1922. The intention of the GCR (later LNER) was to operate its stock over the line to reach the coast. During the early years, the LNWR built a line to run into the station from the east.

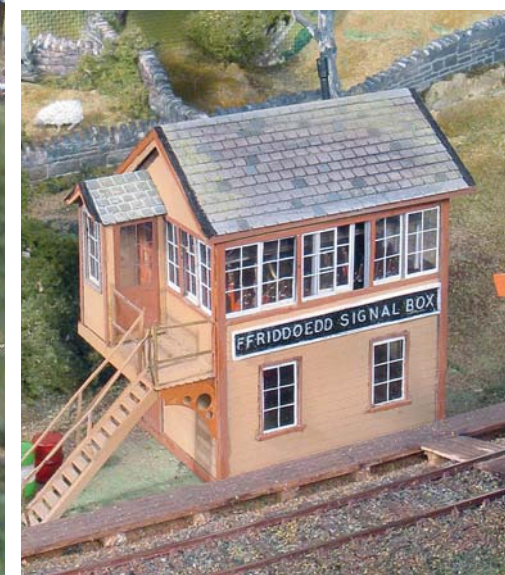
Photographs by Steve Flint, Peco Studio.

A busy period at Friddoed, with Collett 0-6-0 2252 shunting the goods yard on cattle fair day, while sister engine 2251 waits to depart with through coaches for the junction. Simmering away in platform 2 is pannier 5768 with a train of vintage stock.



The Nag's Head pub dominates the scene at the station entrance. On the far side is the Welsh school and chapel, where a funeral is taking place with a typical horsedrawn hearse of the period, whilst across the road from the pub courtyard entrance lies the cattle market. The Nag's Head is taking its supply of beer off the dray.

Close-up view of the McKenzie & Holland signal box, a Churchward kit supplied by Modelux.



The route

The Cambrian line emerged from below Moel Fach, part of the Berwyn Range, at the end of a 10³/₄ mile long branch. Located above the line was the small village of Pen-y-Ffridd. We joined the branch train at Bryneglwyys Junction to travel up to Ffriddoedd.

On leaving the tunnel, the area opened out to the right with a rock face to the left. After a few yards, the rock face gave way and we observed a line emerging from another tunnel which then ran over a junction controlled by a Saxby & Farmer signal box. Access to this box was gained by a set of steep steps down from the farm approach road high above. We were to discover that this was the re-aligned LMS line, a result of an earlier tunnel collapse on the original LNWR line.

Once over the junction, the line passed a small brewery complex on the right-hand side owned by Border Breweries, and over to the left could be seen a gangers' hut with a run-off for a trolley set slightly back. The line curved left to pass under Brewery Lane road bridge with a Cambrian fixed distant against the abutment, positioned on the wrong side

of the line for sighting purposes. This signal controlled the speed over the siding to the brewery and the level crossing beyond the bridge. On emerging from under the bridge into a shallow cutting, the level crossing was encountered with a crossing keeper's cottage on the right. After negotiating the crossing, the line was carried across a three-span stone viaduct over the Afon Ffridd. As we drifted over the short viaduct with its flood arch, directly below us was a fisherman trying to catch his evening meal, completely oblivious to our passing. Dotted around him were cattle grazing on the river bank whilst, over to our left, we saw a timber trestle bridge peeling away with old rusting track on it.

Later, when talking to the stationmaster, Mr Pugh, we discover that this was the original LMS track into the station before a tunnel collapse necessitated the LMS to open out a new tunnel to the present junction just passed. This spur now holds the engine shed and coaling stage near to the bricked up tunnel mouth. The shed originally stood over to the right of the station area beyond the goods yard.

After negotiating the viaduct, we passed through a small wooded area where, over to our left, set back, was a McKenzie & Holland signal box controlling the whole station area, still in its original position.

On leaving the train at our destination, we passed through a quaint stone-built station of





◀ A closer view of the cattle dock with wagons awaiting the next load.

Cambrian origin and emerged into the sunlight onto a spacious forecourt with the Nag's Head Inn directly opposite.

The Model

The layout started life as a Cambrian style timber trestle bridge typical of those built on the coast roads. One evening, I asked my friend, Mike Turner, if we could 'knock' a layout together around this bridge I had made out of balsawood. This little 'knock-up' has taken around five years, mostly enjoyable, but occasionally quite nail-biting as certain parts created problems neither of us had encountered before.

The track plan, although altered slightly, has remained mostly as originally designed. The layout as a whole has been designed as we went along. If it looked OK and fit, it stayed; if not, it was binned and we tried again.

Buildings

With the exception of the GW signal box, which is a Churchward etched brass kit from Modelx and fully detailed, all the other buildings are scratchbuilt. The 2'-square village scene board is an afterthought. How many times do we witness layouts that end where the station ends, where the poor unsuspecting public leave the station area

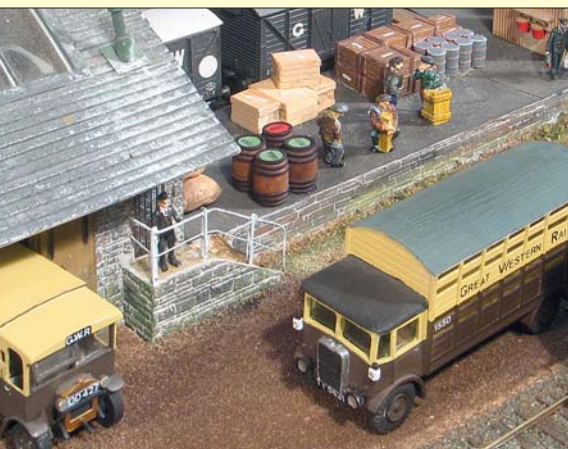
only to fall off the end of the layout into oblivion? So the idea was born of a village to justify the reason for a railway to be there in the first place.

All the buildings are made of Slater's Plastikard reinforced with 40thou plain. Some of the the cattle market buildings are lit and have interior detail added.

Next we move to the station area where the station building and goods shed are made of Wills sheet. These buildings were the first to be built and while the detail and end effect look good with the Wills, I felt the extra effort involved working with this thicker product did not justify continuing using it, so Slater's was used thereafter. Both buildings are again lit, as is the crossing keeper's cottage further along.

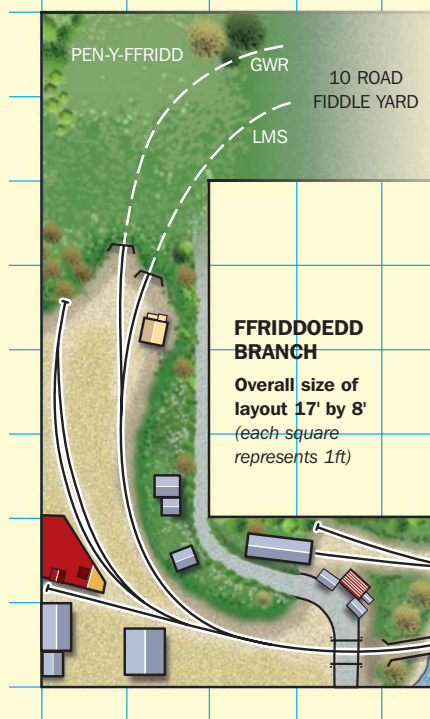
On the other side of the track to the cottage, a small wayside garage is located, scratchbuilt by Mike over many hours. This was built to fill an empty corner and to create some extra detail and scenery.

Next along in the corner is a small brewery complex. This again was built by Mike over many months, or was it years? The idea and design came from a book I have, *The Prince of Ales* about Welsh brewers and brewing. The Border Breweries actually existed in Wrexham until 1984 when the company was taken over by Marston Thompson of Burton. The chimney lettering and Border signs are produced by a friend, Tony O'Neill, who is also a signwriter. The building is freelance as



▲ A scene of activity in and around the goods shed with some of Mike's scratchbuilt road vehicles.

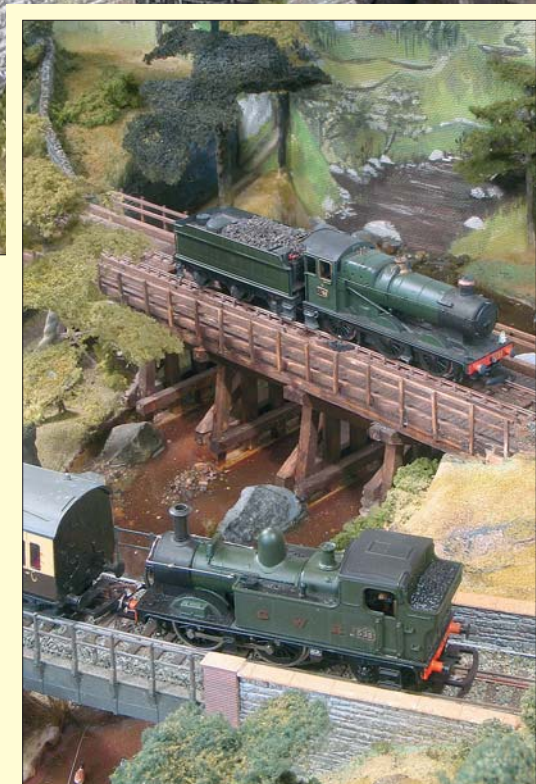
▶ Another view of some of the cottages in Pen-y-Ffridd. These were built from Wills sheets. The flowers and foliage are made of Woodland Scenics and dyed sawdust.





◀ 2251 Class 2252 eases over the level crossing, while a Bullnose Morris fills up with petrol at the small country garage.

2251 Class crosses the viaduct with a short train from Ffriddoedd.



Autotank 4815 runs off the viaduct with a single coach into the station while 2252 backs onto the shed over the timber trestle viaduct. ▶

most brewery complexes are quite large, although in earlier days most pubs actually brewed their own beers and so breweries were small but numerous. Quite a few books have been purchased on brewing to gather the relevant information.

Moving along again, we have a farm building. This has been constructed on three levels, the idea being Mike's who saw this kind of farm while on holiday in the Lake District.

The second village area, called Pen-y-ffridd, was again built to create interest rather than just having the lines plunging into tunnels below a boring green hillside with the usual few sheep

on top. The tunnel mouths and retaining walls are made of Wills plastic sheet. This area took me a good few months to construct. The buildings are mostly of Slater's sheet.

Many a mad hour was spent building dry-stone walling for various parts of the layout. Now this is a pastime to drive you to drink – and it did! These walls were made using Wills stone sheet with 40thou Slater's sandwiched between. When set, the capping stones were

added, these being made by cutting plain Plastikard into small squares, filing them into odd shapes and gluing them into position. A plentiful supply of homebrew was kept handy to numb the boredom of one of the less interesting jobs.

The baseboards are solid top, except the river board, which drops down 4" to the river level. The roadways on all the other boards are rising and dipping to create the effect that the boards are on different levels.

Scatter material was made by sieving sawdust into various grades, and then staining it. Trees are Woodland Scenics matting over trunks made of electrical cable covered in plaster.

Track etc.

Track is SMP code 75, points are hand-built by me using copper-clad sleepers. Signals are again hand-built to suit the location. Points are operated by old Post Office relays which are very reliable, even though I was dubious at first.

The signals are operated by MSE solenoid switches after trying

various different methods. I think these are the best we tried, although I have seen much better operated signals, but obviously the mechanism is more complicated and possibly harder to construct.

The level crossing gates are yet again scratchbuilt, to a design I copied from a Cambrian Railways book and, at the present time, are hand-operated by rod and gears.

The signals are glazed and have grain-of-rice bulbs fitted inside the lamps to give the correct aspects when operating in night time mode. The control panel was made by Mike, the track plan made by myself and then printed by Tony O'Neill and applied to foamboard. The switches were then added.

Figures and animals

Figures, animals and road vehicles are a mixture of Langley, Scale Link, Dart Castings/Shire Scenes, ABS, a few Merit and Aiden Campbell. Scale Link, Dart and Aiden Campbell are of excellent quality.

Most of the road vehicles are horsedrawn as the period is set in the 1920s to mid-1930s, although a few



▲ Metro tank 457 shuffles vans about on the brewery sidings.

◀ A close-up view of plenty of activity in the local Border brewery. Notice the maintenance work taking place to the pipework on the roof. Plenty of movement of kegs and barrels in the brewery yard. The brewery was a labour of love, built by Mike over many months.

A close-up view of the cooling water pipework and headtank on the roof of the brewery. The pipework, pumps, valves etc. are authentic model pipework pieces salvaged from I dare not say where! Combining my knowledge of plant pipework and Mike's electrical knowledge, we cobbled up this interesting little rooftop scene.



BR locos and stock are available to run into the green diesel era. All the street, station and goods yard lighting is scratchbuilt using copper or brass tube with Merit or Mike's Models lamp tops added. The bulbs are either grain-of-wheat or grain-of-rice.

Rolling stock

Coaches are a mixture of RTR, Comet Models, London Road Models, Ratio, D&S and a few IKB. There are also a few examples of the long-vanished Hammond coach sides glued to RTR coaches. I found the Comet kits especially easy to put together, although I enjoyed making them all.

Wagons are either a few RTR Bachmann, Slater's pre-printed, or plain painted and with the excellent, but no longer available, Woodhead transfers added, a few pre-lettered Powsides, D&S, David Geen, ABS, and some very nice Cambrian and other pre-group by Wizard Models. Others are by Parkside and the superb selection by Coopercraft.

I would like to thank a few friends for their continued encouragement and advice; namely Derek Evans of the Rassbottom Brow group, John Dutton for wiring advice and Mike Turner who started me off with the point building. Also, Pat Ryan of Modelx for tools, brass and an excellent signal box kit.

Thanks also to Warrington Totems who made the superb and realistic station nameboard. Finally, a mention must be made to Mike's daughter, Karen, for her brilliant backscenes and hand-made and painted

birds, our long suffering wives who put up with us 'playing trains', and Shire Publications, which has produced some really good books on drystone walls, telephone boxes, letter boxes, British sheep, cattle and pigs and a brilliant book by Carreg Gwalch in Llanrwst about Welsh cattle.

Loco stock

'Manor' 7802 *Bradley Manor*
Mogul
Dean Goods

Collett 0-6-0 2251
Collett 0-6-0 2252
Collett 0-6-0
57xx 0-6-0PT 3715
57xx 0-6-0PT 3714
57xx 0-6-0PT 5768
57xx 0-6-0PT 7768
44xx 2-6-2T
45xx 2-6-2T
45xx 2-6-2T
61xx 2-6-2T 6130
1813 0-6-0ST
1854 0-6-0ST
Metro 2-4-0T

Metro 2-4-0T 457
Cambrian 2-4-0T 1196
2721 Class 0-6-0T 2744
2721 Class 0-6-0T

48xx 0-4-2T 4815
48xx 0-4-2T
Jinty 0-6-0T

Mainline RTR
Mainline RTR
Hornby body,
Perseverance chassis
Bachmann RTR
Mainline RTR
Mainline RTR
Bachmann RTR
Bachmann RTR
Mainline RTR
Bachmann RTR
K's whitemetal kit
Lima RTR
Bachmann RTR
Airfix RTR

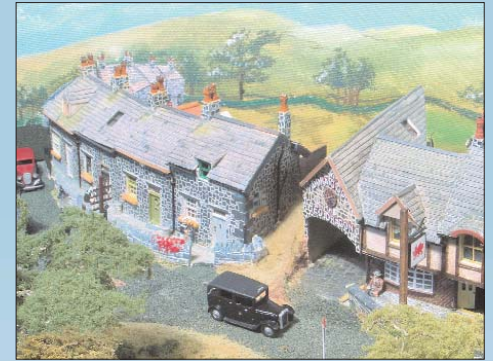
Wills whitemetal kit
Wills whitemetal kit,
Perseverance chassis
Wills kit
GEM whitemetal kit
Hornby RTR
Mainline body,
Comet chassis

Airfix RTR
Airfix RTR
Hornby body, Comet chassis

Coal Tank 0-6-2T
MR 1F 0-6-0T
C13 4-4-2T
V3 2-6-2T
J39 0-6-0
J72 0-6-0T
J68 0-6-0T
N7 0-6-2T

Proscale kit
MPD kit
Nu-Cast kit
Bachmann RTR
Bachmann RTR
Bachmann RTR
PM kits etched brass
S. E. Finecast kit

The Ffriddoedd branch is booked to appear at Rainhill on 4 and 5 March. Details in Societies & Clubs.



▲ The village of Pen-y-Ffridd, located high above the tunnels, shows the Ddraig Goch (or Red Dragon) pub on a nice sunny day. The road running off into the right background between the two sets of cottages goes off to the next village. These backscenes were all beautifully painted by Mike's daughter, Karen, and help to bring the layout to life.

▼ Market day in Ffriddoedd. Sheep are being driven down the High Street to the market largely ignored by the locals of Cambrian Terrace and shoppers, who go about their daily chores.



Loch Lochy

Capturing the essence of the West Highlands in the 1970s

Built in 0 gauge and described by **IAN FUTERS**.



This layout was not actually on my list of proposed 'new' layouts and only came about when I was approached by Santona Publications and asked to write a book on modelling Scottish railways.

I had always been interested in a plan that had appeared in another Santona book; *Modelling The British Rail Era*. The plan depicted the proposed original terminus of the West Highland line at Roshven, on the southern shore of Loch Ailort in Moidart. This location was later thrown out because the local landowners did not want such a station. The line therefore ended in Fort William itself.

The plan was for a terminus situated on a loch-side pier, and coincidentally, it had the usual Futers prerequisite for a layout – three turnouts! It was drawn to 4mm scale, so I doodled on some graph paper to see if I could fit the scene into a 7mm layout. I also had to reduce the length and width in order to fit the boards into my usual mode of transport.

This I managed to do, but later had to compromise on the style of station building. I also managed to include an additional siding for oil traffic. Unlike the published plan, I opted for a traditional set of hidden sidings, but still kept the length of the whole layout down to just under 14'. A 4'6" baseboard length for the hidden siding was chosen in order to accommodate a locomotive and two Gresley or Mk.I coaches, just in case I fancied running my steam stock.

I decided to set the layout in late 1970s or early 1980s. This would, with a little modeller's license allow the inclusion of some rail borne fish traffic, which actually survived until 1981.

I felt it prudent to ensure that I had the layout complete and operational well before its first exhibition at the 2006 Nottingham Show. Work commenced in autumn 2004 and as I intended to recreate the pier, I utilised 3" x 1" timber for the main struts. These were cut away in various areas to accommodate the lochside, and then struts of 2" x 1" timber were inserted at angles to make up the supports for the piers. The other baseboard, which leads into the hidden siding, was simply a conventional box-like structure using 3" x 1" side members. A pair of folding legs fits inside this board whilst a single set of legs holds up the pier section. Pattern makers' dowels from the EM Gauge Society aid alignment with a single 6mm bolt and wing nut.

At this early stage, thought was given to the lighting fascia and its end support boards. These were made from 12mm plywood and, at the pier end of the layout, the board was cut away in order to allow access to the end of the pier itself. The other end support board simply had an access hole sawn out to enable the tracks to reach the hidden siding. This too was constructed at the same time, allowing the whole layout to be erected and dismantled a few times even before trackwork commenced.

The fascia was fitted with its lights and all

exposed timber was given three or four coats of gloss varnish. My usual lighting fascia design was followed, in that I use my theatrical interest and make a 'front of stage bar' within the fascia itself. This enables the front of the layout to be lit fully. If layout lighting is placed in line with the front edge, much of the foreground falls into shadow, often because of the depth of the lighting unit itself. By mounting it slightly forward of the layout, such unnecessary shadows can be avoided.

9mm birch plywood was used for the baseboard surface. The trackbed area was covered with 3mm cork floor tiles and, once the glue had set, track surfaces were checked to ensure all was level. Strangely enough, all was well; the track was cut to length and many dry runs were undertaken before I was happy with the formation. The track chosen was Peco 7mm flat-bottom, slightly more expensive than the bullhead variety, but the turnouts have the added benefit of a built-in electrical connection, so you are not simply relying on the turnout blades to pass on the power.

The four turnouts were laid first, using the marks I had inked onto the cork underlay. Four holes were drilled out where the turnout motor operating arm was to go.

My method of fixing 7mm track to the baseboard is quite simple. I drill holes in the sleepers themselves, and then countersink them. Very small No.2 or 3 1/2" screws are used to fix the track to the cork and baseboard. These

Left: 25 303 is awaiting the signal to depart for Spean Bridge with a branch mixed train.

Right: being an extremely short branch, a one-coach passenger service is operated using a Mk.I BCK. 25 087 has been recorded as operating over the West Highland lines. The station building is a replica of the structures found on the Mallaig line.

Centre: the first items produced for any of my layouts are usually the station nameboards. Brass tube and wire supports hold up this larger than usual plastic sheet sign, painted in the typical Scottish Region house colours. A prototypical sign like this would be worth thousands of pounds today, if it had survived.

Below: the Class 122 DMU 55002 is seen approaching the terminus with an SPV (ex-fish van). In reality, as far as I am aware, this unit never carried the blue/grey livery, and they were never to be found on the West Highland – modeller's license!

Photographs by Steve Flint, Peco Studio.

are easily removed if I am unhappy with the alignment at any stage.

Once all is well, I fill in the holes with plastic wood filler and smooth it off with a file and sandpaper when dry. That way, after the track is painted and weathered, there are no unsightly fixings in view. Using this method, trackwork can be laid quite quickly. It only took a couple of days to lay and fix it all on Loch Lochy, including soldering the feed and return wires onto Peco fishplates, although it does mean you have to deal with strands of black and red wire hanging beneath the boards for a while. Eventually the wires are made into looms and run along the baseboard struts through small cut-outs in the cross-members. They are then fixed into place with plastic cleats. That is another pet hate of mine, wire hanging from layouts like spaghetti, as it can easily be snagged when transporting the layout.

At this stage, I invariably test the track with a temporary controller to ensure all is well electrically, before fitting a control panel. Trying as usual to keep the layout all neat and compact, a small aluminium control panel was fitted within the road bridge which masks the entrance to the hidden siding. This structure was added as soon as the track had been laid. At the same time, the side-walls to the pier were fabricated from 3mm plywood. I like to get any 'heavy engineering' out of the way at a very early stage, and this also included the platforms. Detailing the pier walls and platforms was carried out later.

The turnout motors – I usually use SEEP – and associated wiring were added, as were the DIN plugs and sockets used for power continuity over the baseboard joints. As the hidden siding were to be utilised as the 'other half of the station beyond the road bridge', for shunting the yard and running round, all the tracks over the baseboard joint had to be electrically connected. For this purpose, a rotary switch was fitted next to the control panel. It has five settings, one for each track and an off position. I had quite a bit of fun, if you can call it that, fitting this switch, as I endeavoured to make the correct connections without creating



feedback problems. It now works, but I am not too sure what I did in order to create this!

With the main scenic structures in place and the electrical work completed, I did allow myself a little bit of time to indulge in some testing, mainly to ensure that everything worked and, more importantly, that certain clearances were in order. Platform edge clearances are important, and I used quite a bit of my stock to ensure nothing snagged anywhere. It also gave me the opportunity to check out my blue diesel stock, which had not been used since *Lochside* had been exhibited.

It was then time to turn to the dreaded ballasting. I wanted to create the Scottish Region red ballast effect and, once again, turned to Lanarkshire Model Supplies in Scotland. I invariably use the 4mm scale ballast when working with 7mm layouts but still sift the ballast in an old sieve to ensure that it is all more or less the same grade. I have another small sieve to make an even finer grade for platforms.

The ballast is mixed with powdered wood glue in an old ice-cream box. The ratio is roughly 50/50, although I sometimes tend to put in more glue than ballast. The mixture is simply spread over the sleepers in the time-honoured way and pushed into shape with the aid of an old 1" paint brush. Care must be taken near the turnout operating gear and, of course, it is essential you do not sneeze!

I try to make up neat edges but, as this is a station area, the ballast can get anywhere. I had already fitted a mock concrete apron by the side of the oil siding so no ballast was placed there. Once it was all in place (including a strip of newspaper along the baseboard join) it was sprayed, using a small and cheap plant sprayer, with warm water mixed with a few drops of washing up liquid to reduce surface tension. I've said it before, but I tend to drown the layout to ensure every part of the ballast is wet, so as to avoid filling in patches of ballast once it has all dried. I always leave the ballast for anything up to 36 hours to dry. When I came to check *Loch Lochy's* ballasting, for the first time ever, I think, I did not have to re-do or touch up any areas, it had all set rock hard. A white sort of gluey film lies on the track after this exercise, and because I wished to see the red ballast showing through, I ended up painting each individual sleeper on the layout



with a black-grey colour. Later the red colour was toned down too, using an air-brush and a weathered concoction of paint.

It only remained to paint the rail edges the traditional rusty colour and then I added gloss black paint to the track areas by the platform ends and in the oil siding to represent nasty diesel oil stains. These are prototypical little touches that only take a few minutes to create.

With all the trackwork, ballasting and electrical work complete, and the visible fascia woodwork varnished, thoughts turned to the structures and scenic details. It was obvious that space for a full station building was limited, so a low relief structure had to suffice.

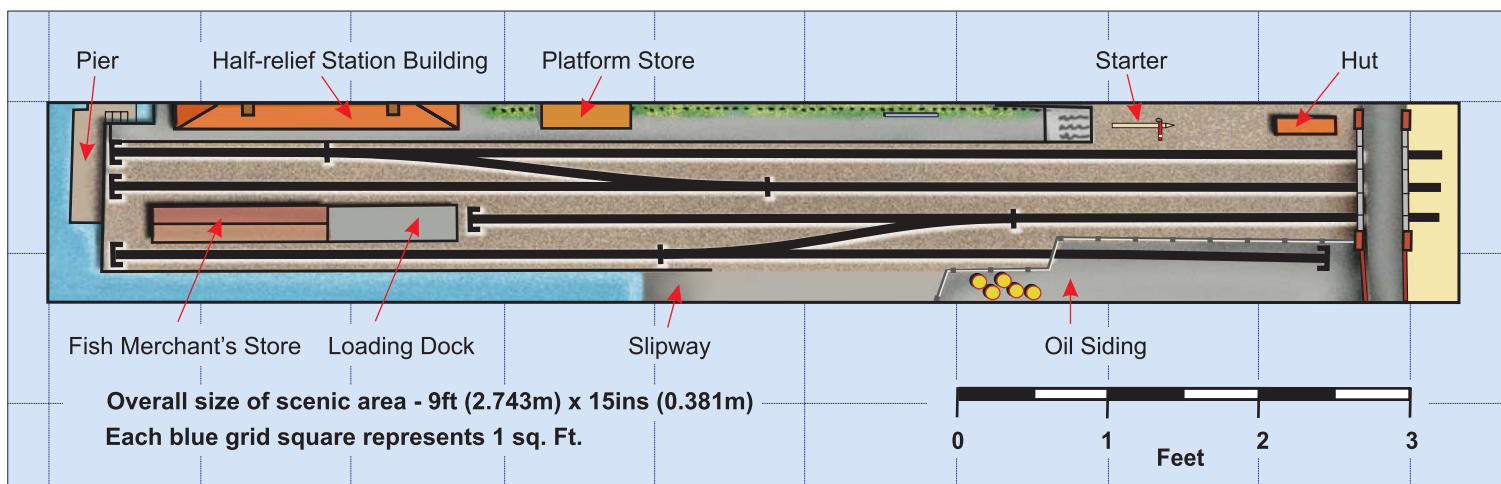
I decided to construct the small station building and store based on those found on the Mallaig line at Arisaig. Using the photographs and measurements I took for the *West Highland Wanderings* article (RM July 03), the station building was built from off-cuts of timber and plywood, covered with plasticard. Windows, mouldings, gutters, drainpipes and doors were added with plastic strip, the windows themselves were painted matt black and then strips of white sticky paper used for the frames. The doors were painted in a medium green colour, typical of the period, which I checked out with Jim Archibald, a good friend of mine, who has worked on the railway in

Lochaber for most of his life. The roof was tiled with strips of cartridge paper cut to shape. Chimney-stacks were fabricated from strip-wood with assorted lengths of old plastic rod (sprues found in 7mm plastic wagon kits) representing the chimney pots.

The small freight or goods shed was simply two bits of timber screwed together and covered with plastic sheet. Details were again off-cuts of plastic, with a piece of sandpaper representing the roof. Some lamp-posts were placed on the layout, which were ancient white-metal castings of typically old gas lamps. They did not look quite right, so I soldered up some modern looking lamps, similar to those at the new Fort William station, using various lengths of brass tube and rod. They too were painted in the mid-green of the period.

Rather than put in the modern style of station nameboard, I fitted up a couple of the older British Railways light blue boards made from brass rod and plasticard. Dry print lettering was used carefully, adding that passengers could change at the station for the steamer services. I'm not too sure if there were any steamer services by then on Loch Lochy, but I do remember reading about earlier services operated by David MacBrayne's company.

My attention then turned to what I call the 'fish processing' factory. This structure was not



Left: the loading dock of the fish processing factory. The fish boxes and pallets were made from plasticard. The specks of white found on the buffer stops and buildings are all linked to the seagulls dotted around the layout!

Right: the end of the line showing the captain looking for his vessel standing on the small and possibly inadequate pier. The fencing is described in the text and was a troublesome adventure. The lamp-posts were soldered utilising assorted pieces of brass tubing. They were copied from the style found at the 'new' Fort William station.

Below right: the exit to the hidden siding is through a fairly modern girder bridge, much detailed with hundreds of individual rivets. 24 104 enters the station with a parcels train.

based upon any particular example; it was simply designed to fit in the available space between two freight tracks. I wanted it to fit at that end of the layout as a sort of break between that and the station buildings, helping to hide the fact that the station building is in partial low relief. Next to the fish factory is a loading platform with a collection of empty fish boxes, barrels and pallets. The empty fish boxes were made out of plasticard, and yes, I believe they are too large!

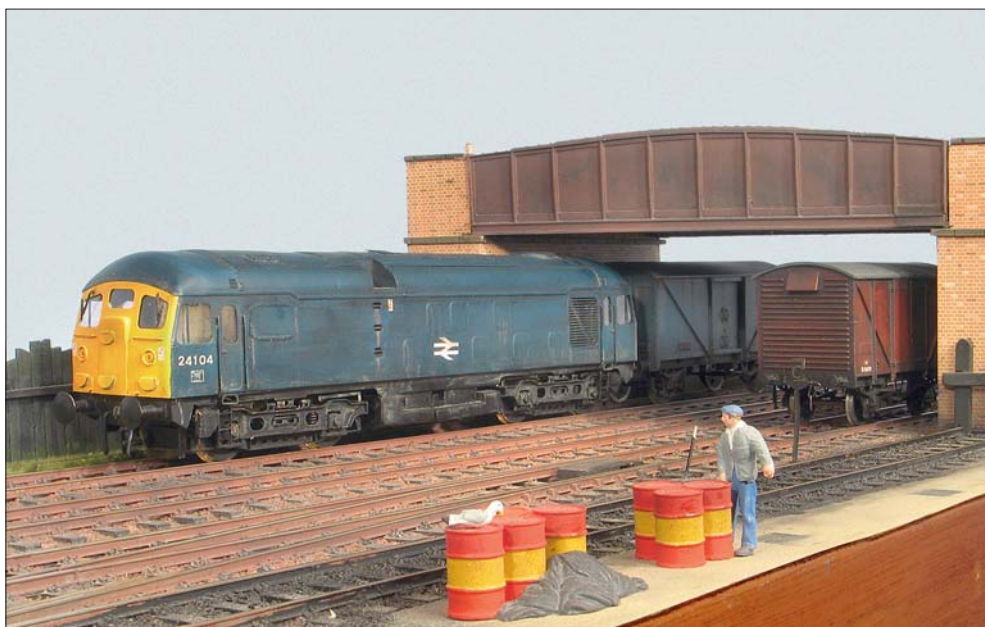
Before the station building was secured in place, I fitted two backscenes to the two main boards. They are painted a sky blue colour and will eventually have some typical Highland scenery painted on them. These bolt onto the layout, in order to be removable when I want to take photographs. The actual backscenes are only about 10" high. That size is dictated by the height of the layout's travelling frame, which in turn is dictated by the available height I have in the car.

The station building was then fitted against the backscene and screwed into position. Parkside 7mm platform fencing, which is representative of North British Railway (NBR) fencing by the way, runs along the length of the platform. As Parkside does not do any fencing for the ramps, I had to make some up with plastic strip. Platform edging stones were added using strips of plasticard cut across to represent the individual slabs. A few uneven cuts were made to represent broken ones.

The area in front of the station building itself was also covered in paving slabs. The rest of the platform surface received some very fine red ballast, typical of that found at many Scottish stations. Some small flower-beds were fitted into place, LNER concrete style, using off-cuts of plastic sheet, and into these were added bits of Woodland Scenics foliage. More foliage was glued alongside the bottom of the station fence and around the base of the buildings to represent weeds.

The fish processing factory was painted light blue, but was immediately weathered and distressed. Wills 4mm corrugated iron, suitably rusted, was used for the roof. The signs fitted on the roof ridge and end wall were made up on the computer. I used the air-brush lightly to weather the building and loading area, giving the platform edges a dusting at the same time.

At the other end of the layout, I already had the foundations screwed in place for the road



bridge. To this I added plastic brick sheet and attempted to make sure it looked quite new. The road is a separate piece of wood suitably shaped with a camber and complete with a pavement, gutter, and some sink grids. To this have been added two sides, which are supposed to represent a fairly modern iron girder bridge. I have imagined the road bridge had recently been replaced by the operating authorities, indeed it has two plaques on its road side which say '1980'. On the top of the girders, I floated on literally hundreds of small plasticard squares, to represent rivets. It was painted a bauxite sort of colour and suitably weathered. One of the reasons for having a removable road section was to allow me to access the track underneath. I have also screwed a Corgi MacBraynes' single deck bus into the roadway, after first adding a driver and some passengers. It says Fort William on the destination board. However, I am aware that

the Corgi bus is not an accurate model of such a vehicle, but it certainly looks the part.

Whilst the air-brush was out, I sprayed the oil depot area, distressing it slightly, and added some oil barrels on the concrete apron. I had thought of adding some pipes and valves, but as there is not a lot of room, I have assumed these to be offstage.

About the same time, I hammered some small nails in a line leading from the end of the platform and under the road bridge to represent signal wire posts. This is because I have imagined that the signal cabin is located off-scene beyond the road bridge. Fine fuse wire was soldered to the nails, which have had their heads cut off, to simulate the signal wire. You can hardly see it, but I know it is there.

Back on the pier head, I put in a two-lever ground frame and added some wooden planking along to the platform crossover, in this case, assuming that the point rodding is



covered by the planking so that it does not get clogged up when the snow arrives. This was a standard procedure in some parts of the NBR system and certainly avoids having to make up tricky sections of point rodding. The two turnouts in the yard are supposed to be operated by hand levers, which were fashioned from lengths of square brass rod. The plywood sides of the pier were then covered with some plastic stone slab sheet, from the larger Wills sheets. This seemed a little on the flat side once painted grey so I carefully cut out plastic stones of a similar size and glued these randomly onto the pier in order to create some relief. Larger capping style stones were added along the top of the pier wall, and into these I hoped to fit some typical seaside style iron fencing painted white.

As I had already decided at an early stage in the project to fix these iron fencing posts along the pier wall, I perused a magazine on model boats and came across a firm based in Northumberland, which produced ships' stanchions. I purchased a couple of hundred or so of a suitable size for 7mm, and looked in astonishment when they arrived. I suppose I was expecting brass turned stanchions, but they were in fact a type which looked as though they had been stamped or pressed out. Suitable wire was also purchased and then, the fun began. Each stanchion had to be folded, and I then, rightly or wrongly tagged a little bit of solder onto each one in order to make them rigid. Once I had folded the requisite number, I then fitted them into pre-drilled holes in the pier wall capping stones and proceeded to thread the soft wire provided into one of the three holes for each stanchion.

Needless to say, it was like threading hundreds of needles and I was very soon tangled up in quite a mess. I eventually managed to thread the three strands of wire through, but only by removing all the stanchions from the wall and then threading them like beads off-site, before spreading them out again and fitting them back into the holes. I can assure you it has tested my patience and also that of

another friend, Geoff Bennett who asked if he could borrow a few! Geoff now owns my *St Catherine's for Loch Fyne* layout and he also wanted to add some pier fencing.

Once in position, I sprayed the fencing white, remembering to cover the surrounding scenic areas with newspaper. When dry, it was distressed with some rusty rain and sea-water stains. A difficult chore which, however, looks quite realistic, even if it is still a little wonky!

The few grassy parts of the layout were treated with sprinklings of Woodland Scenics materials and then my attention was given up to providing the layout with one or two cameos. There is a ramp leading down from the yard into the loch. Here I fitted an old plastic boat, which I had from a previous layout. I had sprayed the boat with black paint and, for some unknown reason, the paint reacted to the plastic and it all went sort of flaky. Not to be deterred, I sprayed the boat with a grey under-coat but the flaky paint still remained. I therefore placed it up-turned on a few planks and added the stooping figure over the boat as though he is painting it. The figure came from a long since forgotten range of 7mm cast figures which had separate cast limbs that could be placed in a variety of positions. For one of the arms I made up a paintbrush from some brass rod and a small piece of brass sheet, and carefully soldered it in place. A couple of tins of paint were made from some chunky Parkside sprue to which I added small wire handles fitted into drilled holes. Part of the boat was painted again, in red oxide and a pleasant little scene was the result.

The loch itself was painted an assortment of murky colours along with some water running out of drains in the pier walls. A small landing area was also added, far too small really, but in any case, space was always at a premium. A further cast white-metal figure, who looks remarkably like Captain Birds-Eye, was placed on the landing stage looking for his craft. Stone stairs at the end of the platform wend their way down to the landing stage, which would not pass muster nowadays in these

health and safety conscious times! Some additional stanchion style fencing was added, plus a lamp-post.

A few other passengers are dotted about the platform, some seated on a bench, not too many though, and all carefully painted. There are a couple of typical NBR station seats on the platform which are also cast white-metal. A small post-box was added to the station building and one cast figure I purchased has a 35mm camera and camera bag. He can be put in a number of locations and reminds me of myself in the 1970s and 1980s, when I would flee up to Scotland to photograph the Sulzer locomotives and the West Highland scene.

The layout required at least a starter signal at the end of the platform, so I purchased a suitable kit from Model Signal Engineering. It was a typical Stevens style lattice post signal, but I added a standard British Railways upper quadrant arm, rather than the NBR style. It was cut down in size and modelled on the Mallaig extension starters, which were invariably shorter than normal NBR posts. Again, I used the example at Arisaig, measuring it from photographs to match the brass signal post etc. It was then soldered together, care being taken in order to be able to operate the signal. The baseplate has a small piece of brass tube added so that a dummy operating wire can go through the baseboard for hand operation. It was positioned at the end of the platform over the dummy operating wire. To my great shame, this is the very first signal I have actually made to work on any of my layouts!

Initially, *Loch Lochy* will be operated with my 'blue period' diesels which were built up for previous layouts such as *Percy Street* and *Lochside*, and consist mainly of stock from the Bachmann brass range. There are two Class 25s, a Class 24 and an 08 shunter. It is highly unlikely that such a locomotive would have been out-stationed at such a remote spot, but it is modelled on an example that used to be at Fort William, certainly during the 1970s.

I also have available a delightful 06 diesel shunter, made from a Right Lines kit. It is of

course out of character for the area, but it may receive an outing every now and again. Under construction are a Tower Class 20 and an old Parkin kit of a Class 27. The priority is to have at least one Class 27, but the Parkin kit is proving to be most unsuitable and continues to be looked at and then put back in its box. DJH is going to produce both the Class 26 and 27, but not for a while, possibly late 2006.

In reality, it would be possible to operate the layout in the earlier 'green' period and then I would have no difficulty in utilising as many fish vans as I could muster, or indeed use some of my earlier style non-fitted wagons and vans. However, I have quite a soft spot for the blue diesel era: it was a part of my life when I spent a considerable amount of time photographing the prototype.

The main idea is that the branch would be operated between Spean Bridge and Loch Lochy with the odd through working, probably in the morning and evening, to Fort William. Having said that, there would only have been about three services a day in any case. However, I want to run a mixed train, so the passenger services will be restricted to one Mk.I, usually a BCK with fish vans or parcels stock attached. Lest we forget, many short branch lines frequently operated with only one coach. However, the summer season might require more than one coach, so a separate fish service may be justified.

However, photographs from both the early green diesel, and the blue periods show that one or two fish vans would be attached to Glasgow-bound services on the West Highland so perhaps complete fish trains would be slightly out of order. By my chosen period, the fish traffic sent by rail continued to dwindle and was usually heading out of the area by lorry.

Again, during my chosen period, some freight in the area operated in more modern stock such as VDAs and OBAs. I hope in time, to include such vehicles as well as the more traditional freight stock. My collection of fish vans continues to grow, and we must once again thank Parkside for its involvement in such matters. The firm has recently added the LNER/BR 'Blue Spot' style of fish van to its 7mm list. A solitary TTB oil tanker, again from an old David Parkin kit, will be seen in the oil siding from time to time, whilst attached to some passenger trains, will be the occasional parcels van including a rail blue liveried CCT. This was made up from yet another old David Parkin etch, and was a beast to finish. I ended up carving the roof from a chunky piece of timber! However, such animals were frequently seen at Scottish outposts and you rarely see

Above left: 08 718 shunts an oil tanker into the short oil siding. A few oil drums and a very messy length of track indicate the type of traffic found here. The starter signal is an MSE kit, cut down in size to represent an example from the Mallaig line and suitably weathered. Note the old sleeper fencing in the background

Right: a trackside view of the station and yard. 25 303 waits to depart with the BCK and an ex-LNER fish van. The practice of putting fish vans on the rear of passenger trains was common in Scotland.

them modelled in 7mm, especially in the blue livery. Other parcels stock includes a rail blue/grey BG, a further BG in plain rail blue, an SR CCT in rail blue and a converted blue spot style fish van lettered as an SPV.

British Railways standard vans play a key role with both planked and plywood examples available. Other stock includes a Palvan and a 13-ton ex-LNER steel open, both from Slater's, and white liveried insulated van, in a very dirty condition from Skytrex. A very recent addition is a Skytrex Conflat, complete with an insulated container. I detailed this by adding some securing chains to the container. It makes a welcome change from the usual vans.

Whilst DMUs were not regular visitors to the Fort William and Mallaig lines, I will possibly allow my single-car Class 122 unit to ply up and down the branch. These units were allocated to one or two areas in Scotland before returning south round about the time of my chosen period. My Bachmann unit has been painted in blue and grey livery, although I fear the actual unit, 55002, never appeared in that livery. I have to admit though, it is a better livery than the rather drab all-over rail blue.

The hidden siding area, of course, crucial to the operation of the layout. Any movements on the layout must use the hidden siding in order to run around their trains or carry out any shunting. Three of the siding will line up together in a certain position, whilst the fourth siding, nearest to the viewing of the layout, can only be used for the yard. Power to the siding, as I explained, is via a five-way rotary switch. One of the yard sidings, the shorter of the two, leading up to the end of the fish loading dock, has an isolation section at its end. Thus a locomotive can bring in a short freight train and be left there whilst the shunter removes the stock.

Passenger trains will naturally use the platform and, when locomotive hauled, will be pushed back a little in order to allow the locomotive to be released. It will run around its train via the hidden siding, and back onto its coaches ready for the return trip to Spean Bridge junction. Some shunting could be carried out by the locomotive before departure, but the use of a separate shunting engine will

make for more interest. This is where the starter signal will be used. The loop will be in use if an oil tanker needs to be put into the oil siding. We could, however, assume further sidings offstage and so the shunter could indeed pull the oil tanker into the station and then place it in its siding. A variety of operations will be available, although the fish trains will require perhaps the most amount of work.

No doubt my fellow operator of over 25 years, Steve Corrigan from Tyneside, will work out some extremely interesting moves and I will then endeavour to untangle them! We end up playing all sorts of games at exhibitions with the stock. Steve will quite happily mix up the train formations and I sort them out when it is my turn to operate the layout. Perhaps we should attempt to operate *Loch Lochy* in a more sensible and prototypical manner. Well, I suppose we can live in hope!

My dream of completing the 'Fort William' project gets ever closer although I would love to build a 'tailchaser' based upon one of the typical island platform stations on the West Highland. There is the slight question of where I would store such a layout, never mind find the space to operate it.

So *Loch Lochy* will have to satisfy my 'Lochaber Leanings' for the time being. It has been a pleasure constructing the project and, believe it or not, it was more or less complete a good nine months before its first exhibition. I therefore decided to give the layout its first outing at a very local show to me, organised by Ian Dixon and the Thetford & District Model Railway Club, in Brandon, Suffolk. I do enjoy supporting small local shows and I was so pleased to be invited to take a totally new layout onto the circuit, for the first time, at such a venue. That was Saturday, 11 February 2006. Next, *Loch Lochy* will be at the Nottingham Show on 18 and 19 March 2006, and then over the Easter weekend at the York Show. It is then booked to appear at some shows over the summer period and then during the autumn and into 2007.

I hope that we will be invited once again to exhibit the layout in Scotland, always a pleasure and an adventure!



Modelling stone buildings

Using DAS clay

DAVID COX explains the techniques he uses to get the best out of a popular modelling medium.

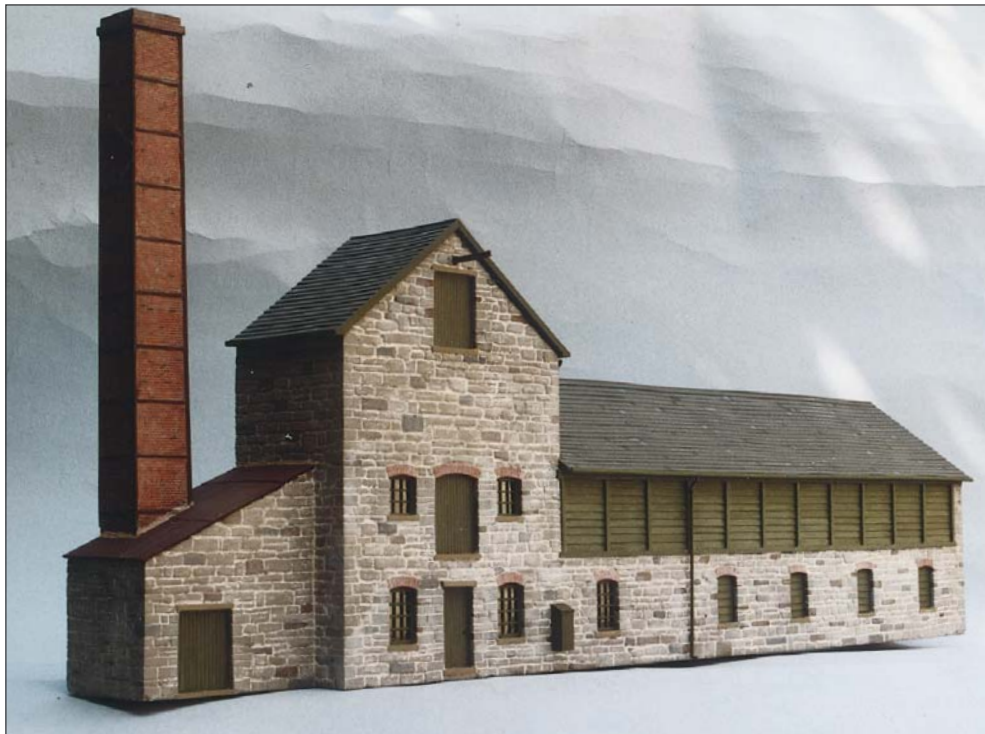
I believe it was Dave Rowe who first introduced the railway modelling world to DAS clay many years ago when he first described how he used it in *RAILWAY MODELLER* and subsequently in his book *Architectural Modelling in 4mm Scale* published by Wild Swan. The buildings he produced on a succession of beautiful model townscapes (*Llareggub, Axford, Leighton Buzzard, Exeter Quay*) were amongst the most realistic I have ever seen.

For the benefit of those who have never come across it before, DAS is the trade name for a variety of air-drying clay produced in Italy. It is a very versatile substance which is useful for us modellers, particularly in modelling buildings. Not only is it cheap, it is also readily available in model and art shops.

I've used DAS mainly for reproducing stone buildings in the past, but the results I have managed are nowhere near the standard Dave Rowe has achieved. This is despite following the suggestions in his articles and book as closely as possible.

The problem (for me at least) lies in the finishing of the DAS-built model. For stonework which is in good condition (i.e. with the mortar intact), Dave recommends applying a thin (1 to 1.5mm) layer of DAS onto the basic structure of the building. Before it hardens, the outlines of the stones are then impressed onto the layer of DAS. The result, when I do it, doesn't convince: the process of impressing the clay produces unrealistic ridges and the mortar courses somehow look wrong.

Applying a thicker layer of DAS does improve matters, or so I found, but then you end up with mortar courses a scale 4" to 6" deep. This is fine for drystone walls, but not for more conventionally-built structures.



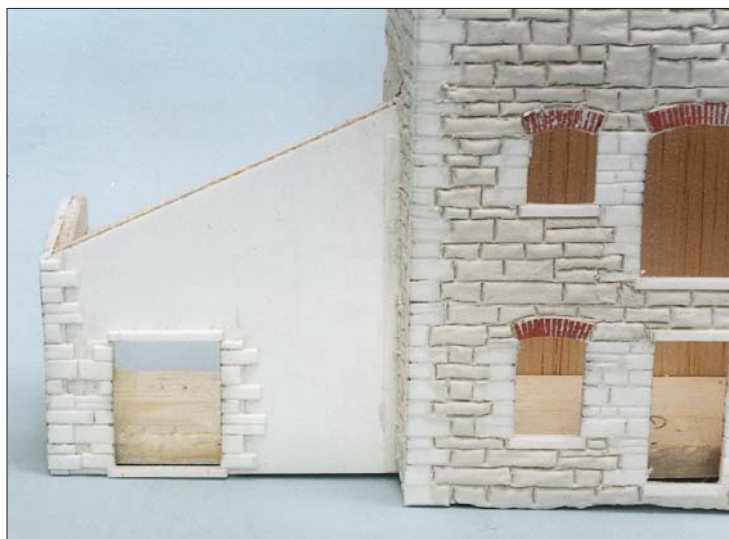
Another unrealistic feature of a lot of DAS-built models is that the resulting stonework at corners and around the openings for doors and windows appear rounded, which I suspect is an inevitable consequence of using DAS.

I am sure the wonderfully realistic models that Dave Rowe has produced in the past have been achieved by the methods he has described. However, the one thing I have discovered is that I am not Dave Rowe! Judging by a lot of other model buildings seen at exhibitions and in the model press which have been constructed using DAS, there are a great

many other modellers who are not Dave Rowe either – or at least, like me, lack his skills.

The solution

It did occur to me that there must be ways round these problems. Looking at real buildings, the stonework at corners and around door and window apertures seemed to be more regularly finished than that forming the rest of the walls. These areas, so I thought, could be modelled in styrene sheet rather than from DAS. By applying a thicker coat of DAS, there must be some way of representing



Left: the completed low relief model, based very loosely on Tuckers' Maltings at Ashburton in Devon. The chimney was modelled on one from the Sarson's malt vinegar factory adjacent to London Bridge station.

Below far left: a rear view of the maltings under construction showing the balsa framework. Note how the apertures have been cut out oversize in the balsa to allow for fixing of doors and windows.

Below near left: a close-up of the maltings during the application of the DAS clay. The styrene stonework around the door and on the corners has been built up to a depth of between 2 and 3mm to allow for the DAS to be applied.

Right: the small barn (from a prototype alongside the Helston branch in Cornwall) installed on the layout and with some very basic landscaping.

Below: the barn with the DAS layered onto the walls and around the styrene corners, but before sanding.

Below right: the barn after sanding of the stonework. A little remedial work with a scalpel was necessary.

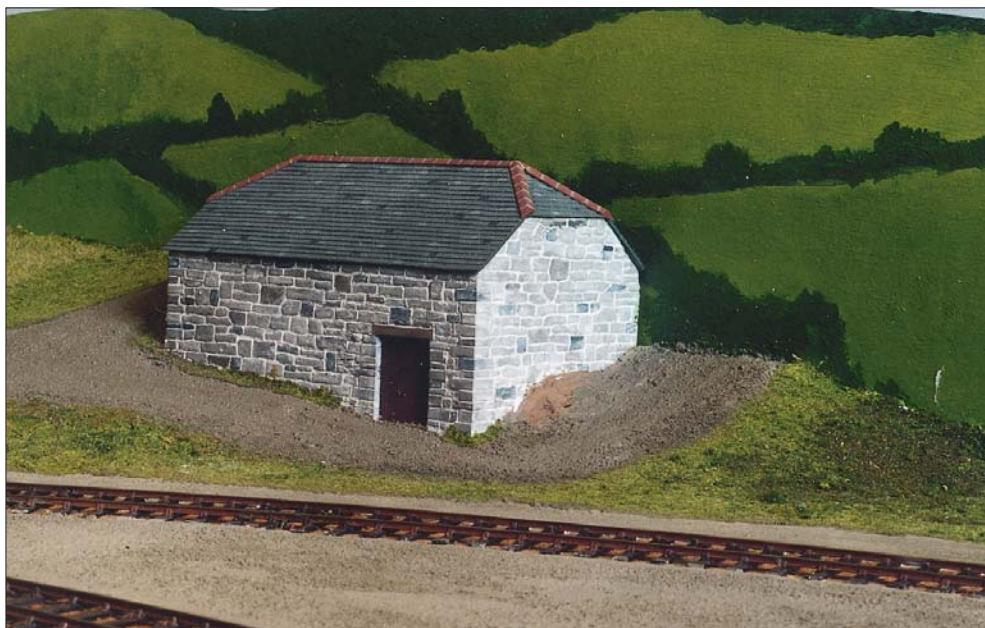
the mortar. Similarly, the ridges thrown up when impressing the clay could be removed by careful sanding.

There was only one way of finding out, and that was to build a model.

The prototype(s)

Actually, I built two. The first was a small barn which appeared in the background of a photo in a book on the Helston branch in Cornwall. Fortunately, the 45xx and B set that the photographer was aiming at didn't obscure the building, although only a couple of elevations were visible. As my model was intended to go up against the backscene at the rear of my layout, I only had to guess at one of the other sides!

The second was rather larger, although it was to be a low relief structure which, again, would be positioned at the rear of the baseboard on my ex-GWR branch terminus. The prototype was Tuckers' Maltings at Ashburton, but modified somewhat to suit the site on my layout. The resulting model was a mirror



image, partly reduced in height to avoid it dominating the whole of the station area and with the addition of an industrial chimney of the kind that the late Fred Dibnah used to demolish.

Construction

The main carcasses of both models were formed from balsa wood for strength and lightness, but work started by marking and cutting out the walls, together with window and door apertures, on a sheet of 30thou styrene. These were then used as a template to mark out the balsa, which would form the inner layer. Openings in the balsa were cut out oversize to allow for doors and windows to be stuck inside the styrene layer. Impact adhesive was used to cement the styrene walls to their balsa counterparts and also to assemble the styrene/balsa walls together round a balsa wood base. False roofs and dividers were fitted, again for strength.

Work on representing the stonework could now begin. I was aiming for a layer of DAS about 2mm or so thick, so the door and window surrounds and the corners needed to be built up in styrene by this amount. 6 or 7mm wide strips of 1mm thick styrene were cemented

around the door and window openings and at the corners. More 1mm thick styrene was cut into yet more strips of varying width from about 2mm to 5 or 6mm. These would form the stonework and would be glued on top of the spacers. Their edges were cleaned up with a few quick runs of a coarse file so that they were slightly chamfered. As they were to butt up against each other, there needed to be some indication that they were separate stones.

Before sticking on the styrene stones, doorsteps and windowsills were added.

The strips were then cut into different lengths more or less at random, the individual 'stones' being stuck around the doors and windows, starting from the doorsteps and windowsills and working up from the bottom. A pair of tweezers proved useful here – to pick them up, position them and keep them in place whilst Mek-Pak was applied. The length and width of the styrene stones varied randomly – the photos will make this clear.

Care had to be taken as I neared the top of the aperture to ensure that the stonework finished where the lintel was supposed to start. I didn't want one side of a window or door opening to be higher than the other otherwise the lintel would end up crooked!





Lintels, as on a great many stone buildings, were of brick laid in a shallow arch. I used Slater's embossed brick cut into strips and curved by cutting part-way along the courses. This usually achieved a smooth curve and allowed for some small adjustment when gluing in place.

The stonework at the corners of the model was tackled in the same way. Each corner stone was formed of two pieces (a long one and a short one) cut from the same styrene strip and I found it easier to cut and apply these together so that they looked the same width. One piece projected out further than the other, so that it could be filed down to make a seemingly solid corner stone.

At this stage, I also added the wooden louvres on the maltings, so that the stonework could be built up around them. The frames were from Evergreen styrene strip and the louvres themselves were cut from 15thou plasticard which were then overlapped. To save time, I modelled them in the closed position, but rather regret doing so now as the building would have looked more interesting with some of them open.

Applying the DAS clay

Lumps of DAS were gouged out of the pack with my fingers (which completely ruined my nails!) and pressed flat on a handy spare piece of plywood. These flattened lumps (which were about 2–3mm thick) were then applied to the styrene surface of the model starting at one of the corners, further lumps being added as required, the joins being smoothed with a wet finger. The point of a small screwdriver was used to tuck the DAS around and under the styrene stones at the corners and windows and door surrounds. Once a side had been covered completely, the stone courses were impressed using a variety of small screwdrivers and scrap bits of 15thou styrene. I found it helpful to impress a few horizontal courses using a ruler as a guide, and then fill in the remaining horizontals and verticals afterwards.

It is worth looking at photos of stone buildings to see how the real stones were laid as it is very easy to produce something that could never have been built full size if one isn't careful. The beauty of DAS, however, is that any mistakes can be rectified (at least, before it has dried) by the wet finger treatment and simply

Above left: view of the completed maltings.

Above right: the barn set into the landscape at the rear of the layout. A great deal is still to be done before the scene is finished, not least ballasting the track!

Photographs by the author.

smoothing over the errors. Once I was reasonably happy with the result, the clay was left to dry overnight.

Further treatment

The following day, the buildings looked a mess, as the photos will show, but before cleaning them up the first task was to ensure the DAS remained attached to the styrene walls. This was done by the means that Dave Rowe recommends, by flooding the surface with Mek-Pak or similar solvent. This seeps through the DAS layer and ensures it stays stuck to the styrene and balsa carcass.

Cleaning up involved removing any DAS which had got into places where it shouldn't have done. Sundry small screwdrivers, compass points and the like were used for this purpose, which was a fairly tedious, but not too lengthy business.

The layer of DAS was inevitably fairly uneven and the impressing of the mortar courses had left the usual ridges. To get rid of these and to even up the stonework, it was sanded down using glasspaper wrapped round a spare bit of 2" x 1" timber. It did not matter too much if the styrene stonework at the corners and window and door apertures also got sanded as the glasspaper added texture, but the brick lintels could quite easily have disappeared altogether without a bit of care in these areas. Needless to say that this created a great deal of dust, so I rapidly migrated outside before the rest of the family could complain. Fortunately, the wind wasn't too strong, but I still got covered in powdered DAS!

Once all the dust had been vacuumed off (both the model and me!), I checked over the stonework quite closely to see if there were any courses which had disappeared. Those which had were reinstated using a craft knife and a compass point.

Adding mortar

At this stage, the stonework was all complete, but the courses were very deep. These needed



to be filled with a representation of mortar. This was done by brushing a very watery mix of DIY filler over the building and then rubbing the stuff off the surface of the stonework with, yet again, a wet finger.

The filler had to be very runny: too thick and the result will look like lime wash. It is difficult to describe how watery it needs to be, but mine had the same sort of consistency as milk.

Finishing off

Painting was the next task and commenced by applying my standard mixture of four parts of Humbrol light grey (No.64) to one part Dark Earth (20). Polyfilla® when dry is the same colour as mortar, so I wanted to avoid getting paint on it if at all possible. Fortunately, on drying, the filler shrinks a little so that the DAS projects slightly. By dry-brushing diagonally across the stonework, it was possible to avoid too much stone colour straying onto the mortar. Individual stones were then picked out in darker and lighter shades of the light grey/dark earth mixture and then the whole left for a couple of days to dry thoroughly before a wash of diluted off white enamel paint was applied. This tones down the often rather stark variation in the colour of individual stones. Some remedial work on the mortar courses was necessary, so a mix of matt white with a touch of dark earth was applied as necessary with an 000 size brush.

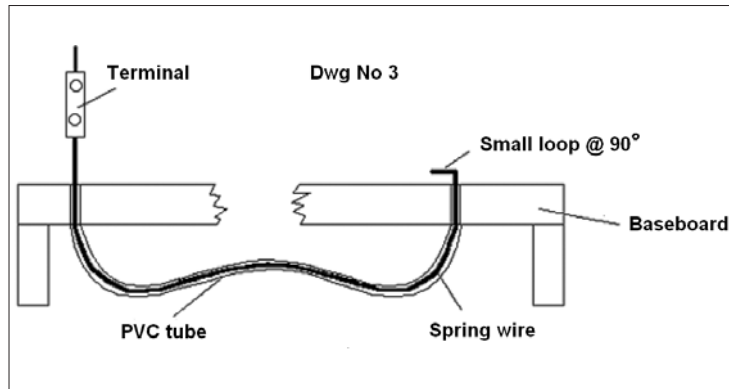
The rest of the construction process was fairly straightforward. Windows were from the Wills range and doors were cut from Evergreen scribed sheets. On the barn, the roof was also by courtesy of Wills, but on the maltings, being rather larger, I used Slater's slating sheets as I have yet to find a way of butting the Wills slate sheets together without the join showing. The industrial chimney was knocked up from plasticard and covered with Slater's brick.

The results can be seen in the photographs. I still don't think I'm up to Dave Rowe's standard, but the models are an improvement over my previous efforts. Most of the other stone buildings on my as-yet-incomplete layout have been made from Wills stone sheets, either used straight out of the packet or sanded down to achieve differing effects (see RM January), but these two DAS-built models give a subtle variation in the finish of the stonework and make the whole scene visually more interesting.

7mm narrow gauge couplings

A ready made solution that works every time

Tension locks and a way to uncouple them, described by **ROY PARKES**.



When building my new layout, *Crackington Quay*, I needed to give some thought to the dreaded (in my case) coupling. I had wanted, and hoped for, some form of auto uncoupling.

There is no standard coupler for the 7mm narrow gauge modeller and, in the end, the final choice has to be a compromise between what looks right and what will actually work.

I tried various types: first was the Kadee® American buckeye coupler. This was rejected as the magnets required for the uncoupling operation were so strong that they created problems with my stock which all has metal axles. In order to use these couplers, it appeared that I would need to convert everything to plastic wheels, which I was not very keen to do.

Then there are the various types of coupling that come in kit form and which you need to build yourself, such as the Sprat & Winkle, DG, and B&B. These I found a fiddle to put together, due to eyesight no doubt, and I therefore gave up.

This left me with the possibility of using a proprietary coupling. The standard Hornby and Dapol coupling was rejected due to their rather large size; the Bemo was a possibility, but it seemed rather expensive.

Then, at an exhibition, I spied the Bachmann mini coupling. This looked not too bad – a hook and bar type coupling which was small and cheap: £2.15 for 10.

It would need some sort of home-made ramp for uncoupling, which might be a problem if you needed to uncouple stock at a large

number of points around your layout. Mine being small meant that I would only require a maximum of eight.

So what follows is how I adapted these couplings to suit my layout which perhaps might be useful for others who would rather use a coupling that is ready-made, cheap and, to date, has operated very satisfactorily.

Couplings

Bachmann mini coupling Refs.36-026/36-030.

- * Remove the NEM coupling pocket.
- * Remove the tail with a craft knife leaving only the basic coupling.
- * If your stock is not to be turned (as in my case) remove the hook from one of the couplings.
- * Fit couplings to the coach, wagon or loco. I found that 8mm from the top of the rail to the top of the coupling bar seemed best.

Uncoupling ramp

Using 40thou plasticard, cut a piece as Drawing 1; this is the uncoupling ramp. The hinge pin is straight brass wire/rod 1.5mm diameter and 20mm long. A piece of plastic tube is needed, with an inside diameter to suit your hinge pin and 14mm long.

Using liquid Poly, glue the tube to the ramp as Drawing 2; fit in position in the track as shown in the photograph.

The 3mm of hinge pin that extends either side of the plastic tube fits between the rail and the plastic sleeper web. Glue hinge pin in

position with a touch of superglue. The ramp and tube should then be free to move.

Uncoupling operating mechanism

I thought of all sorts of complicated arrangements using rods, levers and electrical relays/solenoids before coming up with the idea of just using a simple wire in tube, which is cheap and so easy to fit.

For the tube, I stripped the wire out of a length of 1.5mm cable which gives a very suitable PVC tube. The operating wire is spring wire as sold by many model shops in 1 metre lengths. This was long enough for my layout as it is only 2' wide.

Drill a hole, diameter to suit the outer diameter of your PVC tube. It helps if it is a reasonably tight fit. Using superglue, glue tube in position and flush with the top surface of the baseboard.

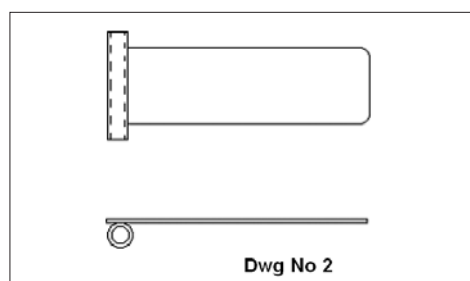
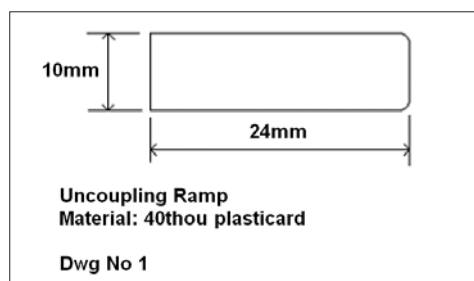
The other end of the tube needs to be cut long enough to reach your operating position (ideally directly to the rear of the uncoupler) allowing the tube to flex and no tight bends, see Drawing 3.

Drill hole and glue in position as before, flush with baseboard. Make a small loop in the wire and bend at 90° and pass through tube, from the uncoupling end, again see Drawing 3.

At the other end, where the wire exits from the tube, you will require some sort of finger grip. You could just form a loop, or glue in position a specially made handle, but all I did was strip the terminals out of a standard 'chocolate block' terminal and fit these using the screws that would normally terminate the electrical cable to grip the spring wire.

To operate, just push down the wire and up lifts your ramp, which in turn lifts the coupler hook as seen in the inset photograph. When the uncoupler is painted and the track ballasted, the appearance is not too obvious.

Plus points: the coupling is ready-made; the uncoupler is easy to make; operating mechanism is very simple, and all very cheap, and they work every time.



Jubilee Sidings

Modelling multiple periods or locations with one EM layout

DAVE TAILBY describes his minimum space project with a lot of loco and stock potential.



Some of the armchair modellers among you may remember TV advertisements in the 1970s for a well-known aperitif. It featured powerboats, beautiful beaches, radiant sunshine and lots of well-to-do folk enjoying la dolce vita, usually sitting up to their shoulders in the sea! The tagline for these adverts was 'Anytime, Any Place, Anywhere', which is basically the concept behind *Jubilee Sidings* and, as a result, its current nickname – the 'Martini™ layout'.

The idea of the Martini™ layout is, sadly, not one of my own making. It entails constructing a layout where the location and time period can't be pinned down by the infrastructure contained therein. The first time I came across this concept, or a derivative of it, was in a *RAILWAY MODELLER* article in September 1972. It was by Ian Futers who, in describing 'Ashleigh, a layout built in a week,' made the comment that, although the layout was LNER based, it would be easy to hold LMS or GWR running sessions by merely changing the station buildings to that of the required company. If that

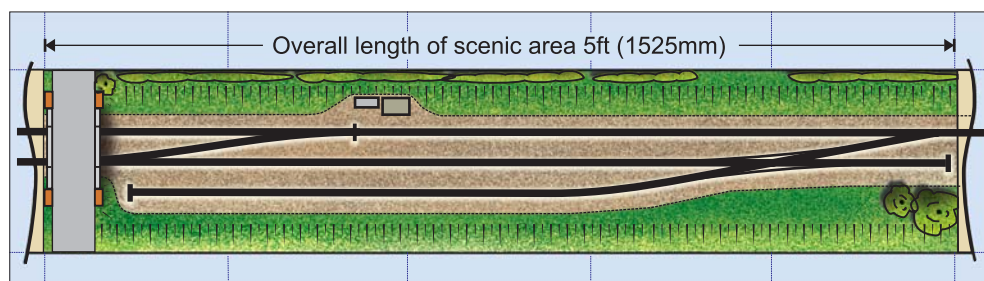
idea is extrapolated further, by not featuring any buildings at all, or any particular item that may pin the layout down to a certain time period, it ought to be possible to run stock from any given part of the UK from any given period of time, the rolling stock being the 'signature items' of the layout rather than the infrastructure.

Another very good example of this concept on the exhibition circuit today, is Peter Johnson's excellent *Canada Road*. Pete and his colleagues operate at exhibitions using mainly diesel based rolling stock from various periods between the late 1950s and the late 1970s. The buildings surrounding the layout have been carefully selected not to depict any particular time period too accurately.

Now, I'm a man of simple tastes and huge layouts are not my bag. Small, simple affairs with plenty of scope for wagon 'worrying' are more up my street. The track plan for *Jubilee Sidings* was the result of the refinement of the usual doodling that goes on in many modellers' idle moments. In terms of the Martini™

concept, it can be seen that there are no structures on the layout, other than a fairly nondescript overbridge at one end and an equally anonymous ground frame. So, in theory, it should be possible to run stock from any given time, from about 1958 to virtually the present day.

Jubilee Sidings itself represents a small exchange facility between an industrial 'plant' and a single track 'main line'. In this case, I have used the term 'main line' to define any single-track route on the British railway system. As the industrial plant is off-stage too, it can be said that in any one given operating session the industry can be anything of one's choosing, and thus the same for the BR line – anywhere on the system, some examples of which are depicted in this article. For instance, most of the photos show the main line representing somewhere on the Cambrian Coast line between Barmouth and Harlech in 1976. For the industrial plant, I have 'borrowed' the location from fellow modeller Neil Rushby, creator of the marvellous minimum space *Shell Island*.



Above: A Class 101 DMU (on loan from Ian Manderson) passes an empty gunpowder van.

Above right: the full extent of the layout as seen in the plan (left).

Centre right: the Ruston shunter ticks over in the siding with a plate wagon for collection.

Right: 24 081 storms past Jubilee Sidings with a Shrewsbury (Coton Hill) bound freight.

That product of Neil's fevered imagination was featured in the August 2003 issue of RAILWAY MODELLER. The Ruston shunter trips vans to and from the Shell Island complex to Jubilee Sidings where they are collected and dropped off by the local pick-up freight. For this scenario, Class 24s, Metro-Cammell DMUs and gunpowder vans are the signature items that pin the layout firmly in this era.

One of the biggest *bêtes noires*, as far as I'm concerned, with some small layouts is the abundance of locomotives that can be seen all at once. While I appreciate that the individual has the divine right to do what he likes with his layout, I do get the pip when I see some model purporting to be an idyllic Great Western Branch line terminus literally bristling with locomotives, usually of an inappropriate nature. Before the diesel modelling fraternity starts sniggering in the corner, I have seen many diesel layouts with a similar problem!

My answer to this is to involve the use of industrial locomotives and exchange sidings, so even with a small layout such as Jubilee Sidings, it is not beyond the bounds of possibility to see a diminutive industrial loco waiting for a larger main line loco to deliver wagons. A credible enough reason to have more than one loco present on such a small layout, to my mind.

Credibility is the keyword to railway modelling in general (something that is stretched to the limits by some). In most cases, to give a layout a credible foothold just one believable *raison d'être* is dreamed up, whereas with Jubilee Sidings, an alternative credibility has to be applied for each location modelled.

For example, some of the accompanying pictures depict a branch line in Oxfordshire during the Speedlink period, circa 1987 to 1990. A vivid imagination could construct a reasonable explanation for what is seen and, in this case, it is assumed that the Oxford to Fairford branch remained open to passengers as far as Witney where a small coal concentration depot is located. Jubilee Sidings represents





the exchange point for an MoD installation alongside the branch (Brize Norton?) and hence the presence of VEA and VGA vans. Easy, eh? but don't ask me to explain what a Class 47 is doing on the coal hoppers instead of the more usual Class 37!

It is also possible to pin down a timescale to a more exact period if desired. For example, a Cornish china clay location in July 1980 would enable one to use both Class 25s and Class 37s, as this was about the time that the former were usurped, and the latter moved in – what I call a 'locomotion crossover point'.

By selecting another specific date, other 'locomotion crossover points' can be modelled, for instance in the china clay example, if one chooses a period nine years previous to the one above, one could run trains during the transition period between the outgoing NBL Class 22s (subject to having a suitable model, of course) and the incoming Class 25s.

Construction

The main baseboard is constructed using the Barry Norman method, though if Barry were to look underneath he would wince a bit at the carpentry! The fiddle-yards are more conventional 2" x 1" timber framing with 6mm ply tops. The cassette method is used for stock

storage and transfer, the cassettes being made by Bob 'the Builder' White.

Trackwork is SMP, with points constructed by Ken Gibbons, laid on a cork base and ballasted in the usual way. i.e. N gauge ballast smoothed between the track and secured in place with a 50/50 PVA glue and water mix. Scenery is the usual blend of Woodland Scenics and Heki products, with some 'sea moss' trees thrown in for good measure. The overbridge is a trimmed down Peco girder bridge, with the accompanying brickwork cobbled together from Wills sheet. The groundframe is from MSE. Point operation is by the wire-in-tube method – simple to install, and electrics are very basic because my knowledge of wiring is limited. Trying to wire a double slip with a feed in the middle is certainly challenging.

Rolling stock is more my forte because I borrow most of it. Well no, not entirely, wagon building is my 'bag' and takes up most of my modelling time. Parkside, Airfix and Dapol kits are supplemented with the odd RTR item. Detailing usually takes the form of fitting EM wheels, more accurate buffers and 3-link couplings. Occasionally, more radical detailing may take place. For example, the Gunpowder van in one of the pictures is a cut-down Dapol model (the firm's original is a scale foot-and-a-

bit too long!) fitted with a Red Panda chassis. Locomotive stock is slowly getting built up, with the more unusual items from the Silver Fox range having a certain appeal. The Ruston that appears in the photos is the only 'industrial' loco I have so far. It's an A1 kit on a Tenshodo Spud built by Ken Gibbons, and always draws comments at exhibitions. Further industrial shunters are in the pipeline, including a Knightwing Sentinel.

Thanks

Jubilee Sidings is my first foray into EM gauge. I'm first to admit that it's not marvellous, I know there are imperfections, and that the rivet-counting brigade could probably pick out faults but, when push comes to shove, I'm happy with it and, as an eminent sage once said, 'it's only a hobby'.

A fraternal hobby, however, and one in which I have made countless acquaintances and friends, some of whom I would like to thank in print. Firstly, the chaps from Hull Miniature Railway Society, notably Jeff Taylor, Ken Gibbons, Ian Fleming and Steve Flint, who have offered advice on everything from roller-bearing axleboxes to Hull City FC's charge up the Football League! Additional thanks to Steve for the magnificent photos. Also, thanks to the Northampton 'narrow gauge modellers', George Woodcock, Richard Coleman and Bob White for their valued advice and assistance, and Ian Manderson for the loan of the Metro-Cammell DMU seen in some of the pictures.

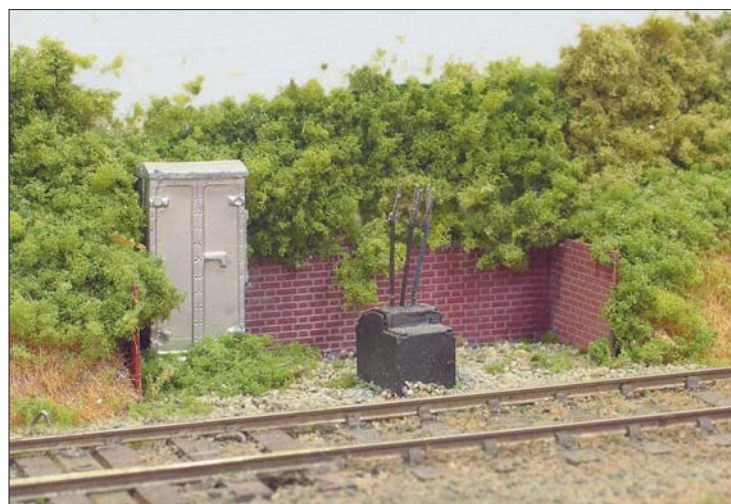
***Jubilee Sidings* can be seen at the following exhibitions during 2006; Northampton (Moulton) March 4 – see Societies & Clubs – Expo EM (Bletchley) May 13 and 14, Banbury October 30.**

Above: the location has moved to Oxfordshire in August 1988. The Class 47 has replaced the usual Class 37 on the Network Coal train.

Below left: The midday 'Bubblecar' heads for Oxford; the Ruston is still in active service.

Below: the only railway 'structure' on the layout is this regionally anonymous looking ground frame.

Photographs by Steve Flint, Peco Studio.





Modelling (Northern) Irish

Part 1 – the multi-purpose diesel railcars of the UTA

*These 4mm scale models of Irish diesel multiple units were constructed by **COLM FLANAGAN**.*

Ireland's railways, both North and South, have always been strapped for cash. This led them to be among the early companies in the British Isles to embrace the concept of the self-propelled carriage – or 'railcar', as they are usually known over here. The County Donegal Railway was the leader in the narrow gauge, and there have been some lovely models of these produced in recent years, and features on them in this magazine. But the 'standard' (i.e. 5'3") gauge railways also built diesel railcars in considerable numbers, particularly in

the North, and until recently these have not received much attention from modellers.

The railway system in Northern Ireland has, for the last 30 years, been dominated by diesel electric railcars which owe their origin to BR's 1950s Southern Region units. A number were built in the 1960s and then a large series in two batches in the 1970s. All used the same basic power unit as the SR machines – and have also outlasted them. Some remain in service, at the time of writing, but many have now been replaced by new diesel hydraulic multiple units

which are being built by CAF in Spain, with air conditioning and 90mph capability – a far cry from those early Irish Donegal machines.

Above: MPD cars 46 (leading) and 43 lead a rake under a bridge on the author's layout. Sister car 64, with a van as 'tail traffic', carries the later (mid-60s) maroon & white livery. The 'old guard' on shed – a Mogul and 'Jeep' 2-6-4T – will be covered in a future article.

Below: Nos.532 and 43 on a lengthy embankment. Note the different UTA crests.





But there was one class of diesel hydraulic railcar built nearly 50 years ago in Northern Ireland, which was a true Inter City machine with (theoretically) a top speed of 90mph – although the track on which they ran was barely safe at speeds such as these.

The Ulster Transport Authority ran most of Northern Ireland's railways from 1949 until 1968: it was a nationalised and integrated concern, responsible for public transport on both rail and road, and had in its Chief Engineer, James Courtenay, an enthusiast for the fusion of bus technology with that of the railway.

Dieselisation was decided upon in the early 1950s and diesel railcars were the preferred option – this suited a Northern Ireland Government which found railways a drain on its resources and so, if it was cheap, then it had a chance of survival.

The most important line within Northern Ireland ran from Belfast to Londonderry, a distance of 93 miles, and had been owned by the LMS – it was run by what was known as the Northern Counties Committee – hence the name LMS/NCC. It had a stud of relatively modern steam locomotives, was single line for much of its length, and had fast timings and comfort standards which needed to be maintained. When dieselisation was decided upon, earlier DMU types just weren't thought adequate.

So, in 1957/8 a new type of technically advanced railcar was introduced, designed for trains on these ex LMS/NCC lines – they were known as Multi-Purpose Diesel Railcars (MPDs). They were all, in fact, converted from steam era coaches, many from coach designs similar to those found on the parent LMS. Some of the railcars used the body and trim of their donor coaches almost unchanged, with only a cab added at one end, others underwent considerable rebuilding. At the time of introduction, they were hailed as a great step forward, one publication hailing them as 'queen of railcars'.

I travelled regularly on them when I was a schoolboy and, a few years ago, doing some research for a book (*Diesel Dawn*, published by Colourpoint Books – reviewed in *RM* September 2003, Ed.), decided to have a go at

modelling some of these machines. I had been fortunate enough to get hold of some basic drawings, without which the project would have been impossible. Out of the 30 power cars built by the UTA, there were no fewer than nine variant types – and that was before any modifications took place in service. There were also some 15 'mules' or trailers and these were varied also; finally there were three dining cars converted to run with the new railcars – these trains were what today would be termed 'inter city'.

Modelling the MPDs

I followed the prototypes in the modelling method chosen – I took a standard steam coach and put a motor in it.

Although our railways here run on a different gauge from mainland UK – 5'3" (21mm in 4mm scale) rather than 4'8½" – I don't have the patience or skill to scratchbuild everything, so I work on 16.5mm, and sometimes keep body widths slightly narrower than they were in fact, as some (though by no means all) Irish carriages were built to take advantage of a wider loading gauge.

Many of these railcars did not have big guard's compartments and thankfully now with units such as the Black Beetle, little can be seen of the power bogie inside. These small units are really quite powerful, are available with the correct wheelbase (9" and 14mm wheels) and mean that I can, if desired, pull a

decent length freight train using two or three of these railcars – something their prototypes did here in the 1960s, but which was never attempted in the UK mainland, to the best of my knowledge.

About half the MPDs were converted from coach designs similar to that of the LMS and I used the body shells of a number of the older pattern Hornby Stanier LMS coaches as the basis, cutting and filling as necessary; basically the end of the coach was cut off and a new plasticard cab fitted – this made the coach some 9" (3mm) longer than the original; most (though not all) had a corridor connection. These Hornby LMS composite body shells are nearly correct, though the window spacing is not quite right, except for the few composite coaches which the UTA built. (The brake end coach has no use as the brake compartments on MPDs were usually only the equivalent of one or two compartment lengths.) However the coaches are the right length as virtually all the MPDs were converted from 57' coaches and, if you make the 'first class' end the cab end, no-one has been churlish enough yet to point this discrepancy out on mine.

In order to improve the overall appearance, I used flushglaze units, and fitted full interior detail where possible. The roofs had to be altered as the Stanier ribbed pattern roof was not used on these trains, and the UTA fitted new vents, similar to those of the Glasgow 'Blue Trains', to some units. You will really need





Above left: closeup view of power car No.43, modelled on a vehicle built in 1958 and withdrawn due to fire damage in 1973.

Above: a typical express of the 1950s, formed of MPD power cars and trailers.

Below left: truly multi-purpose – two cars hauling the breakdown train.

Below: one of the 'North Atlantic' coaches was converted to restaurant car duty. Photographs by the author.

some photographs if you want to model any particular unit accurately. At the time of writing, I await with interest the arrival of the new Hornby LMS style coaches, but they will probably be too expensive for 'donors'.

The mechanics of these machines were unique for the time. They had only one under-floor engine (a Leyland 275bhp turbocharged unit) and this drove the rear bogie via a sophisticated, but ultimately unreliable, torque converter and automatic gearbox. Of course, in model terms it really doesn't much matter, but I wanted the undersides to have as much detail as possible. Much studying of photographs ensued – the undersides of railcars don't feature prominently in most photographs. Eventually, after I had completed two models, I did come across a drawing which gave the location of the various gubbins underneath – and was pleased to discover that I'd got it mostly right.

For one trailer coach, I was able to get away with the Hornby underframe with only slight modification, but the model power cars (dummy and actual) used Comet underframes and bogies. The slightly heavier brass and cast items also help the running qualities. I found that DC Kits was most helpful for my rather peculiar requirements of DMU bits and pieces such as engine castings, exhaust pipes, ventilators etc., which go a long way to making a model railcar interesting. How else can you tell it from a carriage?

Most of my seven railcars are in UTA Brunswick green – a colour about which argument still exists here – I've used three different versions of Brunswick green and could still not swear to any being exactly right or wrong. Transfers of the UTA's 'Red Hand' symbol are available, although I had to do some careful overpainting to do the later crest shown on two of the cars. They were not lined – and carried bus style numbers high up on the sides. The odd unit out is in a transitional livery of red and white which some carried in the mid sixties. This railcar (No.64) has a cab at each end and the model is a real 'cut and shut' job made up of two LMS body shells cut together as these railcars had very different window and door configuration to anything which ran on BR.

A variation is a power car and trailer which are models of non-corridor suburban units – these are modified Bachmann 57' BR suburban

coaches. Once again they're not strictly correct, and you will need to alter the underframes to a more LMS style.

I'm still using the Peco coupling for all my stock and, because of the nature of these railcars, have fitted them all with couplings at both ends – they ran in all kinds of formations, cabs facing both front and back in the same rake, trailers in any position. Vans and restaurant cars also featured in train makeup. One restaurant car was converted from a unique rake of coaches built in the 1930s called the 'North Atlantics' with huge windows, bigger than anything else in Britain either before or, I venture to suggest, after. The only alteration to this coach was to fit it with airbrakes with which the railcars were also fitted. This model uses etched sides on an old Airfix coach underframe.

So, where does the 'Multi Purpose' title come in? Well, so powerful was the Leyland engine/transmission set-up that the UTA engineers decided these railcars could act as small locomotives. Three would give over 800bhp, so they were used to pull freight, parcels trains and do shunting. This may have been a step too far which unduly stressed the engines and transmissions, because reliability never came up to scratch and was, at times, downright appalling. All were eventually re-engined with either Rolls-Royce or AEC engines.

Their career had ups (early on) and many downs (later) but some survived in service until the early 1980s. There was little interest in preserving them, and they also contained the dreaded blue asbestos. All have now vanished, dumped in a flooded quarry near Crumlin in County Antrim. But they live on in my layout, and provide that 'something different' which for many of us is the stuff of enjoyable modelling.

If anyone would like to have a go at doing these, they can contact me via the RM.

Reference

Diesel Dawn by Colm Flanagan, published by Colourpoint Books, Unit D5, Ards Business Centre, Jubilee Road, Newtownards, Co. Down, Northern Ireland BT23 4YH. ISBN 1904242081.



Return to Ashburton

Compact plan for a timeless classic

RICHARD BARDSLEY pre-empts a GWR revival in N gauge.

I've been modelling for just over 20 years, but the *Ashburton* phenomenon was before my time. Why, then, does it still strike fear into so many modellers? Mention that you are considering modelling a Great Western Railway branch line terminus and there is the prospect of a visible shudder from your modelling friends!

You don't have to call it *Ashburton*, nor does it actually have to be GWR, though this article describes a plan for a GWR branch line terminus. Why, then, resurrect an old idea and dust it off for a new generation of modellers?

The first reason is that space is still at a premium for so many of us. Whether you are a student in a bed-sit, living with your parents, or even having the luxury of your own home, space is often a limiting factor. The branch line terminus is small, compact, and yet full of operating potential in terms of freight trains, passenger trains and shunting. Combine this with the space-saving characteristics of N gauge, and you have no excuse for not having enough room for an interesting layout.

So why return to the concept of the branch line terminus on the GWR in particular? The simple answer is the availability of models, not just in terms of rolling stock, but buildings and accessories as well. After the recent doldrums of limited availability from the main N gauge supplier of locomotives, we now have three, and the GWR is high on the agenda, which must surely prove the durability of this company in the branch line context, despite what people might have you think.

Inspiration

There have been many inspiring layouts over the years, and it is worth digging these out of the back issues of model magazines to get some ideas. There is no need to limit yourself



to one scale, of course, as 0 gauge layouts can be scaled down to 00 gauge and N gauge. Indeed, I have been heavily inspired by Bob Harper's wonderful 7mm scale layout *Maristow* (RM December 1992), which I have been lucky to witness in the flesh on a number of occasions.

Another good example of the GWR branch is *Abingdon* by Brant Hickman (RM March 1996). Even that stalwart of the LMS, the late Andy Calvert, gave us a superb example with his layout *Nether Stowey* (RM September 1992). Peter Kazmierczak's article *Some Thoughts On Branch Terminal Design* in February 1989 and April 1989 has lots of prototype information on branch lines, not all of them GWR. Finally, if you can find a second-

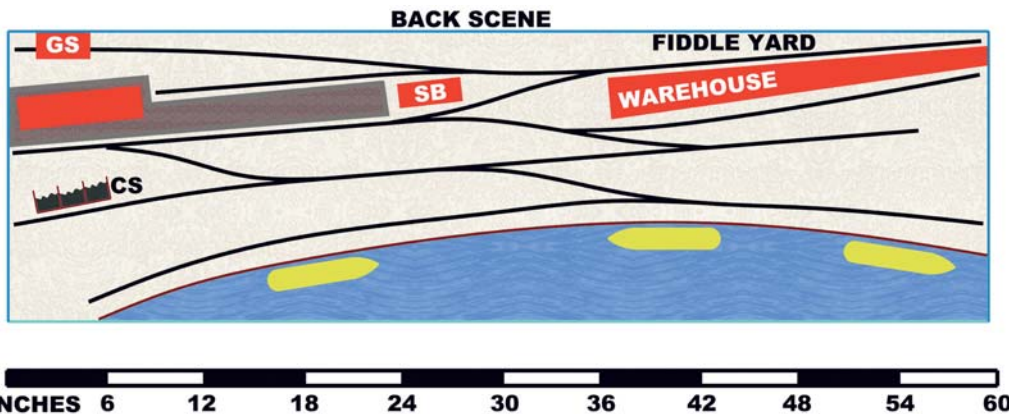
hand copy, *Branch Line Railways* by Michael Andress is a good read.

Inspiration does not stop with enjoying other people's layouts, as there are many preserved railways recreating the branch line and/or GWR atmosphere. So you can enjoy a very pleasant field trip to one of these locations, soak up the atmosphere, and get plenty of ideas for a layout.

Basic design concepts

A branch line terminus is the end of the line so, unlike a through station, you only need a fiddle-yard at one end. You only need one platform, although as an island platform, this gives you two faces, with one of them usually being a shorter, bay platform. Whilst autocaches and steam railmotors (and their DMU successors) are designed to go backwards and forwards without the need for running round, if you are going to have 'proper' passenger trains and freight trains, you need a run-round loop.

Freight facilities should be at least a goods shed and coal staites, and they can even share the same siding, which also makes shunting more interesting. A yard crane is nice, but not essential, as railways used to have a number of wagon-mounted mobile cranes which could be sent up the line if something large needed unloading and this would make an interesting train. An unloading dock or cattle dock could occupy another siding.



Left: GWR character. A 45xx brings Collett coaches into the main platform while a 14xx waits to depart with its autococh. In the far distance is a Ratio goods shed.

Right: the classic small GWR branch line train is the 14xx 0-4-2T with its autococh. Both models are by Dapol.

Lower right: the rear of the Ratio station. It does not take up much space on a branch line terminus platform.

Below: Ashburton signature tune, amongst others – the overall roof is a Ratio kit.

Photos by the author and (roof) Peco Studio.

The single road engine shed is a traditional cameo on branch line terminus layouts with a water crane and coaling stage. It does not require much space for small branch line engines on just a single siding.

The 'other end of the line' is the fiddle-yard, and I always feel that this is a bit of a waste of space, so my layout designs generally run some sidings in front of it, both as a means of hiding it, and also using the extra space for a bit more operational potential. This area could be used to site a small factory, or the ever-popular option of a dairy.

A small space in a small space

As with my plan for *Sluchers Lane* (RM June 2005), I have designed another 'wallpaper' layout, so-called because the design can be drawn full size for N gauge on the back of a roll of wallpaper. This time, I have gone for a slightly larger size of 5' x 1'6". This is still a manageable baseboard size, if the layout does not have a permanent home, while avoiding the need to join two boards together with the attendant complication of splitting the track; an important consideration if you're a beginner.

This sort of size also lends itself to what used to be loosely termed the 'vicarage study' layout, or more precisely, the layout could be installed on the top of a bookcase; not something you see that often these days. Perhaps modern flat-packed furniture is not man enough for the job!

Branch line buildings

The smaller stature of the buildings generally found on branch lines is well served in N



gauge, with the stone wall range from Ratio (station, goods and engine shed) and the range from Peco being ideal examples. These manufacturers also do some nice signal boxes, while the range from Kestrel is also worth a look.

Ratio also does a lovely model of a cattle dock while this firm, and Ten Commandments, also do coaling stages for the loco area. The latter also does a range of cast resin coal staithees for the yard.

Finally, the Great Western timber-built overall roof – so typical of Ashburton – is available from Ratio: it is designed to dovetail into the side of the firm's stone station building.

Rolling stock

If there is one reason for a likely explosion of GWR branch line layouts, it will be the arrival in N gauge of Dapol. This company's 14xx

0-4-2T and 45xx 2-6-2T have introduced new standards for RTR N gauge locomotives. When it arrives on the scene, the forthcoming Peco 2251 0-6-0, while being a tender engine, will be small enough to grace any branch line.

Let us not forget the mainstay of N gauge locomotive manufacturing for many years, Graham Farish, now provided by Bachmann to an improved standard; the firm's GWR 57xx Pannier tank is another mainstay of the branch line environment, and the large Prairie tank, while being one of the more powerful heavy duty versions, would still be at home in a branch line setting.

For coaches, we must again thank Dapol for introducing the first true RTR GWR coaches. The autococh and B Set coaches complement the 14xx and 45xx respectively. While the new range of three Collett main line coaches would perhaps be off the beaten track on a true branch line, if your terminus were a seaside location, then you could perhaps justify a short rake as a portion split from a main line service. The Farish suburban and main line coaches do not really portray any GWR prototype, but they are nicely finished in the GWR livery and do not look completely out of place.

Dapol's two new Siphons come under passenger stock and, if you can get hold of an old Lima one, although a little underscale, your milk trains are well served, especially if you include the Peco four-wheel milk tank wagons, soon to be supplemented by a six-wheel version from Dapol (see *Latest Reviews* RM January 06).

The Lima horsebox has a poor chassis but a reasonable body, while if you don't mind making a kit, the Chivers Finelines Python carriage truck is an excellent model.





Left: these three different vans can all be per-mutated from the latest N Gauge Society kit.

Centre left: this Chivers Finelines kit of the GWR Open C would suit any goods yard.

Lower left: while you may not have much need for gunpowder on your branch line, the Iron Mink would be quite at home. Both models from an N Gauge Society kit.

Lower right: branch line stations often served the agricultural community, so this machine well truck from a N Gauge Society kit would be quite common.

Bottom left: coal wagons are a must for the local coal merchant. This N Gauge Society kit has exclusive Model Master transfers.

Bottom right: the Great Western was different in so many ways, not least in its instantly recognisable 'Toad' brake vans.

There are plenty of suitable RTR wagons from all the main manufacturers, but particular mention should be made of the Farish GWR Toad brake which is a very good model of a definitely GWR vehicle. Peco provides GWR 5- and 7-plank opens and a ventilated van, Dapol a GWR gunpowder van. All three companies provide private owner coal wagons that would be suitable for a branch line.

There are plenty of wagon kits available. The N Gauge Society provides the insulated Mica, a Lorient K machine well wagon, the Iron Mink/gunpowder van and, most recently, a kit that will produce two wagons from the standard ventilated van, plywood version and MOGO.

Chivers Finelines has recently introduced a kit for the GWR Open C. Further private owner wagons can be made from the N Gauge Society's 7- and 8-plank wagon kits that use a Peco 9' chassis; these can be finished with private owner transfers from the Model Master range, available exclusively through the N

Gauge Society. Finally, there is a plethora of other companies' wagons that may have visited the GWR under the common user agreement.

A suggested plan

For this plan, I drew out 6" squares on the back of a piece of wallpaper to represent a base-board 5' long by 18" wide. My aim was to develop a characteristic branch line terminus in this space, incorporating a fiddle-yard and plenty of operational interest. I'm quite keen

on harbour layouts these days as I am slowly making a collection of N scale ships and boats, and a quayside, with its purpose of transshipment, is a classic way of generating a wide variety of traffic.

The first thing to do is to measure the length of your longest train as this determines the length of the station platform, fiddle-yard and run-round loop. I measured a Dapol 45xx and three Dapol Collett coaches to be 19" long. Therefore, on a 5' baseboard, you can fit this train on, end-to-end, three times; in other words, you can have a 19" fiddle-yard at one end and a 19" platform at the other with some track in between. Not a long run for your train, I admit, but this layout is about operation and shunting in particular rather than watching the trains amble through the countryside.

The fiddle-yard is really just a single siding. In order to avoid excessive handling of stock, and to facilitate the rapid swapping of trains, I would suggest that some kind of cassette



Right: classic *Ashburton*, in 4mm scale by Mike Cook, as seen in RM April 1982. Photograph: Brian Monaghan.

Below: *Burton Ash*, on *The Ash Branch* by the late Rodney Pearce (3mm, RM June 1996). Photograph: Len Weal, Peco Studio.

system is used. Such systems are popular in the larger scales but rarely seen in N, although I have seen them used to great effect: an excellent example is Richard Chapman's *Orton-in-Dabble* (*N Gauge Society Journal* 4/02).

The fiddle-yard acts as a headshunt for the bay platform and the goods shed at the rear. Every station would have had a goods shed, and so should every layout. Large towns used to have massive multi-storey goods sheds that were more akin to a warehouse. Branch line goods sheds were more modest affairs. They make a nice model with consignments of goods scattered around and a few vehicles in the process of loading/unloading, but I have suggested with this plan that the goods shed is modelled in low relief at the rear to save space. All that would be seen would be the exterior of the rear wall of the shed and some of the roof. The goods shed still plays a vital role in the operation of the layout in terms of wagons being shunted on this siding, but the traditional cameo scenes associated with the building are omitted.

The siding for the local coal merchant's coal staithes is also an essential ingredient of any station and I have shown this siding coming off the run-round loop. There would probably be room for a loading dock or cattle dock as well on this siding if you wished. The other end of the run-round loop throws off a long siding which services the warehouse/factory/dairy; this building hides the fiddle-yard. Next to it is the headshunt for the other end of the run-round loop.



Coming off the front of the run-round loop is a kick-back siding that runs virtually the length of the layout. I have shown this on the plan as running alongside a quayside. Many a branch line has terminated on the coastline, so there is plenty of potential in this idea, and such scenes are popular on many layouts.

With boats moored at various points along this quayside, there would be lots of traffic generated and some interesting shunting moves to position wagons by boats, especially when other wagons are in the way. If you wanted, the quayside could have transshipment facilities for particular commodities; it could be coal (suggesting a Welsh valleys setting) or china clay (Cornwall) or fish.

The curved siding following the quayside creates a feeling of space at the front of the layout but, if you were really stuck for space, you could easily lose 6" off the front of the layout and just straighten out and shorten the kick-back siding, and think of some suitable business for it to serve.

Return to Ashburton

There may be a tendency for some of the more experienced modellers to look down their noses at the idea of a plan for a GWR branch line terminus, let alone the prospect of a small explosion of such layouts over the next few years. Yet I would suggest that the majority of railway modellers would regard themselves as having average skills, indeed, many of them are new to the hobby. For these modellers, the prospect of being able to complete a small layout easily and in a reasonable timeframe, with quality RTR rolling stock for reliable operation, is very attractive indeed.

So the GWR branch line offers all you need for an entry-level layout. There has never been a better time to do it in N gauge. All the advantages of the space-saving smaller scale with models that now match those in the larger scale in terms of detail, accuracy and performance. Everything you could possibly need is here right now. All you have to do is think of a different name to *Ashburton!*





Return to the Vale

The Roundhouse V of R tank brings with it a different driving experience

DAVID RHODES added some extra detail to this 16mm scale live steamer.

The title would seem to suggest that this article was about a walking experience, which could not be further from the truth.

On my return from Kuwait in 1977, I decided to forgo 4mm modelling in the garden for 16mm, purely because I had come home to find an Archangel *Prince of Wales* waiting for me. As many of you will be aware, *Prince of Wales* is representative of one of the three Davies & Metcalfe 2-6-2Ts, Nos. 7, 8 & 9, on the narrow gauge Vale of Rheidol Railway.

No. 9, as she became affectionately known, was my sole motive power, a very powerful and reliable live steam locomotive. However, there was one drawback in that there was no room to fit radio control on the regulator, hence a degree of loco chasing was necessary.

Had the loco been in my care today, it would have been possible to fit a miniature servo in the cab but, in those far off days, such things were not available.

No. 9 was sold out of service, going to a new home in the south of England— Kent, if I am not mistaken. My 16mm modelling continued, a house move, new line and new locos including scratchbuilding, and a very active part in the Association of 16mm Modellers kept me out of mischief.

A love of all things narrow gauge meant frequent trips to Wales to visit, among other lines, the V of R, the locos of which always held a certain fascination for me. 27 years later, Roundhouse Engineering, Doncaster, introduced its new V of R 2-6-2T live steam model.

Above: No. 9 on a visit to a line in Yorkshire in July 2005. V of R stock is yet to be acquired.

Below left: the original No. 9, circa 1977.

Below: front view of the current machine.

This was not the first modern offering of the V of R tanks; it was however, to me, the one that appeared to be best value for the money involved. After many months of weighing up the pros and cons, I plucked up the courage to place an order.



So, 28 years after taking delivery of my first V of R tank, I became the proud owner of my second, but this time a model with much much more detail. One of the pleasures of 16mm modelling is the opportunity to modify new locomotives, adding that little extra detail which mass production does not permit. Having said that, the new Roundhouse V of R is very much top of the range, being crammed to the smokebox with added detail. There is, however, still room for additional detail, as you will see.

Keen to model the mid-1950s I chose British Railways Brunswick Green with a green dome and no lining. Research would indicate that, during 1955, V of R No.9 was painted in unlined BR green, which lasted a little over 12 months before lining and nameplates were added in 1956. My line is an end-to-end operation; therefore I chose to have the larger gas tank fitted, which gives around one hour of burner time. The only drawback with the large tank is that it projects across the right-hand cab doorway which detracts from the appearance of the loco. Not for long, the answer comes in the form of a modified driver who, in effect, clips over the gas tank. The modification is reasonably straightforward by removing the left leg and part of the left torso to the depth of the gas tank. A small brass clip is then fixed to the torso and bent at right angles so that the driver is clipped to the gas tank.

The Roundhouse V of R tank is offered as one of Nos.7, 8 or 9, the owner to choose which. In reality, as built, the model represents No.9. This is by no means an intended criticism of Roundhouse which has obviously gone to great lengths in the design of the loco. No.9 was the only one of the three to have a sliding air vent on the cab roof, and she was the only one of the three to have handrail knobs supporting the tank front handrails. No.9 (and No.7) were fitted with one toolbox on the left-hand tank top; No.8 carried two toolboxes, one on each tank top. Roundhouse has included a tapped hole for mounting the second toolbox which, in the case of my loco, is the home for an oil can. A whitmetal oil can was drilled out to take an 8BA bolt in the base, the bolt being Araldited in and the head



Above: No.9 test-fitting the turntable. Note that the driver has committed a cardinal sin in leaving the loco in reverse gear...

Right: No.9 arrives at Newport with its first through working. Some platform edge adjustments had to be made to allow the locomotive to pass.

Below left: as the loco is fitted with a large gas tank, which occupies the whole of the cab entrance on the right-hand side, alternative arrangements have had to be made. This crewman is of the one-legged variety.

Below right: new loco, new tool kit!

Photographs by the author.

cut off. The bolt is dropped into the hole allowing the oil can to sit on the tank top. As it is not a tight fit, the oil can is able to move during running which often provokes comments from people who are expecting it to drop off the tank top.

In order to add a little additional realism, I opted for spectacle plate glazing and, to achieve this, I used a piece of spare coach glazing. Holding the glazing strip tight against the rear cab spectacle plate, with the protective cellophane still in place, I drew round the inner of the spectacle plate with a very fine tipped permanent marker pen. The glazing strip was then cut into a square keeping the



cuts as close as possible to the circumference of the circle, top, bottom and sides.

Using a bench grinder, the square was then turned into a circle ensuring that I did not encroach on the black ink of the circle. Several trial fits finally allowed a tight push fit of the Perspex into the spectacle plate. The other three glazing pieces were made in the same way, except that the original was used as a template. This means that, when trimming these to size, it is necessary to grind off the black ink to ensure the fit inside the spectacle plate. A touch of superglue was added to each glazing strip for the final fix.

The fire irons and fireman's shovel (provided with the loco) were painted using a mix of browns (representing rust), silver, matt and gloss black to achieve a well-used look. Tools, two spanners and a hammer were placed in the tank top toolbox. Two loco lamps, one head and one tail, were modified to suit the Swindon type lamp brackets to complete the job.

The Roundhouse V of R tank is a lovely loco to drive, bringing with it a very different driving experience. Perhaps it is due to the sprung driving axles, maybe it's the overall weight, but it is certainly different. There are the simulated cylinder drain cocks, a whistle and finally one radio stick for forward, reverse and regulator. No doubt there will be other modifications as time passes. Meanwhile, I intend to sit back and enjoy my Return to the Vale.



DCC for Dapol 14xx

Fitting a decoder in an N gauge 0-4-2T

ROGER MILLER took up a self-imposed challenge to convert this little model to digital control.

This delightful model, now in limited supply, is a splendid addition to the British outline range of locos. It is one of the smallest locos, too. This presented the challenge to 'chip-it-up'. There is not much room, but it can be done and here is how. Do not underestimate it. The conversion process is quite complex and is best not embarked upon unless you feel confident with your 'delicate touch' and soldering skills. If nothing else, it will give an insight into how nicely this locomotive is constructed.

The chip I used was a Kühn N025 measuring 11.4mm x 8.8mm x 3.3mm, but I expect that other makes of similar chip would do as well. The chip itself will fit into the cab roof, being held there with some double-sided sticky pads.

Step 1

The lubrication instructions tell you how to remove the chimney and boiler with a 'type 0' cross-head screwdriver having a shaft diameter below 1.7mm. Do not be tempted to undo the small screws on the underside of the chassis (*below*). It is quite unnecessary and will only lead to lost springs etc. and crawling around the carpet on all fours.

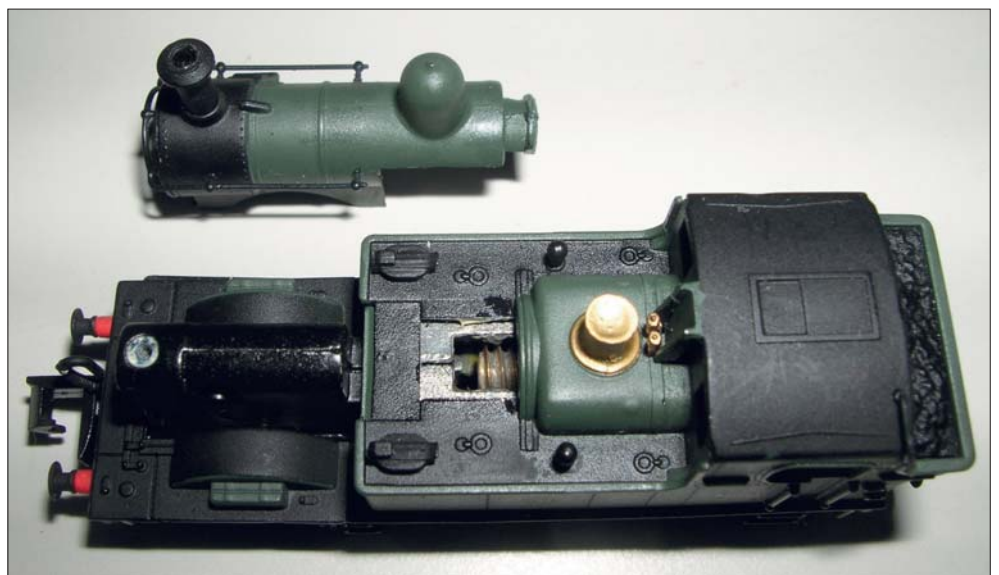


Step 2

The thin brake pipes (*above*) running along each side under the running plate need to be lifted gently out of their sockets at each end of the loco and on both sides.

This is a very delicate part: ease the whole body off the chassis. I found it best to start at the front. It is one of those jobs that is easy to do when you have done it once. However, there is always a first time!

The brake pipes *will* get in the way when the chassis is part-way out. When this happens, they can be lifted out and over the chassis. With care, they will not become detached from the body.



Step 3

Use a miniature soldering iron for all the soldering work. I use a 15w miniature iron with a 1mm bit. Anything larger will not get into the small places accurately enough and will probably carry too much solder. Have a damp cleaning sponge at hand to wipe the tip. Cleanliness is paramount when soldering has to be done accurately and quickly.

Step 4

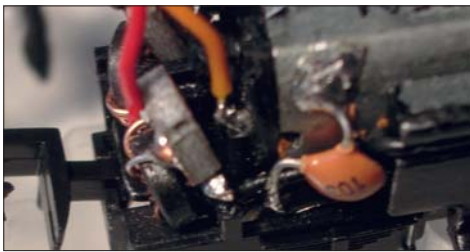
Unsolder the capacitor and suppression choke from the motor terminals on each side of the chassis. Whilst doing this, separate the capacitor connection with the choke. With such a small soldering iron, it would be impossible to remove the capacitor from the motor casing. Don't try, just tuck the capacitor by the side of the casing.



Step 5

The chip itself needs some preparation. Support the chip in a firm location, like a small vice, with the wire connections uppermost. Remove the yellow and white wires from the chip by putting a little tension on each wire and dabbing the soldering iron on the connection to the chip's circuit board. British outline does not require lights and this is typically what the yellow and white wires operate. The wires only take up valuable space and just get in the way.

Shorten the remaining four wires to about 25–30mm. If you leave them longer, they will also take up valuable space. Strip 1mm of insulation from the ends of each of these wires and pre-tin them with solder.



Step 6

Make up two 4mm squares of printed circuit board and tin one side of each of them. These will be used to separate the chip wiring and also anchor the connections. Single-sided PCB material will do, but I had double-sided to hand in the scrap box.

Solder the orange wire to the right-hand motor terminal. Solder the grey wire to the left-hand terminal.

Solder the red wire and the right-hand choke wire to one of the PCB squares.

Solder the black wire and the left-hand choke wire to the other PCB square.

All the soldering is now complete and the chassis can be tested in programming mode to see if the default address can be read.



Step 7

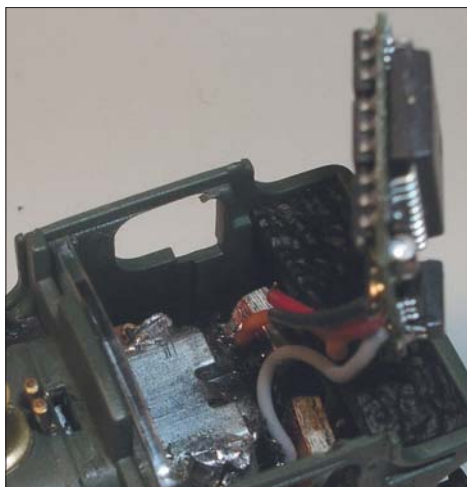
Prepare the body to take the chip by removing the cab roof. Two difficulties have to be overcome for this.

The first is the handrail at the top left back corner of the cab. Gently ease the handrail out of its fixing hole in the side of the cab.



The second problem is that paint may have bridged between the whistles and the shield immediately behind them. Any bridge should be cut through gently so that the whistles themselves remain part of the firebox top and are not attached to the cab front.

Inspect the inside of the firebox for the plastic tab that attaches the front of the cab to the firebox top. Gently release the tab, pushing it through and the cab roof lifts off.



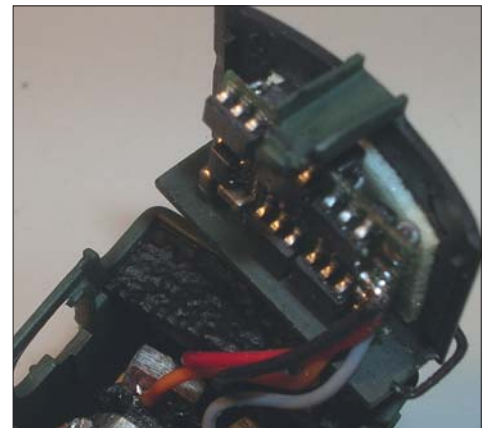
Step 8

Refit the chassis into the body with the chip poking out of the cab roof opening.

The brake pipes that had to be unhooked around the chassis will now have to be hooked back again and then re-inserted into their fitting holes front and back.

Step 9

Place a double-sided sticky pad into the roof. Make sure that the pad itself is not too thick or the chip will be very visible in the cab. Route the wires neatly down one side – I chose the

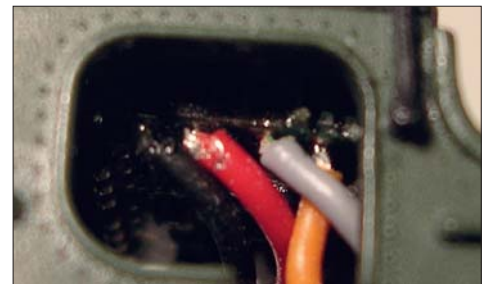


left side. Stick the chip to the pad as far back as possible towards the back of the cab roof. This will allow sufficient clearance for the front cab moulding.

The arc in the roof means that the chip will only adhere to the sticky pad at each end but this seems to be sufficient. Refit the cab roof, chip and all. Relocate the cab roof handrail.

Refit the boiler and chimney, and the conversion is complete.

To give it a final touch, any wires showing in the cab can be painted black.



Final thought

One word of warning became apparent after translating the German instructions that came with the Kühn chip. The company recommends not wearing clothing that causes or encourages static (i.e. man-made fibre). Understandably, these chips can be easily ruined by static discharges and this is not, in my opinion, over-cautious advice.

Enjoy your digital 14xx!

*Dapol 14xx reviews: January & March 2005.
Step-by-step photographs by the author.*

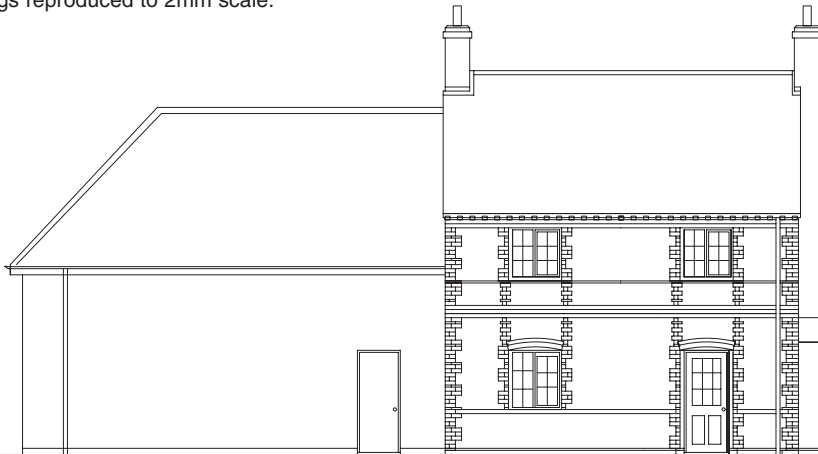


Rowlands Castle

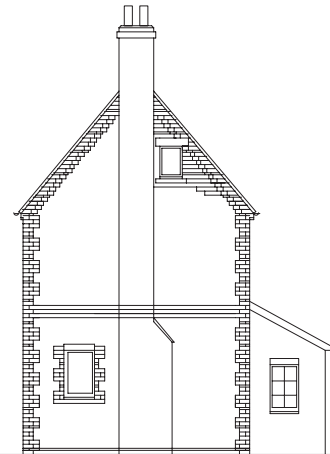
On the 'Portsmouth Direct', c.1944

PETER GOSS continues his latest project with plans of one of the village buildings.

Drawings reproduced to 2mm scale.



West Elevation



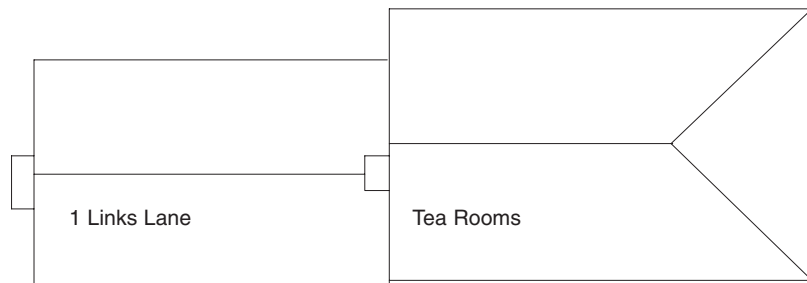
South Elevation



East Elevation



North Elevation



Building Outline



Scale 25'



1 Links Lane
and Tea Rooms

Rickards' Tea Rooms and 1 Links Lane

Next-door to the chapel is 1 Links Lane. It is built mainly of flint with extensive brick detailing. To one side of the original cottage was 'Rickards' Tearooms and Gardens'. Rickards' could provide facilities both indoors and out and was usually called upon to cater for all of the village functions during the early part of the 20th Century. Apart from the cottage front, which retains all of its original arrangement compared with early photographs, the rest of the structure has been extensively extended and altered. My drawings try to recreate some of the original flavour of the property and are mainly guessed after site measuring. The main elevation has brick quoin coursing at all external corners and to each side of windows extending vertically to the eaves above and down to ground level. A three-course band runs around the building horizontally.

The roof is red plain tiled with a plain ridge-line, slightly bent as it ages. Red brick chimneys sit at each end of the roof. One is outside the gable wall completely and the other is inside the building.

The adjacent tearooms is now used as a hairdressing salon. A single storey structure, it may have a high ceiling level inside. I have showed suitable signage for use as the tearooms as they may have been during the 1930s and 1940s. Early pictures also reveal extending shop window canopies to the side and entrance door. It is inevitable that, in pro-



Above: 1 Links Lane. The drawings forming part one of this series were in January.

Photograph and drawings by the author.

ducing drawings of these and future structures, certain information is not going to be available. This is due perhaps to having no camera access or the building has been

altered too much. In such cases I have had to assume several details in an attempt to capture the feel of the thing.

I hope that building owners reading this article will bear with me on this. In the future, I hope to be able to prepare drawings for the rest of the model village, together with details of the station, forest and the layout.

Street lamps in 4mm

Lighting brings a layout to life

TREVOR WEBB outlines an economical method of construction.

The cost of providing a realistic number of street/station lights for even a modest layout can be quite prohibitive, as I discovered when planning the lighting for my 7' x 2' model of a small town terminus. Having already experimented in 2mm scale I found the following solution, at a cost of under 40p a lamp.

All that is needed is some tubing (copper for the deluxe edition or plastic for greater cheapness), grain of wheat bulbs, track pins, brass rings of the sort used in model boat building or soft brass wire (optional for decoration), some small washers, plus superglue, paint and patience.

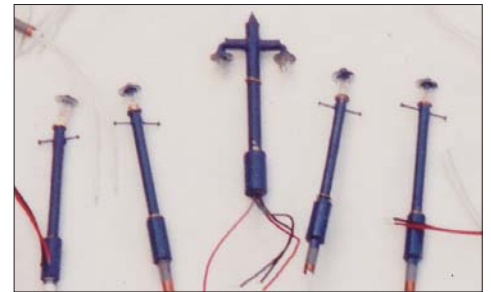


Take a 1/8" diameter tube, but check first that the bulb wires will go through. Cut to the desired length, remembering to leave sufficient for planting in the baseboard. (Those illustrated are 60mm long.) I got five out of a standard length of tubing. Cut a short piece of 1/8" internal diameter tube and slide it over the end, to make the base. Remember to leave enough of the post protruding for planting. The amount depends on the thickness of the baseboard. Fix with superglue.

Next drill a hole through the top – mine was 4mm down – to accept track pins to represent the ladder supports (optional). Cut two pins to 5mm and glue on either side. Make sure the ends do not protrude into the tube; if they do you will have difficulty in passing the wires through. Now paint.

If decoration is desired a brass ring can be added above the base and at the top.

Glue a small washer just below the top of the bulb, to make a shade. The washers used were 6mm in diameter. It is difficult to find ones which will fit fairly tightly on the bulbs, so



care is needed to get each one straight when gluing. Paint, taking care to cover the top well to stop the light shining through. Push the bulb through the post, making sure it seats well at the top; you may need to pinch the wires a little. Do not glue, to make replacement easy. Plant and connect up. Use as low a voltage as possible, for both effectiveness and longevity. Planting can be made firmer by putting a small washer at the bottom of the base.

With a little extra ingenuity it is possible to make a double lamp. A larger bore tube is needed, to accept the extra wires. A 1/8" hole is bored near the top to accept the arms, and the lamps threaded through.

No claim is made for prototypical accuracy. Measuring and photographing street lighting is apt to provoke funny looks! However, these are closely modelled on the sort often found – in fact, I can see one from my window now.

A swan-necked lamp is on the way, providing I can learn to use a tubing bender!

Photographs by the author.

Correctly covered

Mimicking prototype sheeted wagon practice

*This guide to the art of producing wagon tarpaulins (here in 7mm scale) is by **JOHN RODWAY**.*

A load in an open wagon is always liable to get wet. If this would cause damage then it is covered with a tarpaulin that is tied down to cleats, V-hangers, other bits of underframe, and even buffer stocks. With a tall load, water easily drains away. However, if the top of the load is below the height of the sides, water could form a pool in the middle, making it difficult to keep the load dry when it is uncovered.

Most railway companies had some wagons that were fitted with a high longitudinal bar that raised the centre of the tarpaulin. The bar could be swung over to the side to ease loading and unloading, especially when using a crane. It always worries me at exhibitions when I see the empty wagon with the bar still in the 'up' position. I just hope that the hook of a diminutive crane doesn't catch on the bar and lift the wagon, or that the little railwaymen busy working in the wagon bump their heads or decapitate themselves!

Slater's produces an 0 gauge model of the BR Hi-Bar Shock Wagon (Diagram 3/040 of 1953). The firm's design intends the tarpaulin bar to be in the 'up' position permanently. On the Romiley Club's *Gillan & Brown* industrial layout, I would like the wagon to appear sometimes loaded, with the bar supporting the tarpaulin, and at other times empty, with the bar down and the tarpaulin folded on the wagon floor. The challenge was how to achieve this. A pair of interchangeable wagons was one possibility. Another was to engineer a moveable bar, as in the prototype, but this still left the problem of fitting and folding the tarpaulin.

Then came the realisation that, when the tarpaulin was in place, it would be impossible to verify if the hidden bar was actually 'up' or 'down'. So the solution I adopted was to model the wagon with the bar 'down' and then create a separate tarpaulin supported by a sub-structure that could be fitted or removed when the wagon was hidden from public view while inside one of G&B's workshops.



Photographs by Len Weal.



The empty wagon

The first job was to complete the model with the bar permanently in the 'down' position. Because the Slater's end fitting would not easily allow this, I bought some GWR fittings

from ABS. (The company kindly supplied several sets for a couple of quid.) They were turned round so that the bar was on the outside rather than next to the wagon end, as was GWR practice.



My wife painted and dyed two rectangles of silk in blotchy old tarpaulin colours for me. One was glued and folded up, with ends of thread hanging out to represent the ropes. This was stuck to the floor of the empty wagon. The second tarpaulin was decorated with the rub-on lettering and numbers left over from another kit and then set aside.

The tarpaulin and its support

I made a rectangular wall from four pieces of plasticard. It was a snug fit inside the walls of the wagon, but not tight. The ends of this rectangle were gable-shaped to suggest the bar was 'up' and the sloping edges dished to match the natural sag of a tarpaulin. A longitudinal and two internal gable-shaped crosspieces increased stability. Parts of their lower edges were cut away to clear the folded tarpaulin already in the wagon.

Pieces of plasticard were cut, shaped and attached to extend the gable over and beyond the wagon end, the end-plates and the bar. After each piece was added, checks and adjustments were made so that the structure could still be lifted clear of the wagon. This was a slow and fiddly job. Each extension was finished with another gable end. These did not extend as far down as the level of the wagon floor, but they did project to just beyond the sides of the wagon. Strips of plasticard were cut and fitted between these side projections to complete an outer skin, so that all four wagon sides were sandwiched between two pieces of the plasticard sub-structure. There was further testing and fettling to ensure ease of removal and replacement.

A two-part 'roof' was cut, curved and fitted, making the whole sub-structure rigid. When the solvent had hardened, the second tarpaulin was laid on and solvent-welded to the false roof. Then the ends and sides were folded and fixed, first with solvent, and then, as the number of thicknesses increased, with glue. Pressure was applied to keep the folds as tight as possible against the gable ends. The lower edges of the silk were trimmed, tucked under and solvent-welded to the inside of the outer skin. A smudging of soft pencil lead weathered the lettering. The result is shown in the photographs.

Conclusion

There are two compromises with this solution. First, there are no ropes attaching the fitted tarpaulin to the wagon. Second, because of the thickness of the outer plasticard skirt, the tarpaulin is proud of the wagon walls. We'll see if anybody notices this at exhibitions.

So there we have it. A wagon with a sheet rail that can be run correctly in both loaded and unloaded modes – and, should anybody enquire, the operators have no idea what precious cargo is hidden under the tarpaulin. That's a commercial secret!

Heading: the shock open with sheet in place.

Above left: the wagon in 'empty' mode.

Left and far left: closeup of the tarpaulin and underside view; note rebate for floor detail.

Cobnor

An autumnal narrow gauge layout in 009

A minimum-space narrow gauge layout by **STUART ROBINSON.**



I've been interested, on and off, in narrow gauge modelling for many years. I still have some Eggerbahn wagons I bought new for 6s 7d. However, my interest waned due to poor quality of stock and track combined with my lack of model engineering skills to correct the problems. My interest restarted a few years ago when I built *Tiernseebahn* in H0e which was followed by a number of Se and Sm layouts.

I decided to join the 009 Society and subsequently the Surrey Group. I was becoming interested in the more unusual scale/gauge combinations such as Fn16.5, 0n9 and Sn9. I'm exhibition manager of the North Downs Model Railway Circle and had become worried that our exhibition might become stilted because it was difficult to fit more than 13 or 14 layouts into the venue and this constrained the prototype/scale/gauge mix.

My initial thought was to build a series of small layouts that sat between the legs of larger layouts. The first two were exhibited in September 2005, an automatic H0e layout using Eggerbahn stock called *Eggerdorf* and a children's drive-it-yourself layout called *Kinderbahn*.

The concept was to be developed by building a series of small narrow gauge layouts.

At the same time, the Surrey Group was becoming interested in supporting the exhibition and offered to bring 009 layouts. I decided to use three inter-connecting rooms as a narrow gauge hall. A friend agreed to bring a nice 0-16.5 layout called *Cranbrook Town*, but the more unusual scale/gauge combinations were missing.

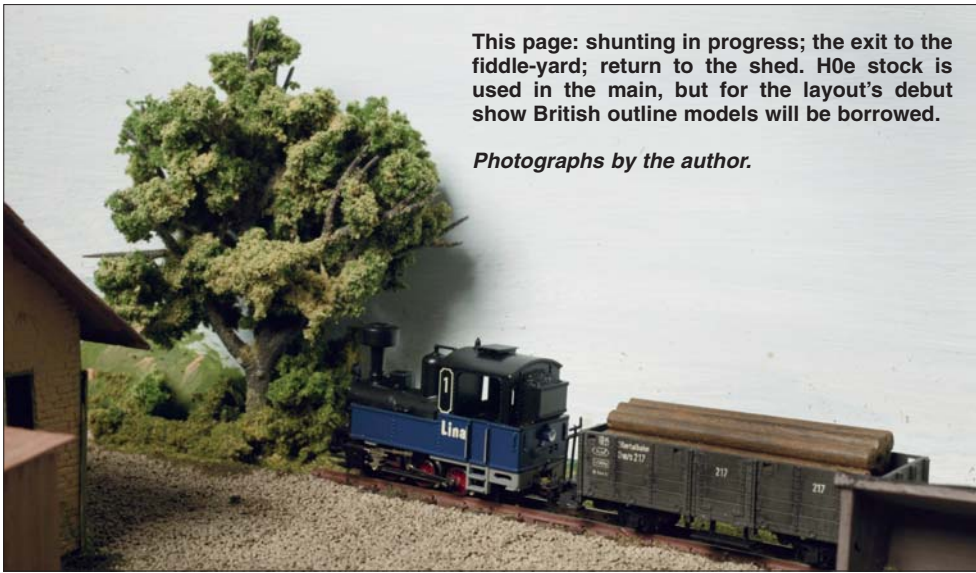
I decided to rectify this by using the small layout concept presented in step formation. Given available space, transport constraints, expectation of extensions etc., I decided to build four 48" x 12" layouts modelled in Fn16.5, 0n9, Sn9 and 009. After further thought, I decided to model each layout in a separate season with the 009 layout set in the autumn. A pleasant surprise was that this gave a bigger range of scale/gauge combinations than appeared at Expo-NG 2005.

I developed a background inspired by the Rye & Camber Tramway moved to Chichester Harbour. A visit led to a preference for the Cobnor peninsula as the flat land would ease



Heading:
aerial view of
the station area, with a
passenger service departing.

This photo: overall view of the layout.



This page: shunting in progress; the exit to the fiddle-yard; return to the shed. H0e stock is used in the main, but for the layout's debut show British outline models will be borrowed.

Photographs by the author.



construction and its woods and hedges provide a scenic break and displays of autumn colours. The description of the layout became: 'the leaves are turning red and gold at the hamlet of Cobnor and the tourist trade is quietening. Tourists arrive via the narrow gauge railway running from Nutbourne Station via Chidham to Cobnor and built to develop the peninsula. The line is losing out to motor transport, but survives on a mix of tourism, local passengers, industry, fishing and agriculture'.

Simultaneously, a layout plan was developed from Camber. For the first, and possibly last, time in my life, I was able to add facilities such as a goods siding and loco shed. I decided to hide the exit/entry hole in the backscene with trees and bushes.

For reasons of ease of movement and assembly, I prefer table-sitting layouts and have developed a very light and rigid baseboard with deck and sides of 6mm ply and cross braces of 1" x 1" softwood. For narrow gauge layouts, I use 2" x 1" softwood at the ends to allow the use of pattern makers' dowels. Joints are screwed for speed of assembly and glued for rigidity.

All connections are made with 6-pin PS2 extension connectors and cables. While some modellers decry computer cables, I have

found them easy to install, less prone to damage than unsheathed cable, and affordable. The only point to note is that if electrically operated points are to be operated at a distance it is advisable to use four or six wires to a circuit to avoid power loss. In order to ease installation and maintenance, electrics are kept as simple as possible so there's little to go wrong.

The backscene is made from flexible MDF (so far only found in B&Q) as this can be curved with little fear of breaking and so gets



away from the corner in the sky. It is built up with a series of coats; two undercoats, sky blue, brown, green and details such as trees and roads. This has the advantage that, if you make a mistake in one coat, you can paint it over in the next. Undercoats and sky blue are horizontally brushed, browns and greens are stippled and details applied with a fine brush.

The autumn vegetation was a challenge. There are commercial products, but they focus on the vivid New England fall colours. As I look out of my window, the British colours are more restrained with trees and bushes in a mix of green and autumn colours. Also, a friend had been whinging about my use of Heki trees, so I decided to try Woodland Scenics' trees. I made up an order and consulted the model shop, but the trees I wanted were not in stock so I plumped for kits. When they arrived, the instructions recommended using Woodland Scenics' glue, but time didn't permit a re-order so I tried what was to hand, wood glue (hopeless), photomount (better), Uhu (bingo). I wait to see if they'll stand up to the rough and tumble of exhibiting.

Expecting them to be flock, I'd ordered a pack of apples and oranges but, unfortunately, they turned out to be small spheres so useless for my purpose. So the trees and grass were given their autumn tints by spraying with photomount and dusting with Woodland Scenics' fine burnt grass. They are OK, but I'd like to add other colours.

I'm presently using my H0e German stock but, for the exhibition, John Thorne has bravely offered the use of his British stock. See John's series *The Ditton Chronicles* RM March 2005 *et seq*. The passenger service is based on the Rye and Camber with nine trains a day with an extra on Wednesday (Chichester Market day) and Saturday evening. There are morning and afternoon goods trains run as required.

Cobnor's first exhibition will be Woodmansterne Model Railway Exhibition 10.00 to 17.00, Saturday 18 March, at St. Peter's Church Hall, Chipstead Way, Woodmansterne, Surrey. Details of the exhibition are in Societies & Clubs, and along with the Circle's layouts can also be found at www.ndmrc.com

Sidney Street

A 'party piece', achieved with a little friendly teamwork

JIM CONNOR was invited to a 'layout party', which was the spur for this urban layout in 4mm.

Late in 2004 I was surprised to receive an invitation to attend a 'layout party' which was being held during July 2005 in suburban east London. I must admit that I'd never heard of such an event before, but was intrigued so I contacted the host to get more information. He told me that it would be a nice idea to get an invited group of modellers along for a pleasant informal day and discuss their various projects. Food would be provided, along with a suitable venue, but instead of bringing a bottle, guests were asked to bring a layout.

Unfortunately, this was a bit of a stumbling block, as my *Harford Street – Mile End Gate* line (RM January 2002) is anything but portable. I was told that if all else failed I could just bring along a couple of buildings from it, but how about a small exhibition layout? One that could be constructed fairly quickly.

Admittedly I liked the idea, but whatever else I can do I cannot produce models quickly. However, with a certain amount of assistance something might indeed prove possible.

As I'd been recently working on buildings for Colin Whitelock's *South Pimlico* layout (RM July 2005), I thought Colin was the best person to approach, so we discussed the matter over a pint or two and formulated a few ideas. Regrettably neither of us could really agree on what shape the layout would take, although we both decided it should be based within inner east London.

Colin favoured a dockland scene, and I would be quite happy provided that some North London Railway architecture could be included on it. I also mentioned the scheme to my son Charlie, now residing in south London, who said he would be pleased to help with whatever idea we eventually agreed on. A few days later, Charlie and I met at Victoria station and he presented me with a set of three detailed drawings showing alternative track layouts and locations for buildings. They all seemed viable and well thought-out, but whereas I'd envisaged a line in cutting, he suggested a viaduct.

The idea was to build another section of the fictitious North London Railway route which



inspired *Harford Street*. I say 'fictitious' although it is actually based on a very tenuous thread of fact. Many years ago, I saw a 19th Century map showing proposed railways around London. One of these routes seemed to start from the NLR at Bow, then continue to a terminus near the west end of Commercial Road. Although this discovery led ultimately to me building my first 'serious' layout back in 1972, I had absolutely no idea of the scheme's origins. Recently however, whilst researching at the National Archives, Kew, I stumbled upon a Board minute of March 1875, which referred to a proposed 'Aldgate & Bow Railway'. Far from being an offshoot of the North London, it was seen as a rival and after opposition, its bill was rejected by Parliament. Whether this was the line which I saw dotted on a map all those years ago I cannot say, but if it is, let us imagine that it was taken over and ultimately built by the NLR!

With this in mind, our latest project was to be located on the section of line linking Harford Street with Commercial Road, and the station was to be named Sidney Street. I felt unsure about the viaduct idea as it would be

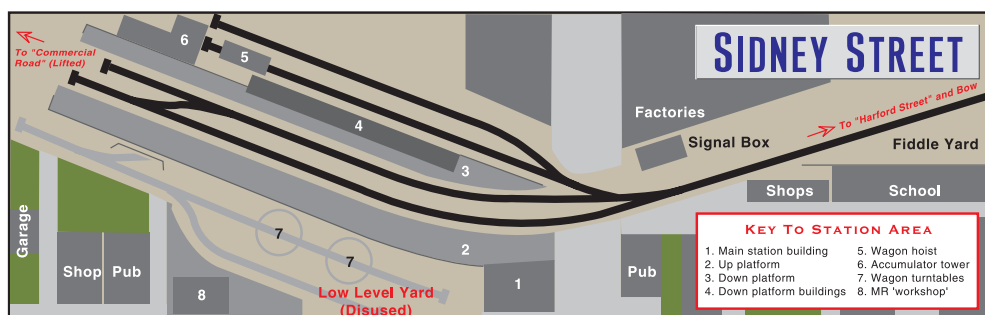
Above: the main building of Sidney Street station can be seen to the right of this view, which also includes a section of the disused low-level goods yard in the foreground. As the imagined route into Commercial Road would have branched off at Bow, it is presumed to have lost its passengers, along with the Poplar branch, in 1944. Sidney Street however, is relatively close to Whitechapel Road, with its trams and Underground links, so the station may have gone earlier, around the time of the First World War. This would account for the level of dereliction and the survival of the odd pre-grouping relic.

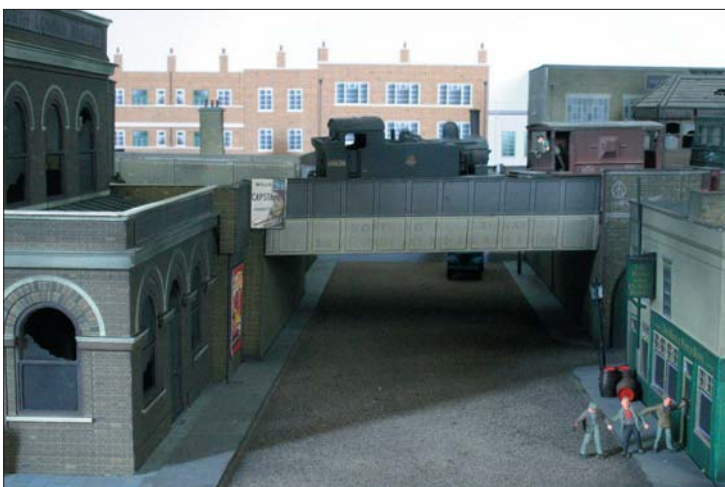
Photographs and track plan by the author.

more difficult to make trains disappear into a fiddle yard than if the tracks were in cutting, but nevertheless I thought it would make an attractive project.

I 'phoned Colin the following evening and although a bit disappointed that Sidney Street itself was some distance from the nearest dock estate, he was happy to be part of the team and we began planning in earnest.

A few days later I started work on the main station building, which Charlie had suggested I based on Haggerston, between Shoreditch and Dalston Junction. Haggerston opened in 1867, two years after the NLR City Extension, and remained in use until 6 May 1940, when it closed as a wartime economy measure. It was never the busiest station on the line and the late Michael Robbins once told me that as late as the 1930s its ticket racks still boasted various pre-grouping issues which had never sold. He also recalled that at one time the booking office ceiling had a hole in it and when it rained the clerk had to employ a bucket to catch all the drips.





A few months after closure, Haggerston was struck during an air raid, but fortunately the damage was photographed by the LMS, so we have a visual record of the building, which otherwise may have gone unrecorded. Working from this view, which is the only one known to exist, I set about designing the building on computer, using the Adobe Illustrator program. Having printed all the components on card, I began assembling it, using various layers of card to provide the necessary relief effect for the walls.

Charlie suggested that the layout should portray a section of line which had long closed to passengers and only had a meagre service of freight trains, similar to the old NLR Poplar branch in its final days. Therefore the station would be closed and derelict whilst part of the formation had been singled.

As the main building would be a focal point I decided to add as much detail as possible, including an interior, still with its panelled booking office screen. Glazing was added and cut to look 'broken' then, when complete, I fitted the roof. Once finished, I took my airbrush and carefully sprayed the structure with diluted Humbrol matt black. By then Christmas was upon us, so I put the building aside and sat back to enjoy the festivities.

Charlie and his wife visited us on New Year's Day and we went to one of the local DIY shops to buy the baseboard materials. Over the next couple of days, the pair of us worked on the boards, which each measured 4' x 2', until we were ready to lay the track. Not only did we

Top left: looking across the low level yard, we see the down platform buildings at Sidney Street station, with the wagon hoist in the left background. The top of the viaduct wall nearest the camera shows signs of newer brickwork, where it has been repaired following partial demolition. Originally this would have supported the up side canopy, but following removal the wall may have become dangerous, so it was reduced in height. To the right of the building is the top of the stairway, which would have provided access to and from the booking hall at street level. I know that the section of discarded nameboard propped against the wall near the top of the stairs is a bit unlikely after so many years of closure, but I think it adds to the general character.

Top right: although based on Haggerston, the main building at Sidney Street is typical of those erected by the North London Railway around the late 1860s and early 1870s. Some of the more elaborate examples are credited to the architect Edwin Henry Horne, although much of the basic design work appears to have been carried out by civil engineer, Thomas Matthews. Between the two storeys is a representation of a stone plaque of a type which was featured on most NLR station buildings of this period. As the station is supposed to have been closed for a number of years, the incised lettering, which once showed its name, has been filled-in with cement, but remains just about readable.

have the old passenger line and station on viaduct, but he had suggested a ground level goods yard as well. This was to be linked to the upper section by a wagon hoist, based very loosely on one which used to be at Bishops-

Above left: three Merten drunks roll out of 'The Rose and Punchbowl' oblivious that ex-GER J69/1 0-6-0T No.68626 is easing the Leyton engineers' train over the bridge above. The old station entrance is seen to the left, with its upper stone frieze displaying the legend 'North London Railway'. This remained a relatively common sight for many years, with examples surviving at a number of locations.

Above: ex-Midland Railway 0-6-0 No.43400 from Cricklewood MPD pauses alongside the former down platform at Sidney Street having brought in a short freight to the high level sidings. The blue-on-white name tablets, based on those which were once at Shoreditch, are just visible on some of the windows. The general condition of the building is based on that which once served the NSWJR side at Kew Bridge, as it appeared in the opening scenes of the 1950s feature film 'Nowhere To Go'. Behind the station can be seen the wagon hoist and part of the Midland accumulator tower, which is loosely based on those at Poplar Dock and City Goods, Royal Mint Street.

gate. Before setting out from home, Charlie had built this hoist and fitted it with an electric motor, so we would be able to operate it.

By the time they left for home we had a very basic layout, with all track and wiring completed, so all that remained was the scenic detailing.

In the past I'd normally worked in styrene sheet, but because I was pleased with the brick effect Charlie had achieved when designing Street Level Models' items I thought I'd use card instead, particularly as we were



Above: the bright, shiny BR Ford lorry looks almost out of place amongst the decay of the Sidney Street complex, alongside a derelict van kitbashed by Colin Whitelock. The lorry is standing on one of two wagon turntables which would have allowed railway wagons to be dealt with beneath the adjoining arches.

Above right: near the entrance to the low level goods yard is this building, which is based on one which used to stand at Poplar Junction, between the Blackwall line and the diverging Midland Dock branch. The prototype is thought to have once housed a workshop, but was disused by the mid-1960s. It stood on a platform, which may have belonged to the original 1840 passenger station at Poplar, which was resited to the opposite side of Brunswick Street around 1845, but this cannot be confirmed.

aiming to get everything done within a fairly tight deadline. To speed things along I adapted some of Charlie's kits for the viaduct sides, but again built them in layers to add more authenticity. Working with these I soon had the viaduct complete and it was time to turn my attention to the various other structures which were required.

The upper storey of the main building faced directly on to the platform as it did at Haggerston, but I deviated slightly from the prototype to suit its location on the layout. I constructed both platforms from card and allowed for two stairwells which I clad in white glazed brick before adding the stairs themselves, this time using an appropriate

thickness of balsa wood. I wanted a typically NLR building to serve the opposite platform and decided on one which used to be at Mildmay Park. Although the prototype had long-since been demolished, it was featured in a past edition of the North London Railway Historical Society Journal and the excellent accompanying drawings by David Hanson provided an ideal foundation from which to work. I again designed the main structure on the computer and included an interior, in case anyone cared to look through the broken windows. The NLR fixed enamel name-tablets to certain window frames on its platform buildings, so these have been replicated on the model. The only one I've ever seen had dark blue lettering on a white background and I presume this was standard.

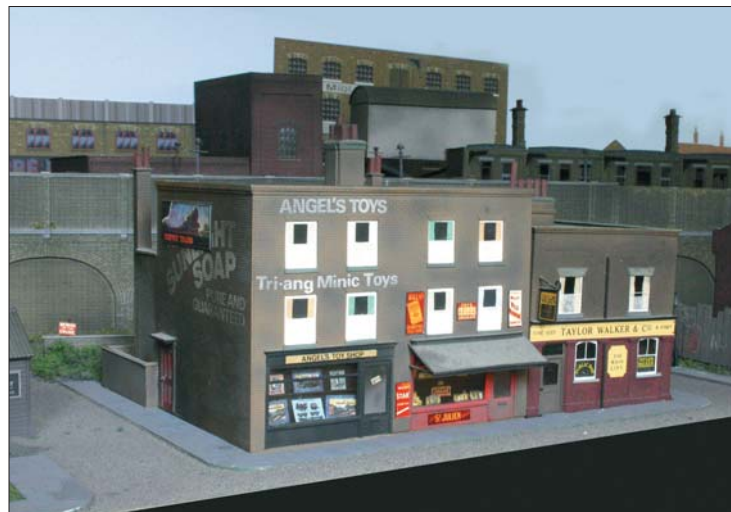
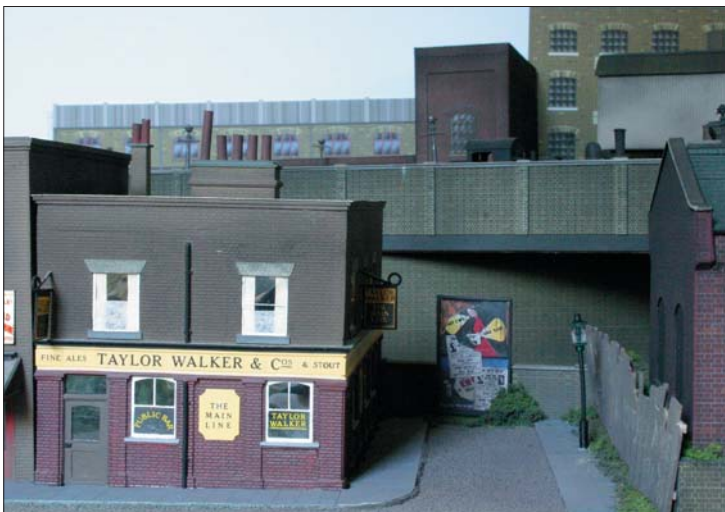
In my experience it was always unusual to see nameboards of any description still in situ on a closed station, particularly around London, but of course there is a prototype for everything. A little while back, a friend provided me with some photographs taken on a 1950s enthusiasts' club visit to Shoreditch NLR, which had last been served by trains in 1940. The views were largely general, but one showed a smiling line-up of participants standing by a window which still displayed a name. A couple of similar boards lay on the platform. I wonder where they are now? If indeed they still exist!

Once the bulk of the 'Mildmay Park' building had been completed I added some etched

brass brackets and pieces of balsa to represent the timbers which would have supported the canopy. I then gave it a quick dusting of matt black with the airbrush and placed it on the layout. When the platform back walls were added, along with some decapitated white metal lamp posts, the disused station at Sidney Street was looking more or less complete.

Below left: opposite the 'Poplar Junction' building stands this pub, which had been made redundant from the *Harford Street* layout. It was inspired by the disused 'Turks Head' in Wapping, although its architectural features are vastly different. The name bears homage to a superb dark ale once brewed by a late-lamented Limehouse brewery and is not intended as a railway reference. In fact, when it was first placed on the new layout we gave thought to changing its name, possibly to something connected with the historic Sidney Street siege, but as all suggestions made it sound like a trendy wine bar we thought best to leave alone!

Below: another building taken from *Harford Street* accommodates a toy shop and tobacconists. The prototype for the toyshop stood in Mile End Road and was locally well known in its day, but it looks sadly out of place in a side-street such as this. The display in the window dates from when the model was constructed in the 1970s, long before decent photocopyers and computers with graphics programmes were available. The Hornby 0 gauge trainsets were therefore drawn-up by hand and coloured-in, which is why they appear so over-scale! The entrance to the low level yard is seen on the extreme left.





Left: moving away from the station in the opposite direction, we encounter 3F No.43400 again, as she passes the remains of Sidney Street signalbox. This is another relic from an earlier effort of mine and actually dates back to the original *Commercial Road* layout of 1972. It is based very loosely on one which used to stand at Dalston Junction, but is of lesser proportions and was heavily adapted to fit a cramped location. It languished unloved for numerous years in our loft and was only rediscovered when my wife was searching out some old photographs. The locomotive is formed of a Golden Arrow resin body on a Hornby 4F chassis.

Turning my attention to the low level goods yard, I added a platform-cum-loading dock and equipped it with a building which once stood near Poplar Junction on the old London & Blackwall line. The prototype had been erected by the Midland Railway in connection with its Poplar Dock branch and was similar to many similar structures built by the company. When I first knew it back in 1965 it was still in good condition, although its interior had been stripped bare and the whole thing smelt strongly of damp. I have modelled it in this condition, again in card, but as the intricate tracery of the window frames would have been difficult to cut around, I drew them on the computer and printed them on to transparent acetate.

One of the two baseboards was now progressing nicely, but it still looked a bit clinical, despite all the airbrush weathering. Once the track had been ballasted, Colin began adding various types of green scatter material and imitation foliage. A further dusting with the airbrush to tone everything down and the overall scene started to take on the desired appearance. In addition he equipped all the points with rodding, although, for the time at least, the low level yard would be modelled as if already closed.

A short while earlier we had been booked by the Roding Valley MRC to exhibit *Sidney Street* at the Leytonstone exhibition, despite

the fact that much remained to be done. As we approached the date it seemed that we could finish one board, but only if we used a couple of surplus buildings off *Harford Street*. These had been built from plasticard and I was a bit concerned that they would look different from all the others, but fortunately my fears were unfounded and a place was found for them on the new layout.

Last but not least, we had to do something about Charlie's wagon hoist, which existed as a bare framework behind the 'Mildmay Park' building. The top of its frame included the electric motor and, as this obviously had to be hidden, I hastily constructed a card cover, based very loosely on one of the hoists which used to be at Bishopsgate GE. I say very loosely, because the motor is quite large, so I had to extend the covering further than it should have been, otherwise it would not have been completely concealed. Colin took one look at the finished article and said it looked like a Great Western water tower, but the show was now imminent, so I decided to live with it.

With just two days to go, we fitted the wires to a transformer and ran a loco over the entire layout. Yes, all was well, so it was broken down into its component parts and subsequently loaded into Colin's car.

On the morning of the show we drove to Leytonstone good and early, and, as we had been allotted a couple of tables for support,

Below left: with the derelict signalbox on the viaduct above, we see some Teddy boys involved in a fight near the arches, as a man walks by on the right, seemingly unconcerned. The graffiti partly visible to the left, appeared alongside the former LTSR line near Bromley in the early 1960s and read rather enigmatically "Is Satch a daddy – I hope not!" I've absolutely no idea what it all meant but it must have made sense to someone!

Below: on the opposite side of the road stands a prefab, which has been built from a Street Level Models kit and fitted with acetate windows. Immediately behind it is a row of shops, whilst to the right a one-time row of terraced houses ends in a bombsite. Much of the East End remained in this condition well into the 1960s, although by that time the venerable Peco gas lamps would probably have been replaced by new electric lighting. The backscene, which hides the fiddle yard includes the distinctive roofline of some East End Dwellings Company flats, of the type designed by Henry Davis and Ernest Emmanuel in the 1890s. The low-relief school mentioned in the text appears behind the terrace remains.

there was no need to use the trestles. The layout was brought into the hall, fitted with its buildings, then connected to the transformer. Lloyd, one of the operating team, applied the power and nothing happened. It was pretty obvious we had a short, but where and why? A few frantic minutes passed, but eventually someone realised that the problem was caused by the supporting tables being slightly uneven. A quick piece of packing appeared from somewhere, the buildings were placed back in their allotted places and just as the show opened, the trains started to run. Soon after, Charlie arrived with a completed Street Level low relief school, which although prior-



Right: moving to the other side of the part-demolished terrace, we see men at work on the back of a Langley Leyland lorry and look towards Redman's Road School. The livery of the Morris Commercial van at the end of the street is believed to be correct, but it somehow looks a little garish, even after a bit of light airbrush weathering. Its transfers, advertising Main Line ale come from the extensive range produced by Canterbury Miniature Commercials, but now available from the Engine Works. The football graffiti on the right was added by Colin and has absolutely nothing to do with me!

Below: we end our brief tour of the layout by returning to Sidney Street station, where ex-LMSR 'Jinty' 0-6-0T No.47432 is seen shunting. The prototype, once based at Cricklewood but later transferred to Willesden, was always a favourite locomotive of mine. Therefore a representation was a must and the Bachmann model, suitably re-numbered and weathered, fits the bill perfectly.



tine and un-weathered, helped to hide the fiddle yard.

Despite having only one board actually completed, the layout met with an extremely positive response. It was very rewarding when people commented on how realistic it all looked and how much it reminded them of the East End that they knew in their childhood. It seemed a shame to waste the space provided by the unfinished section, so we used it to display photographs and drawings of the prototype buildings on which the models had been based.

After the show, the majority of us retired to a well-known pub in Limehouse and reflected on a very enjoyable day, although Colin, being the driver, had to abstain!

A week or so later I heard that a special celebration dinner, to which I'd been invited, had to be changed to a different date and this would clash with the layout party. This of course put me in a quandary, but Colin, who had also been invited, stepped forward and said that he was happy to take along some of the main buildings from *Sidney Street*. This was arranged, and he also took some of his own models as featured on *South Pimlico*.

All our efforts had not been wasted however, because the layout had also been invited to the Chelmsford exhibition, which was due to take place in October. This would give me plenty of time to produce the extra buildings, along with a backscene, so that within a few months we should have something that was more or less finished.

Working from photographs, I drew the various components on computer and printed them as before. When the idea was first conceived, it was suggested that we modelled the mid-1960s era, when blue diesels were first making themselves noticed, but somehow the whole thing seemed to slip back to the previous decade. As attractive as those Swingin' Sixties are for many, I have a deep affinity for the 'Fifties and, as I was producing most of the buildings, the result was perhaps inevitable! The original concept of a line in its final days was retained however, with locomotives working trains of just two wagons and a van. I remember such sights well, so, as there was no

need for an extensive fiddle yard, the whole thing could be kept to an easily transportable size.

Bit by bit, the various other buildings were completed and positioned on the layout. For a while everything looked very 'cardboard', but I knew that once the houses and shops had been airbrushed they would start coming to life. The final pair to be completed were parallel blocks of model dwellings, based on some that had been erected in the early 20th Century. With these in position, together with an accumulator tower to serve the station goods yard, all was more or less complete. Having said that I was still touching-in some paintwork on the night prior to the show when Colin arrived to load everything into the car.

Once again, we quickly checked everything over, and all was working well. We then dismantled the layout and carefully packed the boards ready for an early start the following day.

This time we had no major problems and the layout was happily operational by the time

the doors opened. If anything the response was even better that it had been at Leytonstone and I was amazed when told that *Sidney Street* had been awarded the Geoff Selvage Memorial Cup. It was very satisfying to see our work appreciated so much and it goes to show what a little friendly teamwork can achieve.

The regular operating team of Colin, Iain and Lloyd are quite happy with the finished result, although they all wish it was bigger. If they had their own way, Colin would re-open the station, Iain would erect 25kV overhead catenary and Lloyd would introduce a passenger service off the former GNR hauled by 'Baby Deltics'. However, as nice as all this might sound it would be drifting away from the original concept. Charlie, now the father of bouncing twins, has, by necessity, had little time for operating of late, but when he returns, the whole thing might creep forward into the 1960s. However until then, *Sidney Street* will remain firmly anchored in the final full decade of London steam.



Great Eastern 'Decapod'

Built in 4mm scale from the South Eastern Finecast kit

MALCOLM LEE modelled the one-off GER 0-10-0T to add to a collection of one-offs.

Over the last four years or so the owner of this model has amassed a considerable collection of 4mm model steam engines that were either one-offs or specials. So after the delivery of the LNER Beyer-Garratt to him it was no surprise to receive an order for the GER 'Decapod'.

The engine

The 0-10-0T 'Decapod' was built in 1902 as a response to new electric tramways and proposed underground lines. One of the benefits of the trams was swift acceleration which existing steam locos could not match; so the experimental 'Decapod' was built. With its large 200lb/sqin boiler and ten coupled 4'6" wheels it was designed to out-accelerate any steam loco of the day and in trials near Chadwell Heath it reached the stated goal of accelerating a 300 ton train to 30mph in 30 seconds; however it was far too heavy, its coal bunker far too small and the cost of strengthening bridges and lines would have been far too high.

After the trials it was put in storage and finally cut up in 1906 when some of its parts were used to build a particularly ugly 0-8-0 tender engine used to haul coal trains.

All the published material says that it was never painted in GER livery, but was always 'works grey', whatever shade that was, and lined black and white. However the customer had sent a tinted postcard of the engine in what appeared to be GER fully-lined passenger engine livery. When I telephoned him he told me he already had one engine in grey (the 'Hush-Hush') and didn't want another so GER royal blue it was to be, lined black and red with the inside frames yellow. (See *Great*



Eastern Locomotives, Past and Present, C. Langley Aldrich, 1967)

I build engines and if absolutely necessary I will paint them, usually black. From this you will gather that I have never really concentrated on the finer aspects of painting and lining but unfortunately it is at times like this that I wish I had. I felt that professional painters would be reluctant to put their name to what would be a fictitious livery for this engine so I would have to do it myself; what you see is my attempt at GER livery using aerosol acrylics and HMRS red lining.

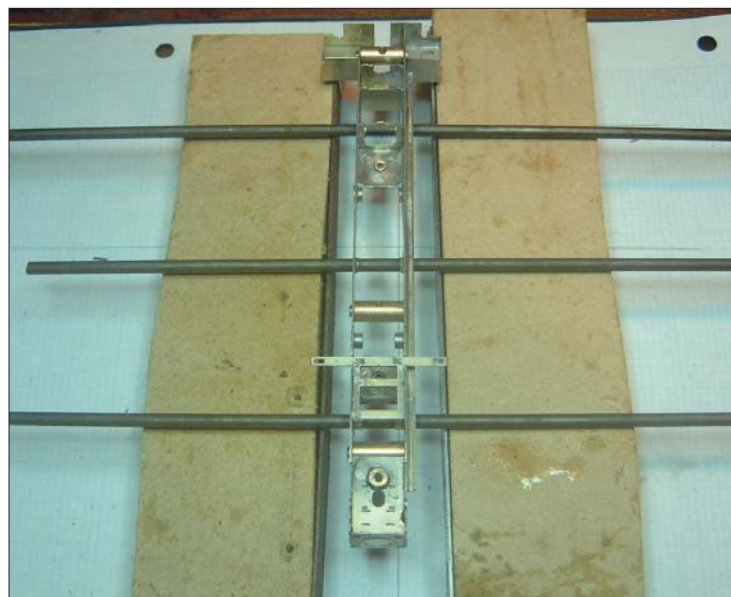
The kit

This South Eastern Finecast kit has been in production for seven or eight years. It is up to the firm's usual high standard of mixed-media kit with a chassis in 15thou nickel silver, etched detailing parts in 12thou brass and from the footplate up the superstructure in whitmetal. Most small items are cast in whitmetal, with the slidebars and

piston/crosshead assemblies in lost wax brass. The box is large enough to contain the finished model but not straight brass wire. It is not worth trying to straighten the coils supplied so I substituted lengths of Alan Gibson's products. Finally there is a sheet of vacuum formed glazing.

The instructions consist of two clear exploded drawings with parts identified by number, a list of components and a two-part (chassis and body) text with the main areas split into convenient paragraphs. There are also four photographs of the completed unpainted kit from various angles. In common with all Finecast kits there is a set of guidance notes on building mixed-media kits which will be of assistance to those building their first loco.

I completed the kit with the recommended Romford wheels, one set plain and one set insulated (with a flangeless pair for the middle set as the prototype), a DS10 open frame motor and Finecast gear mount with Romford 30:1 gear and worm. As the kit came to me the



bag of brass bits was missing. These are the axle bearings, nuts and bolts, turned spacers, handrail knobs etc. Following a telephone call to Finecast the bag duly arrived two days later and I could start.

I built the kit for myself three years ago so was aware that there would be few problems with assembling it, but that crankpin clearances would be tight; more of that later.

The chassis

As usual I started with the chassis. From my previous experience with the kit I knew that with care it builds into a strong base for the heavy engine. There are three turned brass spacers with bolts and more than sufficient etched nickel silver spacers, with sets for 00 and EM/P4.

My previous experience of this and other Finecast kits told me that the slot and tab accuracy would be first class and this turned out to be the case. I also knew that the relationship between the bearing and coupling rod holes would be spot-on. Although the chassis frames have half-etched cut-outs for springing or compensation, the chassis was to be rigid.

The holes for the top-hat bearings were etched slightly small and required opening out with a cutting broach and with ten of them the result was sore fingers. It is also prudent to check for and remove any parting burrs on the end of the top-hats otherwise there is the risk of opening the holes to get a push fit for the burr, the bearing then being sloppy in the hole. The ten bearings were soldered into the frames and because of the length of the frames I also decided to solder a length of rail to the outside of one to keep it straight while assembling.

Of the L-shaped spacers, two have third legs to fold through 180 degrees, forming a substantial spacer and base for the pickups. It is easy to fold them the wrong way (I know); follow the diagram! The rear tank bottom was folded to shape and each fold given a fillet of solder.

With half the spacers and tank bottom soldered to each separate frame I assembled the chassis on my homespun but trusted jig, (see photo, *left*) which features:

- * Mirror glass so everything is flat
- * Graph paper to sight against
- * Two 6" rules on edge, held upright by small MDF blocks
- * Three long 1/8" rods through the front, centre and rear bearings resting on the rule edges.

The brass spacers were bolted in, checking for squareness of the frames by sighting the rods and frames against the graph paper and checking that all three rods were firm against the ruler edges. The rear spacer will be left in place and the hole in it must be vertical; the bolt to hold the body passes through it. The nickel-silver spacers and tank bottom were each clicked into place to the 'other' frame, again checking in all dimensions before moving to the next one.

Some kits are designed to make a bolt-in sub-assembly of cylinders, slidebars and



motion brackets and many can be adapted. In this case the cylinders fit from beneath the frames but the motion bracket frame fits from above so it is difficult if not impossible to adapt. The decision not to make a sub-assembly having been made for me, this item was also positioned in the frames.

Once satisfied that the assembly was square in all aspects each spacer was tack-soldered to the 'other' frame, again checking after each one that nothing had moved before finishing the solder seam. The tank bottom and motion bracket were also tack-soldered and the frames checked before their solder seams were completed. There is another footplate support at the front of the frames and this together with the representation of the middle cylinder also acts as a spacer. Once they were soldered in place the assembled chassis was strong enough to allow removal of the piece of rail and the front and middle brass spacers.

A square and parallel chassis is the bedrock on which a successful engine is built. From the above description it can be seen that building this particular example required careful planning and care at each stage. It doesn't take much longer to build correctly but the time saved in the long run is well worth it. At this stage the chassis was cleaned, then all five wheelsets were fitted and the chassis was trundled along to check that all was well.

Coupling and connecting rods

Following my normal sequence, the next stage was to make and fit the coupling rods and check quartering. The rods were two layers sweated together, in one length each layer, with half-etch guides if you wish to split them into individual rods. There was very little land from these guidelines to the holes for pinning the rods together and it helped to run the end of a rat-tail file in the half-etch to ease the splitting.

With sixteen separate pieces looking much the same there were many opportunities to make mistakes, so following the diagram closely I took one rod at a time from inner and outer halves and sweated them together. After the basic sweating I flooded the top edges so that they could be filed back to give the appearance of being machined from solid bar. To join the rods initially I tried 0.5mm brass pins but the holes were etched slightly larger which together with crankpin clearances

would have meant an unacceptable accumulation of slop from one end of the chassis to the other. Instead 16BA nuts and bolts were used with the nut soldered to the bolt at the front of the rod, a paper shim behind the nut stopping solder from invading the whole thing and gumming up the works. Quartering was straightforward, having assembled the chassis and rods with due care, and was done from the rear axle forward.

On the front rods the outer layer of the front boss was filed off to give more clearance behind the slidebars.

The connecting rods were also sweated together at this stage. After fettling the crosshead castings to make them a sliding fit in the slidebars each con-rod was secured with a 16BA bolt from the back, soldered to the front of the crosshead.

Once the basic chassis pushed along easily the motor was fitted to the centre axle to check a number of things. The first check was how to tie the motor to the chassis once it was finally installed. Then the footplate casting was put in place to check that the various spacers and supports fitted where they should and that the motor didn't foul. At this stage the bunker back casting was checked – which includes the buffer beam – and the two-piece front and buffer beam were also positioned to check the length of the chassis.

Cylinders and slidebars

The cylinders and their cover plates are cast in whitemetal and fit to a folded etched stretcher designed to be bolted between the frames. The cylinder castings have a recess front and back into which the ends of the stretcher should fit, giving the correct spacing of the cylinders. I have found on both kits I have built that these recesses have to be opened out a considerable amount for the stretcher to fit.

As part of each slidebar assembly there is a rear protection plate which is very evident in photographs of the prototype. In the kit photographs it has not been fitted and from my first kit I knew that clearance behind this assembly was tight. Accordingly when I assembled the whitemetal cylinders to the stretcher I checked them against the footplate and moved them out slightly beyond the edge. The holes in the stretcher for the slide bar bosses also had to be extended to fit.



There were the usual frustrations of soldering whitemetal to nickel-silver. After tinning the outer faces of the stretcher with normal solder the cylinder casting was positioned, liberal amounts of flux applied, and low-melt solder introduced from around the side of the etch. Then when each cover plate casting was soldered in place, inevitably the main casting desoldered itself and moved. This process had to be repeated a number of times until I had an assembly with which I was satisfied. I find that cursing is a useful technique to apply to jobs like this.

The rear protection plates were attached to the slidebars and the fit of the crossheads checked before soldering the slidebars to the cylinders. The slidebars have round bosses which fit in the holes in the rear cover plates and the extended holes in the stretcher. The cylinders were bolted to the frames and then each slidebar positioned in the cylinder in turn. It is at times like this you wish for a third hand. With the frames upright and the slidebar held firmly in a vertical position with locking tweezers, a small amount of low-melt solder was run into the joint between boss and cover plate. The bar was then checked for its relationship to the frames before the final joint was made. I lost count of the number of times I had to repeat the procedure. Once again the cylinders and/or cover plates would conspire to un-solder themselves, or the bars would to be correct in only one out of the two planes. However I was eventually satisfied; and then there was the second to do! It is probably the most critical job, ensuring that the bars are positioned correctly.

With the cylinder/slidebar assembly in place the final job of attaching the rear motion brackets to the frames was straightforward. Firstly they were folded and sweated together then positioned below the footplate supports. Some filing of the little tabs on the front of them was needed to achieve a correct fit, with the bracket vertical and the slidebars still square to the frames. The brackets were then soldered to the frames but not to the cylinder assembly which was removed for separate painting.

Front steps

At first glance the one-piece brass etch for the front steps looks complicated, but after studying the diagram closely the various folds make sense (you get a second chance because

there are two brass frets). The main point to watch is that the bottom step on each side is level; any error here will really stand out on the finished model because it is level with the bottom edge of the frame.

The final fold brings two small tabs to fit in slots at the rear of the assembly. By letting these tabs find their own position in the slots when the step is horizontal and the tabs not necessarily inserted fully, they can be soldered in the slots with the assembly square. The middle steps were sprung in place, soldered level and the other folds given solder fillets. The assembly was then soldered to the frames.

Brake hangers

I always make brake hangers and pull-rods a sub-assembly so they do not interfere with installing the wheels. For this engine there were no problems although the brake hangers and shoes are small; thoughtfully spare sets are provided on the frets.

Two pieces of insulated sleeper were cut and soldered between the frames. Four pick-ups of 0.3mm hard brass wire were soldered to them. Apart from some small whitemetal castings to solder to the frames the chassis is now complete. After scrubbing with Ajax then Viakal and degreasing in 'gun wash', it was ready for painting.

Wheels

There are five sets of balance weights to glue to the wheels. The first and fifth sets of wheels are the same, but the other three are different. It was only while they were being installed that I found I had fitted two insulated wheels for the second axle and obviously two plain for the fourth set; at this stage they had already been painted. However many models I have built I still make mistakes, usually caused by running out of midnight oil.

Painting

After masking the bearings and rear motion brackets the frames and brake assemblies were sprayed with Halfords grey acrylic primer followed by the same firm's satin black. Yellow does not paint on top of black so the inside frames were given an intermediate coat of brushed white enamel followed by two coats of brushed yellow. The cylinder and ashpan areas were left black. The rear rail guards were also painted white then red.

On the cylinder assembly the slidebars were

masked and then the cylinders and stretcher primed and painted with Halfords Ford Royal Blue. The cylinders were then masked leaving the front and rear cover plates and steam pipes uncovered which were sprayed satin black. After unmasking the cylinders a single red line of HMRS lining was applied around the black edge of the cylinder cover plates. A final coat of Railmatch satin varnish completed the painting of the cylinders after which the slidebars were unmasked and the protection plates brush-painted 'oily steel'.

Although GER passenger engines of the period had red-painted coupling and connecting rods, the photograph sent with the order had them unpainted and I felt that looked better so I left them unpainted.

The axle-end covers are half-etched and quite delicate so I spray-painted them Royal Blue while on the fret. The postcard that the customer sent had a faint indication of lining on the round axle-end so I lined them red with a bow pen to the best of my ability.

The body

Along the footplate and under the boiler there are cylinders, tanks, sandboxes and so on. It was evident that if the boiler/smokebox was attached to the footplate before painting, masking the blue boiler to spray-paint these black would be difficult so the boiler/smokebox was to be kept as a separate unit and glued to the footplate and firebox after painting. This would also make lining the boiler bands much easier.

The standard of castings was generally very good. The only fault was a small chip in the footplate edge which was easily repaired by puddling a small amount of 70 degree solder on to the edge and dressing back with small files. The mould lines on the firebox, boiler and smokebox were minimal. The cab/bunker sides were the only parts where significant amounts of metal had to be removed to achieve a fit between the spectacle plate and the bunker back; this is mentioned in the instructions.

From my previous experience with the kit I knew of two areas where clearances would be required. The top of the forward water tank needs material removing depending on what motor you are using and which axle you are driving. The second area is the inside of the water tank to clear the rear crankpins.

The cabside openings are thinned as they are cast. However the cab windows are not and a little time spent with a small file reducing the thickness of these is well worth it.

Wherever possible fittings such as lamp irons, handrail knobs, clack valves etc were soldered from the back of each piece before it was attached to the superstructure. The main handrails which run between the steps and the smokebox were not fitted at this stage but left to be placed after painting and lining. Similarly the smokebox door was completed with closing wheel, handrail knobs etc before fitting but in this case the circular handrail was formed, trimmed so that the two ends fitted inside one knob and then soldered in place. Chimney, dome and other boiler fittings



were soldered before the boiler and smokebox were soldered together.

My usual practice is to substitute staples for the etched lamp irons in kits which are usually far too flimsy; staples when soldered firmly using Baker's Fluid flux will not bend or come adrift. However this engine would not have a hard life on a layout so I used what was in the kit. They are formed from both normal and reverse folds and are quite tricky to do without flooding them with solder and losing their shape. Fortunately once again there are spares.

For the main structure I followed the sequence described in the instructions which uses the firebox as the datum from which to position the other parts on the footplate. Once the fit of parts is established soldering can begin. Following this sequence it is possible to solder mainly from the inside. For whitmetal soldering I find it best to tin at least one of the parts and very often both, making sure there are no large blobs. A little solder run along the outside of the seam completes a neat job.

The only part that was reluctant to fit was the rear of the cab. This was because I had been generous with solder when attaching the rear retaining nut; after all it has to stay in place for a long time. A little time with a file and it fitted perfectly.

There are pipe runs from the Westinghouse pumps along the boiler and footplate to be shaped from 0.7mm wire. The two along the footplate were soldered in place, then the rear sandboxes were soldered on. The other two go to the smokebox; they were shaped but left to be glued on after attaching the boiler to the footplate. The roof was checked for fit once the cab was assembled. The final job is attaching the more vulnerable parts such as coal rails, guard irons and buffers.

I usually break whitmetal vacuum pipes when I give the model a final vigorous scrub so these days I substitute them with brass ones from the spares box. The middle cylinder and front steps assembly prevents the fitting of a sprung coupling hook at the front. A hook was cut to length and this together with a screw coupling was soldered to the buffer beam. The cab fittings were left to be painted separately and glued in.

Finally the two assemblies were cleaned

then set aside under cover for a couple of days to dry thoroughly.

Painting

Both assemblies were first primed and then painted Royal Blue. After a couple of days for the paint to harden, the blue was masked appropriately to overspray with black. On the boiler assembly there were just the smokebox and boiler bands to paint black. On the footplate assembly all the panel centres including the Westinghouse pumps and rear sandboxes, valances and firebox were masked. The bunker back was particularly tricky to cover with steps, lamp irons, destination board hangers, handrail and vacuum pipe all getting in the way. This left the footplate, and all the panel edges including the well tank to be sprayed satin black. After removing the tape it was with some relief that I found black had not drifted under any of it.

The boiler bands and all the body panel edges were red lined again with HMRS lining. The cab roof which had already been checked for fit was sprayed white on the outside and light brown underneath. The cab interior front and back were brushed black, the sides light brown and the floor grey. Finally the pair of number plates was painted red. When dry a gentle rub on a sheet of 400-grit wet-&-dry brought up the brass surround and number; any paint remaining on the edges was scraped off carefully. The plates were glued to the bunker sides. The final job on the body was an overall coat of satin varnish from Railmatch.

Assembly

After the gaffe with the balance weights was corrected the wheels were finally installed in the chassis. A dab of enamel paint inside the axle nuts was used as a retainer. The axle covers were removed from the fret and the edges carefully cleaned. A dab of superglue was applied to the back of each and then it was fixed to the wheel by screwing in the crankpin, again with a dab of paint to act as a retainer of the pin, holding the centre of the cover over the wheel nut to allow the glue to go off. The drive was to the centre axle. One wire was taken back underneath the bunker to

be fixed to the rear spacer with the body bolt, the other to the pickups. Pickups were covered with thin sheathing from very thin multi-strand wire from Maplins and taken to the four flanged insulated wheels.

In order to allow the coupling rods past the axle covers, small washers were put on the crankpins and then the coupling rods installed. The front wheel crank washers were filed as thin as possible. At this stage the con-rods were installed to the cylinder assembly which was then fitted to the chassis to check that the front wheel crankpins passed without fouling. Once this was achieved the cylinders were bolted home, the slidebars soldered carefully to the rear motion bracket and the con-rod installed to the centre wheels. Two small washers were used between the connecting and coupling rods so that the con-rod moved as parallel to the chassis as possible.

The brake gear was fitted and finally the pickups adjusted. There is very little room for these with the brake gear and springs. I ended up with each wire going between the spring hanger and spring with enough sheathing to insulate. That means there was very little springing left in the pickups and if I was to do another 'Decapod' I would rethink this aspect.

The final bolting of the body to the chassis revealed an area of clearance that I had forgotten about from my first model. In order to fit a sprung coupling at the rear a small cutout is needed in the rear tank bottom. That was done with the chassis in place, carefully, and the cutout repainted. Once the coupling was in place all that was left was to fit the main handrail run from the firebox to the front steps.

Summary

This is not a kit for the beginner. Firstly the 10-coupled chassis has to be built to a high degree of accuracy if the finished model is to run well. Secondly there are a number of techniques used in assembling the cylinders and slide bars that are more advanced. The clearances even in 00 need attention.

However do not let these put you off. The kit builds into a very good representation of the engine. It has a weight and presence that you can imagine the prototype had. As for the ivory; that is a matter of taste.

GWR duplex milk wagon

Built from the Falcon Brassworks 4mm scale kit

Milk tanks were once a common sight on the railways. The model is described by **ERIC LOBB.**

I needed some milk tanks for my layout *Tavistock South*. I had already bought some Lima models but was not entirely satisfied with the appearance of them, e.g. huge flanges, out of line overscale brakes, although some serious weathering can work a small miracle.

I therefore figured that an etched kit of a twin tank variant would be an option, that this would add some variation, and finesse to a rake of similar wagons, and be a quick option. Not so the latter I found.

Construction

I ordered a kit from Falcon Brassworks. The instructions leave quite a bit to the imagination, and do you no favours if you have never built an etched kit before, although Falcon does offer the use of a help line if you have any problems.

The first two operations for the chassis and solebars are straightforward folding jobs. I use home-made folding bars in a vice which are made from two 12" x 1" lengths of aluminium angle pinned together with a sliding fit in one side, with steel roll pins to maintain parallelism.

The timber tank supports are supposed to be fitted to the chassis next but I found that there were not enough on the fret and that they were very fiddly to solder up. I decided to cut the extra two I needed from a solid piece of brass 2mm thick, which also added some weight to the chassis.

The tanks are needed next and can be rolled in the same way as a loco boiler would be. Some modellers find the need to anneal brass before rolling but I found this was not necessary. I used a set of home-made rollers for mine, but 'V' blocks and a dowel will do the trick if you work carefully. If 'V' blocks are not available then a good substitute is a piece of good quality aluminium angle held in the vice



channel uppermost. Then the boiler or tank can be pressed gently into it with a dowel.

The instructions suggest that the tank lower edge is trimmed until it fits around the tank ends snugly, into a small recess cast into the edge of the whitmetal. Small recess is an understatement, as it is minute as castings go, but having said that, it is very accurate and only had the minimum of flash remaining. In order to remove this to make the tank tube fit snugly I very carefully ran the blade of a piercing saw around the lip to clean it out.

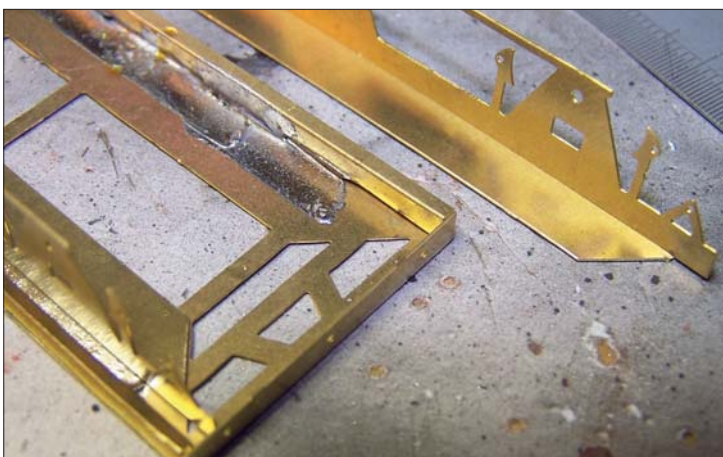
The inner ends were fitted first using cyano glue ensuring that the holes in the top of the

tank were at the correct ends, as the vents are towards the middle of the wagon not the outer ends. The bottom joint was then soldered up from the inside keeping the job as cylindrical as possible with my fingers protected from heat transfer by small squares of cardboard.

Above: the completed model, with a Lima tank for company, is seen on the author's layout.

Below left and right: chassis under construction, with part-finished unit visible in the background of the rolled tanks. Note the holes for the vents as mentioned in the text.

Photographs by the author.



The outer ends were then fitted ensuring the cast timber brace was perfectly horizontal and at right angles to the fittings holes in the top of the tank.

The only photo I could find of one of these vehicles was of W2935 in Jim Russell's *A Pictorial Record of GW wagons* ISBN 902888081. I'm unsure if this book is still available.

Here was the first major deviation from the notes and drawing I had with the kit, in that the photo showed stanchions and a timber brace between the tanks, and Morton brakes, with the brake lever over the right-hand wheel and the V hanger central between the middle and right-hand axle on each side respectively.

I made up stanchions from T section microstrip and a timber brace from square plastic section. This had to be filed to the same profile as the tank ends. When fitted there were gaps between the tank ends and the timber so I filled them with green filler putty.

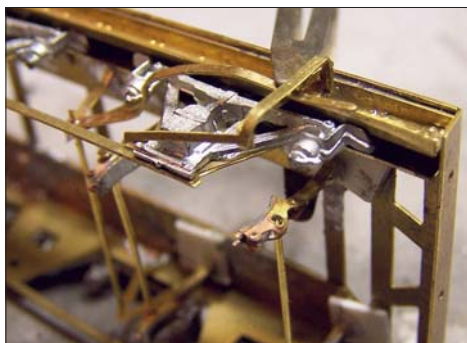
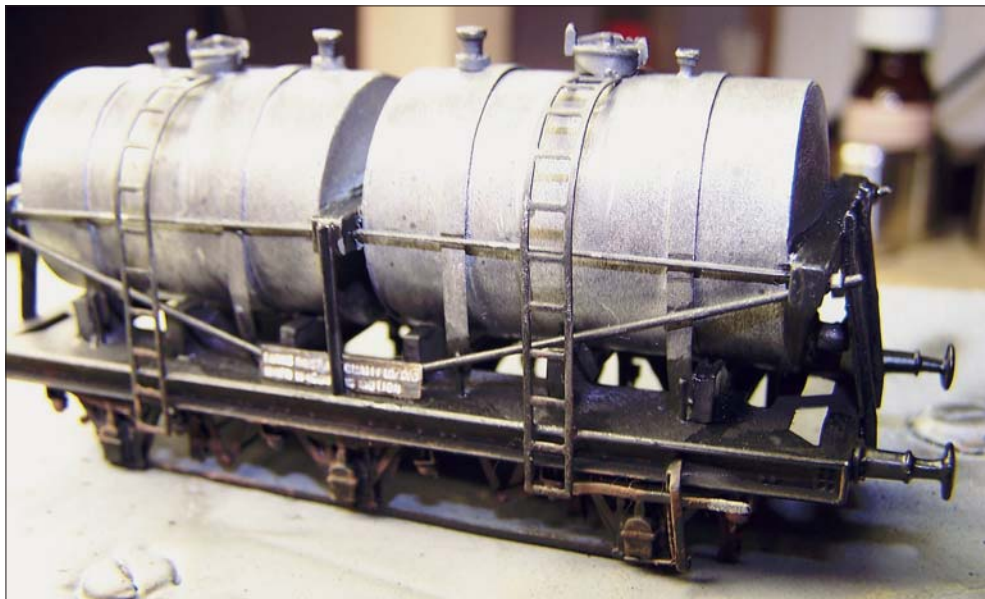
The Dean brake lever brackets and the out-of-line under-nourished brake shoes were removed and replaced with new Morton levers, V hangers and clasp brakes from Michael Clark's Masokits. A pack containing additional Morton levers was also needed. Some of these components are very tiny, but if you follow the instructions carefully and take your time the end results are very pleasing.

The three W-irons for each side are formed as one piece and only required folding so that they fit squarely under the chassis. The inner edge of the folded top edge needs to sit parallel and flush to the edge of the openings in the chassis floor for 16.5mm gauge. I found that these parts were just a fraction too long to fit behind the buffer beams, and both needed to be trimmed at one end only. It is best if a pencil mark is made on the right-hand end of the two parts and on the chassis at the same time and then the two parts are held hard up against the left-hand buffer beam after trimming so that the axle bearings remain in line.

One last job before fitting the W-irons is to clamp them in place, turn the chassis over and mark with a scribe through the top on to the folded section, and then trim this off so that the daylight is preserved through the chassis members.

The wheels were popped in and the whole thing tested on a piece of glass to ensure that all was square. The spring/axlebox castings are very crisp and accurate and there was very little flash. In fact this was the case with all the castings including the buffers which sometimes suffer from misalignment when cast. The axleboxes were fitted to the W-irons with two-part epoxy resin.

The tank straps were aligned over the tanks after tinning with solder and then very carefully tacked down. These straps need to be fitted with threaded sections on the ends prior to fitting to the chassis and these were made by cutting the straps to the correct length and then soldering an over-length piece of 0.5mm brass wire to the ends. You need to see a photo of the prototype for the arrangement of this detail. Most tank wagons with securing straps have the same type of fitting. The ends were



then marked where they had to go through the chassis, drilled and soldered on the underside.

Before finally fitting the tanks I drilled the ends of the stanchions to take the diagonal support rods and the long tie-rods joining the stanchions end to end. Having done this with the tanks assembled I wished that I had drilled them in their component state as I snapped a tiny drill bit in the whitmetal which resulted in carving away the material until I could get hold of the broken tip with pliers to remove it. I then had to build up the damaged part with green filler putty and a 16BA nut from an old kit.

Before fitting any of the detail parts the whole assembly needed to be cleaned with a brass wire brush, to give a good key for the cyano glue used for the white metal details, because I find it impossible to solder them without a disaster occurring.

The etched ladders in the kit are not that good looking as the stiles are flat face on, and the rungs are flat instead of rods. If they all fall off in use as one already has, then I will replace them with something better.

Painting

As with any model, cleanliness is essential before paint is applied and a wash in warm soapy water is best. If the water is too hot some cyano-glued joints may fall apart and this would have been about 25% of the kit in my case.

When thoroughly dry I sprayed the model with grey acrylic car primer. When this was dry I sprayed the underframe with acrylic matt

black. By holding a piece of card close to the model a lot of over-spray on to the rest of the body can be avoided.

The tanks are clad in aluminium and the best way I have found to represent this is with Metalcote aluminium from Humbrol. When first applied this paint looks like paint, and nothing like metal. When dry to the touch, and this is quite soon after application, the surface needs to be buffed with a cotton bud, or in my case I used a soft nylon cup-shaped brush in a mini drill. The surface is then just like bare sheet metal. The remaining details were picked out with a brush.

The tanks of these wagons were always in a filthy state on the outside, and did not give a clue to the layman that foodstuff was conveyed in them. I have tried to replicate this with some heavy weathering applied from an airbrush, but it is important to let some of the original colouring shine through from beneath, otherwise it can look as if the wagon has been poorly repainted.



Wheels

I have used Jackson wheels and these also needed to be weathered. I push the wheelsets into punched holes in a piece of card the same thickness as the wheel tread, I have a metric wad punch set from Squires. This is a relatively cheap punch set and for modelling purposes will last for ever. Cut on to a block of hard wood (but not the parquet flooring). The wheels are sprayed or hand painted without any paint getting on the treads. This is particularly useful on loco wheels.

Overall I found that this was quite a pleasing kit to construct. I hope that the photos give a good impression of the finished model. For those who are interested, I took them with a Kodak DX 6490 digital camera.



...an exchange of railway modelling ideas for beginners of all ages

Aston Yard

An 11-year-old modeller's compact 00 gauge layout

This Midland Region-based freight depot was built by **STEVE MITCHELL**.

I have loved railways from a very young age and had my first layout when I was about five years old. Shortly after this, I was taken to the local model railway club and let loose behind the club's layout.

From then on, it was only a matter of time before I had my first exhibition layout, a 00 gauge, called *Manor Farm Road*. This layout was built to run any stock that I wanted to, and soon I was taking it to local exhibitions. The next layout to be built was an N gauge one called *Stone Rock*. This has also been displayed at a number of exhibitions and I sometimes still run it.

Aston Yard

This is my latest layout and is a model of a small freight yard. It was designed by taking ideas from books, other small layouts seen at exhibitions and layouts featured in *RAILWAY MODELLER*. It was also influenced by the St. John's Mickleover Model Railway Group's layout *Farkham* (see *RM* April 2005). I have seen this model progress at the club and I like the industrial and urban look it has.

I could only have a small layout as it has to be kept in the garage. It also had to be designed so that it could be operated from both sides, the rear at exhibitions and backed up against the garage wall at home. Hopefully, the layout shows that, even in a small space of 5' x 1'6", you can have quite a lot of track without making it look overcrowded.

Location and period

The next job was to choose a location and era to be modelled for the layout. My local model railway club in Derby has a large British Railways Midland Region steam following,



also the nearby preserved railway lines have many Midland Region locomotives. Both of these reasons helped me to decide and it seemed quite a nice idea to base the model around this period.

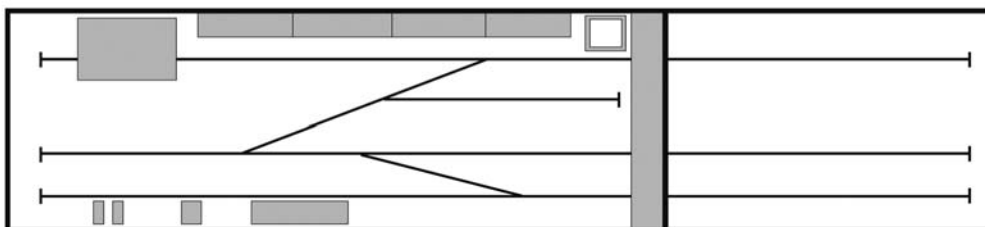
Track and electrics

Peco Streamline code 100 track has been used on the layout, with the points being operated by brass push rods. There are three exit roads to the fiddle-yard area, which give the impression that the model is a small part of a much

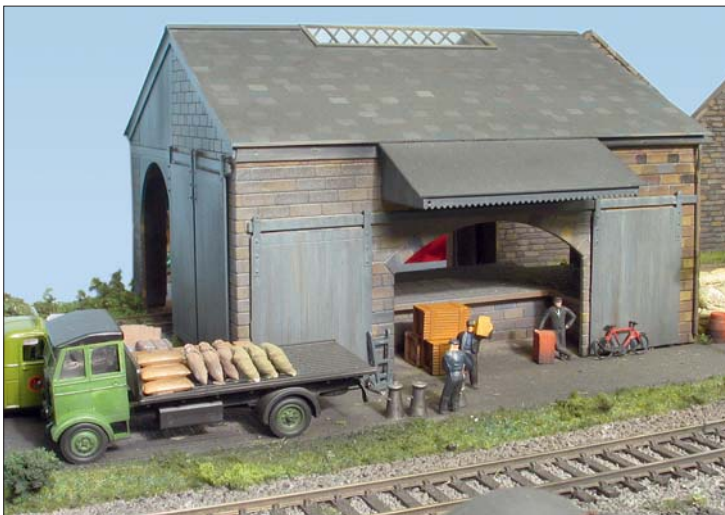
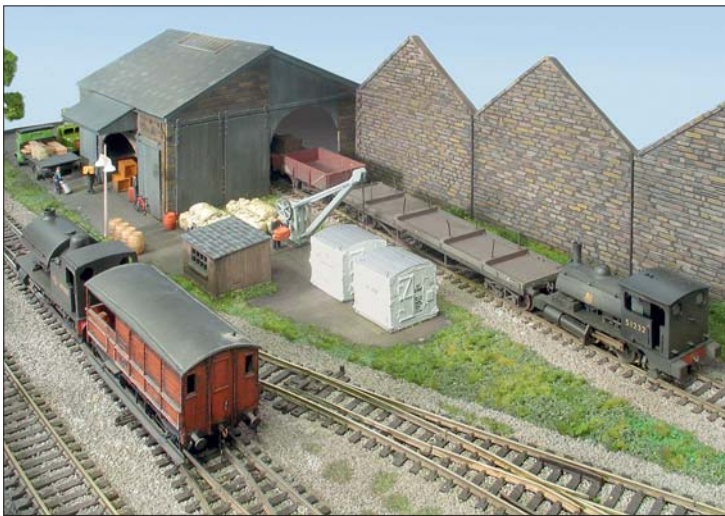
larger location. The layout has been wired with many isolating sections, which makes operating it more interesting and enables more than one locomotive to be in use. Unfortunately, sometimes it can look a bit like Clapham Junction! Control is through a Gaugemaster hand-held unit.

Scenery

The layout only has a few buildings, which have all come from the Wills and Ratio ranges and are mainly of stone construction. Quite a lot of time was spent in painting them, including picking out individual stones in different colours to make them look realistic.



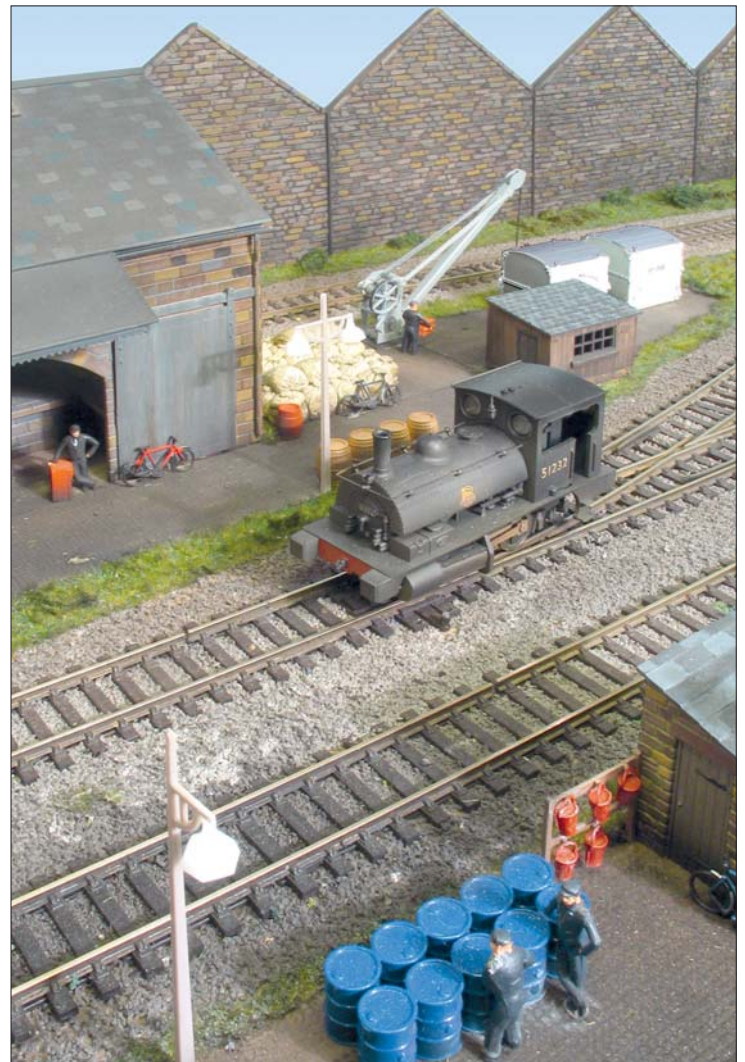
Above: a busy time at Aston Yard with *Prairie 2-6-2T 4573* reversing its train, while *Class 08 diesel shunter D4182* collects a 16T mineral wagon that has been unloaded by the local coal merchant.



Top: Kitson 0-4-0 saddle tank 47005 arrives with a brake van for the next departure, while ex-L&Y 0-4-0ST Pug shunts wagons through the goods shed.

Above: the goods shed on *Aston Yard* was built from a Ratio kit with the stonework picked-out in different colours. The end result is very realistic.

Above right: portrait, with Pug in centre. Many small details have been added to the layout to give a more realistic feel to it.



The ballast is Woodland Scenics. This was put down dry, wetted with water mixed with washing-up liquid, before diluted PVA was finally applied to it. The small amount of 'green' scenics on the layout also came from the Woodland Scenics range.

Rolling stock

The locomotives and rolling stock on *Aston Yard* are mainly ready to run, but they have all been weathered to make them look more

realistic. All the stock is fitted with three-link couplings which give a better look, even if they can be a little difficult to hook up at times! Many of the wagons have also had loads made, which can be removed or added when shunted into the goods shed.

The main locomotives used on the layout are: Hornby ex-L&Y 0-4-0ST Pug; Bachmann Standard Class 4 4-6-0; Bachmann 45xx Prairie 2-6-2T – a Western Region interloper! – Lima Class 47; Lima/Bachmann Class 20; Bachmann Class 08.

Other visiting locomotives sometimes appear, which people kindly lend me.

Thanks

Thank you to my Mum, Phillipa, and Dave Roome for all their help and support in building *Aston Yard* and for taking me to the many exhibitions over the years. Thanks also to the St. John's Mickleover Model Railway Group and Stuart Ward for inviting me to the Derby and Mickleover exhibitions each year and the experience I have gained in model railways from this.

Aston Road is the best layout I have owned up to now, but I do hope to have more in the future.

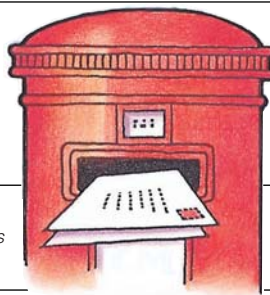


Left: Class 08 diesel shunter D4182 rests between duties at *Aston Yard*.

Photographs by Steve Flint Peco Studio.

READERS LETTERS

We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.



SEATHORPE – MORE INFO

Thank you to Bryan Blaxhall and RM for bringing us the *Seathorpe Branch* (RM January) with its reminiscences of Southwold (Seathorpe) and Walberswick (Walbeach). Readers may be interested to know that it may not be entirely the fiction that Bryan implies.

In the 1890s the narrow gauge Southwold Railway (SR) made an approach to the Great Eastern Railway (GER) with a view to being taken over. The GER's Engineer undertook a survey and valuation of the SR and there was a period of unsuccessful negotiation between the two companies. In 1900 another approach was made by the SR and the GER board asked its Engineer to review the earlier valuation and also to report on the cost of constructing a standard gauge line from Saxmundham (or Leiston on the Aldeburgh branch) to Southwold.

The survey shows the proposed route as leaving the East Suffolk line at Saxmundham, a little north of the junction for the Aldeburgh branch, then running through sparsely-populated country passing close by settlements at Middleton, Westleton and Dunwich before crossing the navigable River Blyth by swing bridge at Walberswick, from where there were three alternative approach routes into Southwold itself. The GER board decided not to pursue either option, rather spending considerable sums of capital previously committed to the construction of the Norfolk and Suffolk Joint line and elsewhere.

The original GER maps, gradient profile and cut-and-fill diagrams survived and will shortly be returned to me at the end of their 5-year loan to the Southwold Museum, which has an interesting collection of SR artefacts. (There is an active Southwold Railway Society with ambitious but practical plans to revive the narrow gauge line; the Membership Secretary may be written to at 1 Darwin Court, Fieldstile Road, Southwold IP18 6LY.)

So Bryan's inspiring *Seathorpe Branch*, along with the earlier magnificent *Dunwich* layout by Messrs Jackson, Phillips and Kent, has some factual precedent. I am currently developing detailed plans and constructing stock for my own version of Southwold (Town) in 7mm, also based in the mid-1950s – I can smell the brewery mingled with exhaust steam even now as I make my way to a pint of Adnam's in the station buffet!

MIKE BOOTMAN

MODEL RAILWAY LAYOUTS

Congratulations to Peter Whitworth (January 2005 edition) for creating a real model railway layout in which trains actually travel from A to B. The use of a reverse loop is inspiring.

The vast majority of designs in your

magazine cannot be described as model railways. They are no more than beautifully-modelled scraps of countryside which happen to have a railway incorporated. Whether this is a station, wharf or townscape, the railway is of secondary importance to ensuring that detailing of the model buildings is accurate. Railways are intended to do something; either to transport passengers or goods. A snapshot of one station can never convey this concept.

Off-screen shunting by the 'hand of God' cannot be considered to be normal railway practice even for the GWR and should never be contemplated if a display purports to be the model of a railway.

Please can we have more layouts of the Whitworth type and less of the 'little bit of England' scenario.

A.V. (TONY) RETALLICK

SMOKE UNITS

I would be interested in my fellow modellers' opinions and experiences regarding smoke units.

Back in the Sixties I had a Tri-ang SR L1 loco with smoke that appeared to work fine to me, but since then very few have been produced with the unit fitted.

I have heard say that they can overheat and melt the bodywork of the loco and if this is true, has anyone found a cure for it?

Currently, I have locos ranging from Terriers to 9Fs and I would like to put these units in all of them, but I need some information first regarding their reliability etc.

Can anyone out there help me please?

B J DAVIS,
63 Cannon Grove, Fetcham,
Nr Leatherhead, Surrey KT22 9LP.

PO WITH A FAMILY CONNECTION

In the early years of the 20th Century my Great-Grandfather owned brick fields near the Great Eastern Railway at Carterhatch, but unlike at his other brick field at Hertingfordbury on the Great Northern Railway, no siding was installed and he conveyed materials, bricks and tiles to and from the nearby Churchbury station.

He is said to have owned a few 5-plank and 7-plank wagons and although no photographic evidence has been discovered I have commissioned Dapol to produce a limited edition run of 100 7-plank wagons (see *photograph – Ed.*). It is based on the



recollections of long-deceased relatives and therefore some licence has been used in the production.

Each wagon has a numbered certificate and some are still available at £8.75p each including P&P.

PETER PAYE
12 Audrey Gardens, Bishop's
Stortford, Hertfordshire, CM23 3EP.

DCC – AND ZERO 1

As a regular reader of your magazine since the early 1960s I have always felt somewhat inferior to the high level of information that has regularly been published and enjoyed as part of the learning curve to our wonderful hobby. However I now feel that perhaps I can make some contribution, if recent contributions re Zero 1 are anything to go by. I refer to *Converting Milford* by Tony Kell (Oct. 2005) and the letter by David Plume (Dec. 05).

I cannot only claim involvement in Zero 1 from its inception, I still operate a 14' x 16' loft layout using the system with total satisfaction. I have heard all the stories of 'other peoples' experiences', including wheels being welded to tracks etc.! All on 18v AC, 4 amps! The only problem I have had was the failure of the original keypads on the control box, however careful circuit-following and replacement of the pads with miniature push-on, spring-off switches solved the problem.

As a comparison with the modern DCC systems (excluding the add-on features such as whistles, sounds etc.) the running operation of locomotives with Zero 1 is exactly the same. I have ability to double-head, opposite-direction running and 4 different inertia speeds and 4 controllable locos running simultaneously. More than enough for good interest and control. David Plume has remembered his experiences well with the exception of addresses on the chips. It is 16 not 8, and I do not find any more problems with cleanliness than most operators: all I need is a 'spirit-dampened' lintless wipe along the rails perhaps after every 4 to 5 sessions to keep everything running satisfactory. I have a stud of 25 locos (Hornby, Bachmann, Lima, Airfix and Mainline) with some duplicated addresses – which allows for instant replacement when locos need service – plus 7 service modules operating 26 Peco point motors.

Why Zero 1 failed is a mystery to me: perhaps it was too advanced for its time or dare I suggest (tongue in cheek) it was only British.

A LIBBY

Now that both Bachmann and Hornby have ventured into DCC, I think it is high time for those of us who do not want this encumbrance to make our voices heard. We are already paying the price for a lobbying campaign that

has had more spin than a trainload of washing machines!

For example, Bachmann used to be brilliant with its current collection on pony trucks, but the latest steam locos are back to having just the six driving wheels collecting. Not that there is any saving on assembly work, because we are now sold a DCC socket instead. But the cost doesn't stop there because this prevents the use of some of those features that DCC extols as so appealing – constant speed and inertia and brake simulation!

'Station stop' and 'shuttle' modules and HF track cleaners cannot be used with these locos either. Talk about turning the clock back 50 years! But then of course you can get the constant speed and inertia and brake simulation back again by paying a fortune for all that lovely DCC gear!

So are the manufacturers concerned? You bet they are – they want to sell their new DCC gear to the punters, and so they don't let on that the sockets are a problem. Instead it's our bad feedback controllers, and I was even told that the whole idea of keeping constant speed through gradients and curves was a red herring!

I took a look through magazine and internet letters and I found a whole lot of other people like myself who had found new locos performing badly. On all occasions we've been fed a lot of nonsense about motors and controllers that ignored the fact that the same gear was working happily in other locos. The fact that the effect of these sockets was already being discussed on the internet, and that Gaugemaster Controls was aware of it beggars belief that no one at the loco manufacturers had a clue. Why didn't they advise on how to bypass or remove them?

All this is symptomatic of the way DCC is being foisted on to us by a hardcore of enthusiasts, and business interests who believe that anything digital will be profitable these days – even when based on a concept that grew out of trying to run multiple trains on the front room carpet!

With analogue DC you can easily isolate trains, and if desired, arrange their automatic operation without needing to care about addressing the number of the loco on the next train (if you know it). The Model Electronic Railway Group even sells a module that slows and accelerates trains according to the trackside signals and keeps speed steady between sections as several trains follow each other. Surely a more appropriate application of technology than DCC.

All this is lost when DCC is installed unless one forgets those easy installation claims and puts in the switched sections and wiring the adverts say are not needed, and maybe link up control to a PC for some automation. The ability to have trains colliding head on would not be such a good sales pitch!

Don't forget too that any short circuit, such as can be caused by a wheel at a live-frog point, will shut down the whole DCC layout unless you sectionalise it with separate booster feeds. With 5 amps to play with a fault on DCC can do damage and melt things, and every single loco on the layout will need to have a decoder chip costing about £20 each. (Three of them and you might have bought another loco!)



But just think of those exciting features you could get with DCC! You could buy a diesel loco fan and maybe glimpse it, and loco sounds (expensive if available) that can still be heard competing 'miles away' in the hidden sidings! Constant coach lighting? We already have it with rechargeable battery units, and until recently, with the Gaugemaster HF power supply (another victim of DCC incompatibility?) Double heading and multiple units? We already have too – just need decent mechanisms and an isolated section in a platform for coupling. Whistles and horns? Much better to keep them working automatically from lineside locations rather than keep addressing the expensive individual loco mounted sounders.

Now I understand the business impetus to sell more product value and make model railways appeal to those who like new technology for its own sake, but money spent on electronics is money not spent on models. Customer loyalty will be lost if we are treated like idiots for not responding to the marketing hype, and I suggest this hobby has been unique in that faulty goods are often repaired rather than returned. I wonder how many of those who are calling for decoders to be ready-fitted because they find them too fiddly to fit will be prepared to investigate, file, bend, tighten and solder when something isn't right. Maybe we have been idiots after all! Does anyone want a couple of spare DCC sockets?

CLIVE GREEDUS

I have been reading with mounting horror both the comments of Tony Kell in his article and subsequently David Plume's letter on this subject. They speak about products long-passed into history only remembered dimly by old modellers as they take the air in their bath chairs. I have a working Zero 1 control system, although not the time to use it as much as I would like.

Thank you all for making me feel like something dug up by *Time Team*.

MIKE BRIDGE

MAIL ORDER PRACTICALITIES

I have read your magazine for many years. Production advances there may have been but the tried and tested format has remained the same. Perhaps the biggest change has been in the nature of the advertisements. Most are now attractively designed and with the advantage of colour illustrations of the products. Going through the advertisements is a major part of my enjoyment of the magazine. One thing which has

KINGSWAY SUBWAY – LAST DAY

Further to the article by John Howe on his 4mm scale model of this part of the London tram network (see last month's issue), Philip J. Kelley loaned us these prints of the real thing, taken on the last day of operation, 5 April 1954. Above left, E3 car No.160 descends the ramp, meeting E3 No.1944 also plying Route 35 (Forest Hill-Highgate). No.160 was one of the original Leyton Corporation cars.

Above right, another E3, car No.1948 grinds its way out of the subway, also working a Route 35 service.

Photographs: Philip J. Kelley.

amazed me is how some comparatively small retailers can have such large stocks. The answer, of course, is they do not. They order on, as I have recently had cause to find out

Circumstances, local and personal, cause me now to rely on mail order. Deliveries can run into months punctuated by woolly excuses such as the order is being dealt with or it is being looked into. As a result of my experiences, I offer this advice to readers.

The first and most important thing is to make sure the item is actually in stock and these stocks are on the premises. Then ask how soon it will be sent. If offered 'in a few days', then ask at what stage the card account will be debited. If it is to be more than a few days, then ask them to ring to confirm when the item is ready for despatch. Then and only then should the card number be given.

JAMES NEWBY

SEMAPHORE SIGNALS

May I submit a quick memo to the model railway manufacturers who are consistently investing big money into producing more types of locos and rolling stock?

The time is long overdue to fill a massive void in the model railway market, namely, the semaphore signal.

The trade has supplied us with virtually everything we need to create any railway scene that takes our fancy: pre-group, Big Four, British Railways – we have the correct locos and stock, the station buildings, goods sheds, signal boxes, and a grand array of 'lineside furniture', but where are the signals to complete the scene?

I used to work in a manual box at a busy junction station (Wakefield Kirkgate) during the last days of steam, and the vast number of signals and points in our block required a frame of 150+ levers. There was a signal or ground dolly for virtually every train movement.

How many superb layouts have we

seen at exhibitions, especially in N gauge, where the signals are 'fixed' in an 'on' or 'off' position, simply because the builder does not have the time or skill to produce working signals from the kits available, whereas a ready-made one would probably solve the problem?

Apart from the few items from Hornby, which are in urgent need of re-tooling, there are currently no ready-made 00 signals in production as far as I know, and in N gauge the situation is no better, with only Ratio and Langley kits available (I am open to correction), which are fiddly, especially for 'grumpy old men' like me!

In the early Sixties, Lone Star produced a ready-made home and distant signal in 000 (the forerunner of N) which, although crude by today's standards, looked the part, and only needed a ladder adding to the post to give a reasonable-looking signal. They can occasionally be picked up at toy fairs, and can be easily controlled by 'wire-in-tube'.

Now, forty-odd years later, we still cannot buy decent ready-made signals in N and 00.

So come on Hornby, Dapol, Bachmann. Why not 'test the market' with a nicely-made upper or lower quadrant single-post signal, in both scales. If the demand is there, the potential is enormous. Junction brackets, gantries, platform starters, calling-on signals, square posts, round posts, lattice posts, ground dollies; the subject is vast. How about an NER slotted post, or a GNR somersault signal! And, dare I say it – the spectacles illuminated by LEDs?

There is one condition however – and it is a very important one. The lever connected to the signal arm MUST be at the BASE of the MAIN post, even on brackets and gantries (unlike the current ones from Hornby) to make remote control easy, by wire-in-tube or under-board motor.

So, who is going to start the ball rolling and give us this vital 'missing link', long overdue in my opinion, especially for steam-era layouts?

B. AUSTERBERRY

RAILWAY MODELLING – MY EXPERIENCE

I read with interest your reader's experiences of visiting Norman Wisenden's shop in Greenfield (RM December).

I am nine years old and I began getting interested in model railways through my dad, who has had an interest since he was a young boy. Whereas your reader reminisces about his time with Norman, I have to tell you

about mine at Arcadia Models, at Shaw, near Oldham. There must be something about model shops, where a natter and a cuppa go hand-in-hand – for me it is a natter and a cup of juice.

Whenever I visit Tim's (Arcadia Models' proprietor), despite my age I am treated like any other enthusiast. At Arcadia, I am spoilt for choice. There is so much I want there. I go nearly every weekend. I am now saving up £100.00, so that I can buy a Virgin Voyager. He is (Tim Housley, owner!) a very nice man. All the time I am reading your magazine so I can get ideas to improve my railway

Now that I am getting older and we have moved house, the plan is to convert our loft into a railway room where one railway will be created with a sharing of ideas from me and my dad. Me and my dad love your magazine, and who will get their hands on it first?

JACK SMITH

N(B)MRS NEEDS HELP!

We, the members of the Nottingham (Bulwell) Model Railway Society, need your help. As with most clubs, we always welcome new members, regardless of your chosen scale, gauge, era and area of interest. On this occasion, however, we have a specific challenge to address.

We have an EM Gauge layout, measuring 30' x 2'6" (including fiddle-yards), based upon a theoretical single line extension of the ex-Cambrian/GWR line beyond Pwllheli, to a junction station at Llanbedrog (the layout), and on to Abersoch or Aberdaron (main or branch). It is intended to be operated in either a 1930s GWR steam, or an early BR steam/diesel era. All the trackwork (C&L) is complete; all wiring is complete; the scenery and structures are half-way there, and the bits that actually move, the 'trains' and 'signals', hardly exist at all.

This has been a long-term project for the club, which has now stalled, following the recent loss of several members from our EM group. So, if the above appeals to your particular interests, or you would just like to join in and lend a hand, then please contact Tony Drew on 0115 9722443, at tony.drew@messages.co.uk, or come along and meet us at our clubrooms at 80 Coventry Road, Bulwell, Nottingham (contact us for directions) on any Tuesday evening from 1900 onwards.

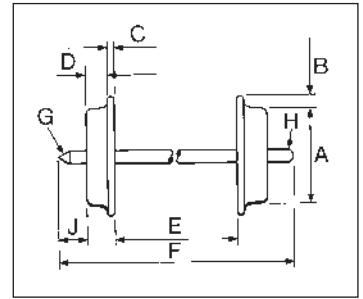
Better still, come and meet me at the Nottingham Model Railway Exhibition over the weekend of 18 & 19 March.

TONY DREW

Details of the show are in Societies & Clubs – Ed.

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A1 Pacific No.1470 Great Northern new in 00 from Hornby



Hornby has released a version of its Gresley Pacific representing the original 4-6-2 on the Great Northern's books, No.1470 *Great Northern*. The model (ref.R2405, £105.00) represents the locomotive as first taken into LNER stock (the machine was only eight months old at Grouping) but prior to renumbering in March 1925. As we all know, it became, in 1945 the testbed for the Thompson Pacifics.

Chief amongst the differences on the engine is the evidence of right-hand drive, both on the boiler (ejector pipe on 'offside') and in the GN-height cab, where the reverser has migrated across the floor to the correct side. Other features on the superstructure,

such as sprung buffers, metal scale coupling, sliding roof vents, flush glazing etc appear as before.

Hornby has also followed the usual Gresley Pacific model arrangement of flangeless trailing wheels in the representation of the Cartazzi truck. Flanged alternatives are supplied with the model.

Beneath the running plate, the lever linkage is now correctly on the left-hand side of the locomotive. However, delicate though the mouldings are, we believe that for accuracy the front steps, immediately in rear of the buffer beam, should be removed. The first two Gresley 4-6-2s were especially hard on engine crews!

The new GN-type coal-rail tender is a splendid model in its own right. Prise away the moulded 'coal' load and the shape of the coal space is there right through to the open shovelling plate. The front 'dash' is raked rearwards in the correct fashion; in later years they were set vertical.

Painting and lining are, as expected, first class. Handrails, smokebox dart and door strapping are picked out as if bulled-up: this is one machine that we are sure Hornby will *not* be offering weathered! The shaded LNER lettering – including the N suffix denoting former Great Northern stock – and numbering on the tender flanks are spot-on. The '5000 gallons' plate, high

on the tender front on the fireman's side, is a very fine piece of printing.

Mechanically the model performs easily as well as its predecessors. DCC compatibility, naturally, is a feature of this model.

For 00

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE in text

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Shock open and van in 00 from Bachmann

Just as on the real railway, the traditional four-wheel wagon tends to get overlooked when review sample shelves are groaning with locomotives and coaching stock. Time to record, therefore, that Bachmann has kept the 00 freight modeller happy over the past months with quite a few new incarnations of its BR and pre-nationalisation design goods wagons, full details of which appear in its catalogue. Typical of the items are the two shock wagons illustrated here.

To the contemporary observer, used to wagons dedicated to specific traffic flows, the 'common carrier' aspect of the late British Railways may come as a bit of a surprise. BR had to accept any business offered, and in the case of fragile cargoes had to develop vehicles capable of handling them securely. BR took on the concept of shock-absorbing wagons from pre-nationali-



sation practice, and turned out opens and vans by the hundreds.

The open, with sheet rail, that Bachmann has modelled was built at Derby in 1953. It was one of a batch of 850 to Diagram 40, of which there were over 2000 in all. The model (ref.37-875) boasts a movable sheet rail and the

characteristic covered spring pockets along the solebar are present.

Its companion van (ref.37-900), W139600, is a former GWR Diagram V28 SHOCKVAN, the erstwhile No.63 (of 1940) in this specialised fleet.

Both models feature the characteristically shorter bodies in comparison to

the 10' wheelbase underframes. Both represent vacuum-fitted wagons: the brake pipes were carried on the chassis underside to allow for any movement (and re-centring) of the body in relation to the chassis. The distinctive stripes – the better to mark these vehicles out in busy goods yards – have been printed crisply over ribs and corrugations.

For 00

SAMPLES SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE £6.65ea

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

GNER and Virgin electrics in N from Graham Farish



New releases to the 25kV electric fleet in N from Graham Farish represent those seen on the West and East Coast main lines to Scotland, and are a commemoration and a celebration.

The two Virgin-liveried models mark the respective classes' replacement on front-line WCML duties by the fleet of tilting Pendolino EMUs. The 87, No.87 001 *Royal Scot* is now in the care of the NRM – fittingly, being the first of the 'Electric Scots' – whilst stablemate Class 90 No.90 004 *City of Glasgow* carries the name once borne by 87 006. The models are not

new (see April 2000 for a previous Virgin 87 + 90 combination) but they have both benefited from the improved mechanism now standard across the GF range. Metal pantographs are standard fittings, but are not wired for current collection via the overhead. Also, digital command control sockets are absent.

The celebration lands on the GNER-operated fleet of Class 91s, which have been putting in sterling service on the ECML since 1989. The GF model and its companion Driving Van Trailer are also not new models, but

they have been packaged together this time, in the manner of the modern 2-car DMU fleet, side by side in an enlarged card sleeve and separated by a strip of foam.

The loco is finished as No.91 004 *Grantham*, and its DVT is No.82212. The smart, restrained GNER scheme is reproduced crisply, the red trim line having a clean separation from the overall deep blue.

The livery is one of the smarter, more restrained and less flamboyant on today's railways: more in keeping with transport, and rail transport especially.

For N

SAMPLES SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICES

87 001 (ref.371-750) – £76.50
90 004 (ref.371-776) – £76.50
91 004 & DVT (ref.371-801) – £86.95

WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



Latest versions of Hornby Seacows in 00 include weathering



New to the selection of high-quality Seacow ballast hoppers in 00 from Hornby (reviewed in full last month) are Mainline and weathered versions.

The Mainline examples represent those which run in fixed rakes, termed 'Stingrays', and which have auxiliary lighting etc for night workings. There is

a pristine DB980052 (ref.R6287A), and weathered DB980053 and DB980054 (refs.R6287B and C respectively). EWS-liveried models with weathering,

to accompany pristine DB980238, are DB980239 (ref.6286B) and DB980240 (ref.6286C).

Please note that according to the 2006 Hornby price list further versions of these models will retail at £19.50ea.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE all versions – £18.50ea

WHEEL DATA

B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Great Western stalwarts in 00 and N from the Bachmann stable



Three recent additions to the Bachmann family will gladden the hearts of the GW modeller.

The 57xx 0-6-0PTs – nicknamed 'matchboxes' to some – are now available as GWR green No.5786 (ref.32-210) and BR black No.7739 with early emblem (ref.32-211). These attractive little models boast a wealth of detail, such as open cab interior with detailed bunker front; handrails, pipe-work and injectors proud of the superstructure; metal fire-iron hooks on the bunker rear; plus sprung buffers, sprung centre coupled wheels, brake shoes in line with wheel treads, and fine guard irons and sand pipes.

The models are not DCC-ready, and there may not be that much room inside the model for one! Performance is smooth and quiet, as one would expect from this manufacturer.

Painting and lettering are excellent, with GWR shaded lettering in full register and BR emblem crisp. The green 57 has no visible three-letter depot code, but 7739 has an 86B Newport Pill plate. (As a spot-check, 5786 was at 84A Wolverhampton Stafford Road in 1950.)

The GWR railcar makes a welcome

return to the **Graham Farish** N gauge range, our sample of which is the BR (WR) green-liveried W32W (ref.371-625). Versions in BR crimson & cream, and Great Western chocolate & cream with 'shirt button' monogram are also available. The model is a usefully-heavy 130g (enough for the 'tail traffic' allowed the real things) and runs well.

There is also no DCC socket, and also precious little space in which to fit one.

Modellers wishing to 'go Great Western' will find, as ever, that they have an ample choice of products.

For 00 & N

SAMPLES SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICES

57xx Panniers – £49.95ea
GWR railcar – £67.95

WHEEL DATA

00: B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

N: B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



Latest Class 60 and Class 50 in 00 from Hornby



Two new versions of the highly-regarded Hornby Class 60 and 50 models in 4mm scale have arrived, in Mainline and Large Logo liveries respectively.

60 078, in the attractive and short-lived Aircraft Blue paint scheme of the pseudo-private freight operator, follows hard on the heels of EWS-liveried 60 026 (see last month). It is every bit as breathtaking: areas such as the 'rolling wheel' logo are very well printed, and the silvered striping is also very good.

50 004 *St Vincent* carries the well-regarded BR Large Logo scheme. The model is dated to the 1988-90 period, by virtue of the plaque above the nameplates, which was fitted in September of the former year. ('04 was condemned in 1990.) On the model, the replicas are printed very well.

See RM January 2004 for the full review of this superb model.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES

60 078 (ref.R2490) – £89.00
50 004 (ref.R2487) – £95.00

WHEEL DATA

B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Hornby LMS/BR(LM) stock in 00 increases by three new types

Following on from the LMS Period III 60' corridor firsts seen in last month's issue, samples are now to hand of the accompanying Diagram 1899 57' corridor third, Diagram 1905 57' corridor brake third and Diagram 2007 50' full brake as follows:

LMS corridor third 1637	R4237
LMS corridor brake third 5620	R4232
LMS full brake 30972	R4233
BR(M) corridor third M1668M	R4235
BR(M) corridor brake third M5593M	R4236
BR(M) full brake M31004M	R4237



As with the firsts, these models sport excellent detailing, sprung buffers and handrails proud of the bodywork. The coaches have been painted and lined



(expertly) before several of these details have been applied, such as the door grab handles and luggage van handles. Printing is also neat and legible.

Sadly several of these models exhibited the bowed bodywork which has been commented upon elsewhere. This problem did not seem to be uniform – across the range of our samples at least – so it may not affect all batches of these, or future runs.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES

all versions – £29.99ea

WHEEL DATA

B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Harburn Hobbies' latest in 4mm



Latest in the large range of pre-painted resin-cast scenic accessories are the three items illustrated here.

The brick building with corrugated iron roof is described as Fishermen's workshops (ref.QS430, £14.95), and it fits nicely in the Harburn 'Quayside Collection' of fishing boats, 'catches' and accessories. In fact this attractive building might have many uses. Although it has windows in the back, it would make a good 'lean-to' structure, perhaps in a motive power depot against the main shed. The modelling of brickwork, woodwork and corrugated sheets is very good as always and there is a stovepipe chimney which plugs into a pre-formed hole in the roof. The building is hollow, but the walls are thick with solid-backed windows cast into them, so the model is not suitable for interior detailing or lighting. It is 40mm tall to top edge of



roof, and the footprint is 133mm x 35mm.

Two new items in the 'Country & Gardens Collection' are also illustrated; a round flower bed with box hedge and ornate urn (ref.CG242, 26mm tall, 62mm diameter, £10.95) and the urn, complete with flowering plants, on its own (ref.CG245, 20mm tall, 20mm diameter, £3.95).

Harburn Hobbies' items are distributed to the trade by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.

For 4mm scale

SAMPLES SUPPLIED BY
Harburn Hobbies, 67 Elm Row,
Edinburgh EH7 4AQ

PRICES

In text.

Loco headboards from Fox



Notwithstanding its title, Fox Transfers has an ever-expanding range of excellently produced and finished etched loco nameplates and headboards. A small selection of the latter is shown: no prizes for spotting the odd one out!

Clockwise from the Golden Arrow set (£12.95), complete with flags, there is the Devon Belle 'wings' set for Bulleid Pacifics (£15.95) and one of no fewer than four different Cunarder shipping line headboards (£6.95). The Southern theme continues with the SR-

type Bournemouth Belle board (£6.95), a Night Ferry board (£6.95), and liner train boards Sitmar Line, Oriana and another Cunarder (£6.95ea). Odd man out: a 'Deltic' winged thistle (£3.95)!

For 4mm scale

AVAILABLE FROM
Fox Transfers, 138 Main Street,
Markfield, Leicestershire LE67 9UX

PRICES in text. P&P 60p per order.

Latest Dapol Private Owner wagon commissions in 00 and N



1E Promotionals has commissioned three new Private Owners in 00 from Dapol, namely 'Franklin' of Bedford, 'John Dickinson' of Watford and 'J.G. Stanton' of Brackley – based at the Great Central station in the town.

250 certified examples are available, price £7.50 each plus £1.00 postage from the joint distributors, KRS Model Railways of Leighton Buzzard, and GE Models of Sheringham. *KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds LU7 0BA. G.E.Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.*

Ballards' of Tunbridge Wells has a couple of commissions: firstly in 00 'Bonnell' of Forest Row, based on details from a photograph of Three Bridges c.1924 of the coal merchant's sole example. Also new, for N, is 'Baltic Saw Mills' from the shop's home town.

Prices are £8.00, each, P&P £1.00 per order.

Ballards', 54 Grosvenor Road, Tunbridge Wells, Kent TN1 2AS.

West Wales Wagon Works has three new Dapol commissions in N, namely 'Baker & Kernick', based in



Cardiff (100 of which have been produced); 'Bliss Tweed Mills' of Chipping Norton (150 of which have been pro-

duced); and 'G.D. Owen', a local merchant from Cardigan. To come is a wagon marked for Gresford Colliery.

Prices are £8.00 each including postage and packing.

West Wales Wagon Works, Valentine House, Brynderi Close, Adpar, Newcastle Emlyn, Ceredigion SA38 9NP.

All are attractively finished, with good painting and lettering ('Stanton' and 'Bliss Tweed Mills' especially so). Each model, no matter which scale, runs smoothly on metal wheelsets.

OTTLITE® TrueColor™ lamps

In common with many pastimes, ours demands excellent lighting for best results. Recently we have been able to examine two lamps which deliver just that.

The OTT-LITE® was developed by Dr. John Ott, a photobiologist and pio-

neer in light research. He studied the effects of various wavelengths of natural light, and developed a range of lamps which replicate natural light best, without eyestrain or glare.

The samples we examined were courtesy of the UK distributors EQS

Ltd. (They are listed in our index to advertisers.) Both samples are of the tabletop variety, but OTT-LITE® manufactures floor-standing varieties as well. The TrueColor™ Task Lamp stands 285mm tall over the swivel (fully 360 degrees) base and with conve-

nient carrying handle retracted. The lamp housing itself is 230mm long, and can be rotated out from the stand right up to vertical if needed. This action switches the lamp on, and it switches off when the housing is closed up again. We examined the magnifier-fitted version of this lamp, whereby a 2x magnifier can be rotated from its position within the lamp casing; ideal for small work. (It is also available without the magnifier, price £49.99).

Its companion is the TrueColor™ Clip-On Lamp, which features a 265mm-long lamp housing on an extendable (0mm-254mm) gooseneck, which allows the lamp to be positioned according to need. The shade can be rotated to direct light as the user wishes. It is anchored to a desk etc via a sturdy spring clip. The useful magnifier option is not available with this lamp.

Each lamp comes with instructions on installation and replacement of the low-heat energy-efficient light tubes themselves.

Highly recommended.

*MANUFACTURED BY
OTT-LITE Technology, 1214 West Cass Street, Tampa, Florida 33606, USA. www.ott-lite.com*

*UK DISTRIBUTORS
EQS Ltd., 11 Iliffe House, Iliffe Avenue, Leicester LE2 5LS*

*PRICES
Task Lamp (with magnifier) – £79.99
Clip-On Lamp – £49.99.*



Digitrax delivers new DS64 stationary (accessory) decoder

Digitrax has produced a new state-of-the-art stationary Digital Command Control (DCC) decoder for up to four accessories such as slow motion, solenoid (three-wire), or bi-polar (two-wire) point motors.

The circuitry is encased in a protective plastic cover, and the unit measures 120mm wide x 86mm deep x 35mm high.

Three 4mm diameter holes are provided for mounting screws or bolts.

The unit can be powered from the track or using an external 12VDC supply; maximum power input is 300mA. Pulse output for solenoids is approximately 20 volts; pulse length can be set to one of four values between 200ms and 1600ms.

Each output of the DS64 can drive two Peco or Atlas solenoid point motors or up to four Kato Unitrack machines.

Connections to the accessories via a group of small screw terminals on one side of the unit; on the other is the power input (a standard concentric connector) and two LocoNet multipin sockets for telephone type connectors.

At one side of the unit are three small buttons and associated yellow, red, and green LEDs (STAT, OPS, and



ID respectively) used for setting up and programming.

The unit comes ready for use with solenoid and bi-polar devices, but can easily be re-programmed. Note that it is not possible to mix types of point motor on one DS64 accessory decoder – it must be set for either four slow motion or four coils.

Default addresses for the four attached devices are 01, 02, 03, and 04, but these can of course be re-set by the user to any value from 01 to 2048.

The address of the DS64 itself can also be programmed (01-256), and the device will also accept input signals to operate the individual accessories

from such things as occupancy detectors or computer programmes.

The performance of the device is governed by a series of option switches which can be programmed and retained in its memory.

The DS64 can also remember up to eight routes each of up to eight turnouts.

It can thus be seen that while at one level the DS64 is simply a competent four-channel accessory decoder, it is also capable of much more should more sophisticated functions be required.

The unit comes with a 16-page A5 size illustrated instruction booklet. Many of the procedures are easier said than written out, and easier demonstrated than said!

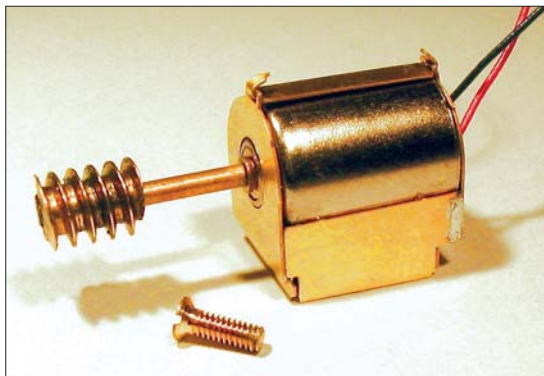
Naturally the device is fully compatible with the relevant NMRA DCC and FCC standards.

For all scales

IMPORTED BY
Sunningwell Command Control Ltd.,
P.O.Box 381, Abingdon, Oxfordshire,
OX13 6YB.

PRICE £40.00.

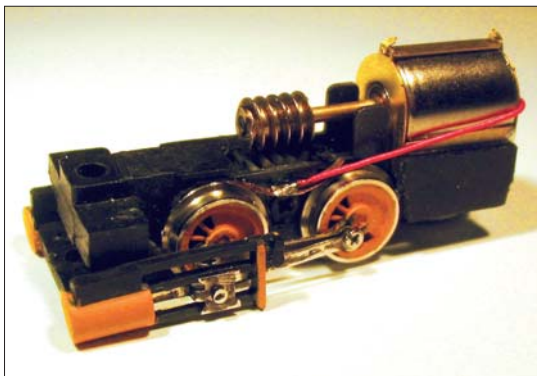
Remotoring kit for Bachmann N gauge chassis from Nigel Lawton



Nigel Lawton has produced a kit which provides a 10mm diameter by 12mm long coreless motor and the mounting hardware to re-power Bachmann N gauge 0-4-0 and 2-6-2 chassis. With a longer shaft adaptor (available on request) it can also be used with the

Bachmann 0-6-0. While designed for use by narrow gaugers replacing the body, those working in N may also find it useful.

The kit includes the motor, with captive leads; an etched brass fret for the motor mounting cradle, plus packing



pieces for adjustment; a 10BA countersink bolt, with suitable nut, to fix the cradle to the chassis; a 1mm/1.5mm shaft adaptor and 13mm extender to carry the worm; and a thrust washer.

The coreless motor does not have tapped holes and mounting bolts,

hence the need for the cradle, which is designed to fit in the existing location in the chassis.

The Bachmann worm will have to be removed from the original motor and fitted to the new motor's shaft.

Detailed assembly instructions are provided, with photographic illustrations, on two sides of an A5 sheet.

Some soldering will be required.

For N

AVAILABLE FROM
Nigel Lawton, 77 Katherine Way,
Seaford, East Sussex, BN25 2XF
Email – NigelLawton009@fsmail.net
Order online from –
<http://www.geocities.com/nigellawton009/VeeTipper.html>

PRICE £10.00
Postage & packing – 75 pence UK,
£3.00 rest of world.

Transport Treasures™ period road vehicles in 4mm scale

The six 1950/60s medium-weight lorries and vans illustrated are in the Transport Treasures™ range of 1:76 scale diecasts from Pocketbond.

Detailing and finish of the Chinese-made models is to a high standard. In fact their construction is 'mixed media', with diecast metal cabs and bodies mounted on plastic chassis. Each vehicle features number plates front and rear, glazing and cab interior details.

The vehicles use the Ford Thames ET6 and Austin K2 chassis/cabs, each with three different body styles, flatbed, dropside and van. The tampon-



printed liveries are correct for the period and the BR and BRS liveried flatbeds will be particularly at home in

station yards. The six vehicles are, from left: ref.7601 Ford Thames ET6 flatbed British Railways; ref.7603 Ford

Thames ET6 van 'Newbould's Bread'; ref.7602 Ford Thames ET6 dropside 'Brook & Sons'; ref.7605 Austin K2 dropside National Coal Board; ref.7606 Austin K2 van 'Kemp's Biscuits'; and ref.7604 Austin K2 flatbed British Road Services.

For 4mm scale

SAMPLES SUPPLIED BY
Pocketbond Limited, PO Box 80,
Welwyn, Herts AL6 0ND

PRICES
£5.99 each.

Book Reviews

Tramway Memories London

Paul Collins
Ian Allan Publishing, 4 Watling Drive, Hinckley, Leics LE10 3EY.
282mm x 213mm 80pp
Softback £14.99
ISBN 0 7110 3037 5

Interest in London trams remains very strong, despite the fact that it is more than fifty years since the first-generation system closed. The author, whose 'View from the Past' on this subject was a great success, has provided a further selection of photographs and a new text for this latest work.

Although the contents have a bias towards the last years, months and days of the great network, endowing the book with an overall atmosphere of sadness and regret, there are also memories of happier times and many photographs of a technical nature revealing, for instance, the complex buried secrets of the conduit system.

Chapters are devoted to the contemporary enthusiasts who recorded the last days of the system, including the photographers and the sound recordists with their (to our present-day eyes) archaic equipment.

Other sections deal with the drivers, conductors and other personalities of the system, the Penhall Road 'Tramatorium' (the tramway equivalent to the 'Dump' at Swindon) and an Archaeology of the system which includes artefacts as diverse as horse-tram stables and the surviving section of the Kingsway Subway.

Although the majority of the photographs are inevitably in monochrome, there are seven pages of colour, plus covers. The gentle, slightly odd colour renderings of the time, if anything, enhance the period atmosphere.

Although your reviewer was only rising nine on that fateful day in 1952, the world of E1s, E3s and HR2s today seems not that far away, and is brought even nearer by this wonderful assembly of tramway words and images.

Deltics

The Last Year

Alastair McLean
Tempus Publishing Ltd.
The Mill, Brimscombe Port,
Stroud, Gloucestershire GL5 2QG.
235mm x 155mm 128pp
Softback £12.99
ISBN 0-7524-3559-0

Here the author tells a familiar tale, but one that bears repeating. The story is set in 1981/1982, when the Deltics were running their very last miles in BR service and the enthusiast population was responding in a way not seen since the demise of steam traction in 1968. Railtours were a natural result of these bitter-sweet emotions, and the book's well-chosen selection of monochrome photographs includes the following well-remembered specials: the

North Briton, the *Deltic Fenman*, the *Celtic Deltic*, the *Deltic Cumbrian*, the *Deltic Scotsman*, and the *Grampian Deltic*. The last railtour from Edinburgh to Kings Cross on 2 January 1982 carried the now-famous headboard *Farewell to Thy Greatness* and this is illustrated on 55 022 at Haymarket.

The black-and-white photography helps to endow the book with a feeling of the sadness and dourness of the time, but the author ends on a higher note in the final pages, *The Afterlife*, where he notes that a few Deltics have been preserved and even returned to main line service.

Steam on Canvas

Further railway paintings

Philip D. Hawkins
Oxford Publishing Co,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.
290mm x 320mm 96pp
Hardback £35.00
ISBN 0860935926

This magnificent volume contains reproductions of some forty examples of the author's work, complete with descriptive text and the always fascinating preliminary annotated pencil sketches for each painting. There are also photographs of paintings 'under way', a corner of the artist's West Country studio, and pages from his 1960s loco spotting notebooks, from many and varied locations. These have survived over four decades and today often provide the memories and impetus so necessary for a painting.

The reader is also given an insight into the commercial side of an artist's life, as the author describes his work for railway or associated companies, such as Crewe Works, EWS, Virgin and others.

The superb 'gallery' of railway paintings, combined with the book's strong autobiographical element, make this volume a very desirable addition to the enthusiast's library.

LMS locomotive Profiles – 8 The Class 8F 2-8-0s

David Hunt, John Jennison,
Fred James and Bob Essery
Wild Swan Publications Ltd,
1-3 Hagbourne Road, Didcot,
Oxon OX11 8DP.
270mm x 210mm 136pp
Softback £16.95
ISBN 1905184085

Profile No.8 follows the same form as its predecessors, with a very comprehensive text illustrated by both half-tones and drawings.

The mainly works drawings reproduced here consist of the following. Boiler and Clothing arrangements for both vertical throatplate domeless and sloping throatplate domed boilers.

Right: Stanier 8F No.48206 was one of the fleet with improved balancing of the reciprocating masses, as denoted by the cabside star. When photographed, at Sattley depot on 25 April 1965, it had three years' career left.

Photograph: Frank Hornby.

Firebox, Smokebox and Motion arrangements. Pipe arrangement and elevation and plan Nos.8000-8011. Frame arrangements Nos.8000-8011. General arrangement of pony truck. Cab arrangement. Pipe and rod arrangement end views Nos.8012-8095. Pipe and rod arrangement elevation and plan Nos.8012-8095. External elevation. The drawings are printed on fold-outs where applicable.

From the same authors and publishers is an 80-page **Pictorial Supplement** to this profile (£13.95, ISBN 1905184093), which, as its name suggests, contains many more captioned photographs of the LMS Class 8F 2-8-0s in addition to a fair amount of extra text dealing with boilers, cylinders and motion, wheels, brakes and sanding, buffer beams, platforms and cabs, tender variations, the locomotives in service and livery details.

One of the more unusual views in this supplement sums up the engines' long and varied careers: a group of stored 2-8-0s, not pictured somewhere on the London Midland Region, but at No.18 Transportation Stores, Suez...

Newcastle to Hexham

including the Allendale branch

Roger R. Darsley
Middleton Press, Easebourne Lane Midhurst, West Sussex GU29 9AZ.
240mm x 165mm 96pp
Hardback £14.95
ISBN 1904474691

This latest volume in the *Eastern Main Lines* series describes the eastern end of the Newcastle to Carlisle line, including the branch to Allendale and both routes into Newcastle, via Blaydon and via North Wylam.

The book is designed in the familiar Middleton way with captioned photographs, OS map extracts, timetables etc all arranged in 'route order.' The period of these images ranges from pre-Group to recent times. The book opens with a railway map of the whole area which is useful to show non-Geordies where familiar sounding places like Blaydon, Wylam, Scotswood, Gateshead, Byker, Manors and so on are actually situated in relation to each other.

There is much history here; we pass George Stephenson's birthplace.

The Power of the LMS 2-6-0s

Gavin Morrison
Oxford Publishing Co,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.
273mm x 215mm 112pp
Hardback £19.99
ISBN 0860935957

The latest addition to the popular 'Power of' series deals with the Moguls which were built for the LMS from 1926. These include the distinctive Horwich-built 'Crabs', the Stanier Class 4s from 1933, the Ivatt versions from 1947 and the smaller Ivatt Class 2s from 1946.

By means of a splendid selection of captioned photographs, these interesting and significant locomotives are shown at work on the London Midland, Eastern and North Eastern and Scottish Regions, M&GN and Cambrian. Variations and liveries are studied and there are portraits of the locos 'on shed' and in preservation.

A photograph of Stanier 2-6-0 No.13245, brand new and fitted with GWR style safety valve/topfeed bonnet, confirmed for your reviewer as historical fact something which he had hitherto dismissed as apocryphal.

This is a useful collection for modellers of the London Midland Region, particularly in the light of recent ready-to-run releases.

The Welsh Highland Railway

— an historical guide 1: Caernarfon to Rhyd Ddu

Compiled by John Keylock
WHR Heritage Group
298mm x 210mm 28pp
Softback £5.00
No ISBN

This new publication from the Welsh Highland Railway Heritage Group provides a very interesting and convenient summary of the historical background to the newly re-opened section of the WHR from Caernarfon to Rhyd Ddu.

(Needless to say, a second volume is planned to cover the rest of the line, south through Beddgelert and the famous Aberglaslyn Pass then on to Porthmadog, when that is eventually restored, anticipated to be in 2009.)



The author is well qualified as he has been involved with attempts to revive the line for over 40 years, and is presently Secretary of the WHR Heritage Group.

The Group sees itself as being the historical conscience of the restoration project, and has done excellent work to encourage the preservation, retention, and re-use of as much of the historic infrastructure as feasible with regard to present health and safety standards and the practical requirements of a working railway.

Logically, the guide progresses south from Caernarfon, commenting on significant features of the line and landscape, some long vanished, some still evident and thus providing ideal points of reference for today's visitor to relate to the past.

The tour is illustrated by an interesting collection of archive photos from the Group's extensive collection, several previously unpublished, reproduced as well as the originals will allow (understandably, some are less than technically perfect but merit inclusion for their interest) and printed on high quality glossy paper.

There is a large detailed route map across the centre pages, and the overall presentation is attractive and restrained, without excessive use of graphic devices. A number of (colour) facsimiles of old tickets and other period documents enhance the work, which is rounded off with a brief bibliography.

In short, a well-produced and informative publication which serves the new WHR well by reminding today's travellers of its past.

It is available from Welsh Highland Railway station shops at both Caernarfon and Porthmadog, and at the Ffestiniog Railway's Harbour Station there; it can also be obtained by mail order from WHR Heritage, Weathervane, Childswickham, Broadway, Worcestershire, WR12 7HL, for £5.50 including postage and packing. Please make cheques payable to 'WHRHG'.

Modern Railways Dictionary

of Railway Industry Terms

John Glover
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics
LE10 3EY.

260mm x 210mm 160pp
Hardback £19.99
ISBN 0711030766

Most enthusiasts and modellers are familiar with the traditional railway terminology which has been passed down from generation to generation for over a century and a half. For some time, however, a need has been felt for a dictionary of the terminology that is in present day use, reflecting the new railway structures and operational methods which have replaced the traditional ones.

Regular readers of modern railway literature will know that author John Glover was without a doubt the man to compile this Dictionary. In fact the work is almost an encyclopaedia, as it explains the organisation of the modern railway and its relationship with

Right: Class 60 No.60 079 approaching Barnetby with Immingham-bound MGR hoppers on 21 June 2003. Also visible are *inter alia* temporary (left) and permanent (right) speed restriction markers and a TWPS grid: these and more are explained in the Railway Industry Terms Dictionary.

Photograph: John Chalcraft.

other bodies including the Department for Transport, Network Rail etc.

The text is supported by a good selection of photographs, of which some are in colour. The Dictionary can be 'dipped into' to good effect, and particular subjects can be readily found through the alphabetical and thematic organisation of the pages.

This Dictionary is certain to prove its worth on the shelves of enthusiasts and railway managers alike.

Brilliantly Old Fashioned

The Story of ACE 0 gauge trains

Allen Levy
New Cavendish Books,
3 Denbigh Road, London W11
2SJ.

240mm x 230mm 135pp
Hardback £14.95
ISBN 1904562078

Unlike many model train marque histories, including the classic New Cavendish volumes on Hornby 0, Dublo *et al*, the range described here is still in production and growing and therefore the story is 'open-ended' and looks to the future. Although the very early ACE locos, the E1 4-4-4 tanks, were indeed inspired by the prewar Hornby tinplate versions, the range now consists of locos and coaches which doff their caps at actual prototypes rather than at models and toys of a bygone age.

We have never noticed that modern buzzword 'retro' in ACE literature and when talking to fellow users of the trains, your reviewer gets the impression that the appeal is not so much the three-rail, the lithographed tinplate or the coarse wheel standards *per se*, but more the opportunity to be transported to a time before model railways were subjugated by the scenery, and historical and technical expertise seemed to be required in order to participate in the hobby.

Although this well-produced volume contains a full listing of ACE products, it is also a history of the company from its earliest days, describing trials, tribulations and successes, production techniques, workplaces and personnel. Some of the last mentioned are as interesting as the trains themselves, and when Allen Levy allows a modicum of autobiography to invade the history, it is very much to the benefit of the story overall.

The colour illustrations include the aforementioned factories, personalities and also advertising, point-of-sale art etc. The latter, like that of London Transport, is always of a satisfyingly high standard.

Works drawings and rough conceptual pencil sketches provide the reader with a fascinating insight into how the products are conceived and designed.



This book is a very rare treat for coarse scale 0 gauge collectors and operators. It is to be hoped that expansion of the range will necessitate a revised edition before too long!

LMS Journal No.12

Wild Swan Publications Ltd,
1-3 Hagbourne Road, Didcot,
Oxon OX11 8DP.
270mm x 210mm 80pp
Softback £9.95
ISBN 1905184107

Editor Bob Essery has again provided a 'packed programme' for this issue of the Journal, combining technical and historical interest.

In *LMS Engineering Apprentice*, Keith Miles recalls the early days of his apprenticeship, at St Rollox, to become 'the man who decided which engine pulled which train'. This fascinating illustrated account will be continued in forthcoming issues.

LMS Standard Coaches fitted for Motor Operation by Phil Tattersall describes the Driving and non-Driving non-Gangwayed Trailers, Gangwayed Trailers and useful notes on liveries and numbering.

In the article *Replacement of Horse Cartage by Road Vehicles on the M&GN*, Nelson Twells describes the results of the decision minuted in October 1925 to employ road motors in place of horses on the M&GNJR. There are two interesting photographs of the contemporary lorries with their surprisingly advanced removable flatbeds.

Part 2 of William Dunn's *Allocation of Engines Western 'A' Division 1926* deals with tank engines and includes photographs of machines as diverse as 0-8-4T No.7943 and 0-4-OST No.7216.

In Part 12 of the *LMS Signals* series, Graham Warburton begins his account of Automatic Train Control on the LMS with an overview of the various systems then available and a more detailed description of the Hudd system as adopted by the LMS.

Macclesfield Memories by John Hulme is naturally based around the shed and the station. His very readable memories are supported by photographs and track plans.

In *Further Information on Locomotive Profiles*, Series Editor David Hunt brings readers up to date on the amendments and additions to the Profiles which have been suggested, since their publication, by other readers.

In *Locomotive Details Part 2*, David Hunt takes as his subject rotary cam poppet valves. As we expect from this author, a very clear picture of the various systems is built up from text, photographs and diagrams.

Ted Harrison continues his *Once a Midland Man* series with Part 4 which is centred around Hasland MPD, south of Chesterfield and contains many stories of railway life in the fifties and sixties.

LMS Journal No.13

LMS Society Issue

Wild Swan Publications Ltd.
Details/price same as No.12
ISBN 1905184123

This is a rather special issue of the Journal, as editor Bob Essery explains in his Editorial. All the articles have been supplied by members of the LMS Society, and the issue is dedicated to the memory of David Jenkinson whose last article, *LMS Dining Cars in Scotland*, also appears here.

Other articles in this issue include *Motive Power Improver*, Keith Miles' absorbing account of his thirteen-months training to become an 'Improver', the next step in his path to becoming the man who decided which engine pulled the train.

In *The Locomotives named after Holders of the Victoria Cross*, Geoff Holt discusses the brave men after whom the locos were named, J.A. Christie, E. Sykes and W. Wood.

Martin Stuart Welch in his article *LMS Progress on the Permanent Way* gives much information on the Company's introduction of flat-bottom rail for both plain track and turnouts, just before and during WWII.

In March 1941 Des Melia got a job on the railway at Burnley and, realizing that he would need 414 firing turns to become a registered Fireman and to get a pay increase, he began to keep a record of all the turns on which he worked. From May 1942 he included the engine number as well. The article *Des's Engines* by Des Melia and Noel Coates deals mostly with the L&Y types he worked on until he stopped writing things down in October 1943, objective achieved.

In Part 13 of his long-running *LMS Signals* series, Graham Warburton continues his account of automatic train control on the LMS, the first part of which appeared in LMSJ No.12.

New products and programmes from the British Toy & Hobby Fair 2006

The 2006 British Toy & Hobby Fair was held at its usual venue, ExCel in the Docklands of London, from 25-28 January. The two major producers attending, Hornby and Bachmann, had busy stands as always: we were able to see and learn of new items for the coming year.

Hornby

Given that this firm had held its regular pre-Christmas press briefing – see last month's issue for the report – there was little that was new to us on the Hornby stand. On display were mockups of the firm's new DCC control system, which although they were marked 'do not touch' the controllers gave an idea of their compact size.

Bachmann/Graham Farish

A busy 2006 schedule was announced at the Toy Fair.

The 00 scale range sees the addition of two new steam locomotives, a modern diesel multiple unit and six new wagons. Additionally there will be a number of new liveries for models in the existing range.

In N gauge, Graham Farish is introducing two new steam locomotives, a diesel shunter, a modern diesel multiple unit, a range of LMS Stanier coaches and nine new wagon types.

At the opposite end of the scale, garden railway enthusiasts will welcome news of the progress on the G scale Aristocraft Class 66, announced in last year's report.

The E-Z Command Digital Control System (see review in RM January 2005) continues to develop and 2006 will see the first British diesel locomotives introduced with authentic diesel type sound chips already fitted.

4mm scale

Following the release of its Class 4 'big brother', the Ivatt 2MT 2-6-0 Class locomotive is to join the Bachmann Blue Riband range. Initially three versions will be available as follows; 46521 (which is currently preserved on the Great Central Railway) in British Railways lined green with late crest, 46440 in BR black with early emblem and 4604 in LMS black. Each model will be DCC ready, have locomotive drive, tender cab and detailed pipework.

Also there will be a BR Standard Mogul (76xxx) for 2006. To begin with two versions of the locomotive will be available, initially with the Type 1B tender. These are 76053 with the British Railways early emblem and 76069 with the late crest. The model will feature drive to all coupled wheels and will be DCC ready.

On the diesel front, Class 47s are planned, with identities given as D1500 (green, small warning panels),



D1765 (green, full yellow ends), 40 063 (blue, 'domino' headcode panel) and 40148 (blue, later sealed beam headcode panels).

Tooling modifications are planned for the following: Class 20 (as 20 228 with tablet catcher recesses); 37, covering 37/0, 37/4 and 37/5 versions; and 57/3 (with Dellner coupler, as 57 307 *Lady Penelope*). There will also be Class 150/1 and /2 DMUs, in several BR and post-BR finishes. All the above will be DCC-ready.

Existing items, with new identities, include the following, described as 'DCC on board': GW tanks 9759 (8750 Class 0-6-0PT) and 56xx 0-6-2T 6671; LMS 'Jinty' 0-6-0T 47629; Standard 4MT 2-6-4T 80009; Class 25/1 D5211; 37/0 37 114 *City of Worcester* in EWS finish; split-box Class 40 40 129; and Freightliner 57/0 57 010 *Freightliner Crusader*.

Many other locomotives, steam and diesel era, get new names/numbers: the latest Bachmann catalogue gives full details of these.

The big development from Bachmann on the digital front is a selection of locomotives which are supplied with DCC decoders, with sound, factory-fitted. Initial varieties are Class 20 D8113 in BR green; Class 25/3 25 093 in BR blue; Class 47 47 404 *Hadrian* in blue; and Class 66 66 022 *Lafarge Charnwood*.

New fleet numbers are proposed for much of the existing coach fleet: spied on the stand were development models of the Mk.I RMB mini-buffet; the Mk.I Pullmans in reversed blue & grey; and Mk.II coaches in several finishes, including the early BR green and maroon FOs. These latter two collections should be available soon.

New wagon tooling sees 100-tonne bogie tanks in Shell and (two) BP finishes, and VAA/VBA vans. Departmental stock planned are ZKA Limpet ballast wagons (three finishes) and YGH Sealion and YGA/YGB Seacow bogie ballast hoppers, the latter based on former Sealion conversions.

Finally, the 'Junior' range of locomotives for youngsters is added to with diesel 'Rusty', fitted with the same six-coupled chassis seen under one of the steamers in the January issue.



N gauge

The Graham Farish range of N gauge steam outline models will be increased, firstly with a Stanier 'Jubilee' 4-6-0. Initially three versions will be available as follows; 45593 *Kolhapur* in British Railways lined green with late crest and 4000 gallon Stanier tender, 45568 *Western Australia* in BR lined green with Fowler tender and 5558 *Kashmir* in LMS crimson with 4000 gallon Stanier tender.

Also planned is a BR Standard Class 3 2-6-2T. Two versions will feature in the 2006 catalogue; 82005 in British Railways lined green with the late crest and 82016 in BR lined black with early emblem.

For diesel fans, new projects comprise a Class 150 DMU and an 04 shunter. The former is a smaller echo from the Bachmann 4mm scale programme. Split into three sub-classes, Bachmann and Graham Farish are concentrating on the Class 150/1 and Class 150/2 versions. The 150/1 units will appear initially in the colours of Centro Passenger Transport Executive and First North Western. The Class 150/2 will carry Regional Railways 'Sprinter' and Arriva Trains Wales liveries in both scales. The new units will feature all wheel pick-up, flywheel drive and bi-directional lighting systems.

The 04 is an exciting project in so small a scale: two versions feature in the 2006 catalogue; D2280 in British Railways green and D2294 in British Rail blue.

On the coaching stock front, test shots of two Mk.I Pullman cars were seen, as were two Stanier coaches in BR crimson & cream, a brake 3rd and corridor third.

Wagons follow the lead of the 00 range, insofar as new tooling is concerned, with 1:148 versions of the 100-tonne bogie tank wagon and Sealion/Seacow proposed. Also planned for N

is a Freightliner HHA hopper, re-sized from the 4mm one. For other new liveries, see the 2006 Graham Farish catalogue, available now, price £3.00.

0 gauge

The Gresley A3s in the 7mm scale Bachmann Brass collection were displayed, along with other classes. A new development is 'base colour finishing', whereby models such as the 'Austerity' J94 0-6-0ST can be supplied in black, not unpainted brass finish, therefore needing the purchaser only to apply number and BR crests as appropriate. The range of colours is, at present, a bit like that offered by Henry Ford – black.

Aristocraft

Moulding is about to commence on the G scale Class 66 project, which was announced last year. In the words of the firm's Lewis Polk, the 'hardest part of the job', the year-long R&D process, is now complete. No fewer than 200 pages of drawings had to be prepared, checked and amended as necessary.

Catering for changes as small as the cab-front headlights, which are different on later builds of 66, have necessitated a total of 45 moulds, of which the main bodysheet is a six-way slide type. The resulting model will not be a 'toy' by any measure!

Delivery of this sizeable model is anticipated for autumn.

Woodland Scenics

This renowned firm, the products of which are distributed in the UK by Bachmann, was promoting an intriguing 'Ready Grass' vinyl-backed grass mat range. (An example is seen, rather incongruously, beneath the Graham Farish Mk.I Pullmans on this page!)

The sheets, of various shades, are designed to be heat-shaped to the landform substructure via a suitable hot air gun.



SHOP NEWS

OPEN

Chuffers, Guisborough

It is not often that a shop business develops from the success of a website, but this is Christopher and Karen Hoffman's story.

After a year of selling scenic materials on the internet, they were able to open Chuffers, their new shop in Guisborough, North Yorkshire. This followed a career on the full-size railway where Christopher was a Relief Station Supervisor.

They specialise in N gauge which is still their hobby. After only a few weeks trading, Chuffers is building a strong reputation for customer service, something that Christopher felt was lacking in the modelling business.

Contact: **Chuffers, 95 Westgate, Guisborough, North Yorkshire TS14 6AF. Telephone 01287 639479.**
www.chuffersonline.co.uk

A&H Models, Brackley

If you would like to see a DCC computer-controlled, N gauge layout, visit Anthony and Helen Ellis at Brackley.

The shop has been in business since May last year and concentrates on model railways in N, 00 and garden scales. Fans of radio-controlled models, diecast and Airfix kits will also find some things

of interest too.

Helen had an office career whilst Anthony worked with bespoke interiors for exotic cars.

It is good to see another new store for us to support.

A&H Models Ltd., 95 High Street, Brackley, Northamptonshire NN13 7BW. Telephone 01280 701410.

Crampton Museum opportunity

The Crampton Tower Museum in Broadstairs, Kent focuses on the work of Thomas Russell Crampton, a railway locomotive designer, civil engineer and submarine telegraph pioneer.

The Museum is open daily between Easter and October and includes seven working layouts in scales from N to 0. The largest layout *Moat Park* is 18' x 8' in 00 and was built by a now defunct club in Canterbury. But it is now over thirty years old and becoming unreliable and shabby despite regular voluntary attention.

In short, the Museum needs a

replacement layout of a similar size and of exhibition standard. The Museum would like to hear from any individual or club who would like to relocate a redundant layout.

The Museum is a registered charity and has realistic funds available to purchase a suitable example. It should represent the traditional English steam era and have a main line character; the region is not important.

For more details, please contact **Peter Shaw, Chairman, Crampton Tower Museum, Broadstairs, Kent CT10 2AB.**

Genesis IQA Bogie Cargowagon flat

A new 4mm scale kit for the IQA Bogie Cargowagon flat is now introduced by Genesis. The wagons were used for some twenty years to transport wood and steel between the continent and the UK, travelling in recent years via the Channel Tunnel.

The wagons have eight stanchions on each side and four head stanchions at each end. It measures 290mm in

length and is cast in lead-free pewter. Pipes and dummy couplings are supplied with the kit. Paint, wheels and transfers are required to complete. The price is £19.00 plus £1.50 p&p and it is available from **Genesis Kits, Waveney Cottage, Willingham Road, Market Rasen, Lincs LN8 3DN. Telephone 01673 843236.**

genesis@waveneycottage.co.uk



New GRS releases



A Ffestiniog 0-4-4-0 double Fairlie in 16mm scale is now released by Garden Railway Specialists as part of its Brass Line range.

It will be supplied in 45mm or 32mm gauges. Each loco is fitted with two Canon motors. The construction is brass throughout and includes full cab detail, lamp irons and whistle. The wheels are the correct outline and profile. The model painted in satin black, ready for panelling and lining will be £850.00. It can also be provided in lined green for £1130.00, lined red as *David Lloyd George* or lined maroon with decals at £1150.00. For a small extra cost, the customer can specify the nameplates.

A Ffestiniog bogie coach kit is also available at 10% discount if you buy a loco, 15% discount if you buy two or more coaches.

A further addition to the range is a standard G scale LMS Stove R full brake kit (D1796 of 1938, 21' wheelbase. The kit consists of a resin body



shell with rubber corridor connections and a plastic floor. Clear plastic glazing, door handles and ventilators are included. The underframe is built up from brass etch with a full three-point spring suspension system for better roadholding. Slater's coach wheels and whitmetal castings complete the fully detailed underframe. Waterslide transfers are included as are screw couplings and full instructions. Paint and adhesives are required to complete. Price £295.00.

Contact **Garden Railway Specialists, Station Studio, 6 Summerleys Road, Princes Risborough, Buckinghamshire HP27 9DT. Telephone 01844 345158.**

New PR Manager for Bachmann

Bachmann Europe PLC has appointed Dennis Lovett as the company's first Public Relations Manager.

He joined Bachmann from Virgin Trains where he was Deputy Director, Corporate Affairs.

A fourth generation railway man

from Bletchley, Bucks, Dennis has spent 26 years in the railway industry holding a number of advertising and public affairs posts with, amongst others, British Rail Southern Region.

He is also a member of the Gauge 0 Guild and the Train Collectors' Society.

London's Transport in miniature

This annual event is now in its fourth year and will be held on March 4 and 5 at London's Transport Museum Depot in Acton, West London. See *Societies & Clubs* for details. Working layouts ranging from 5' to 20' in length, in 2mm to 0 gauge are booked to appear. The subjects cover all modes of London travel from Underground trains and trams to cycling and walking.

New layouts for 2006 include *Copenhagen Fields* by The Model Railway Club. Other models include

the Channel Tunnel Rail Link and architectural models of the 1990s' Jubilee Line Canary Wharf station plus the Oxford Circus station model as rebuilt in the 1960s for the Victoria Line.

Over the weekend there will be rides on miniature trains, craft workshops and dressing up for the children.

The Museum's Acton Depot contains over 370,000 items not displayed at the Museum in Covent Garden.

For full details telephone **020 7379 6344** or visit www.ltmuseum.co.uk

Pecorama Lucky Ticket Draw

Each year, a draw takes place to select a number of lucky tickets from the thousands of visitors who come to the Pecorama railway and pleasure garden complex at Beer in Devon.

The two runners-up drawn from the hat are: Rita Martin from Ottery St. Mary in Devon and Susan Miller, coinciden-

tally from neighbouring Honiton in Devon. They each receive garden gift vouchers worth £50.00.

The First Prize winner, who will receive a garden gift voucher worth £100.00, is from a long way away, Stephen Welch from South Australia.

Congratulations to all!

Bachmann Class 57 correction

In the February issue we reviewed the Bachmann 'Thunderbird' Class 57 and described it as 'driven on the inner four

axles'. It is even better than that; it has drive to all six axles. We apologise to all concerned for the error.

Yeovil Gauge O Group awards

The evening of January 4 was the occasion for Bob Phelps of Peco to present the annual competition awards to the Yeovil Model Railway Group in their club room at Bower Hinton in Somerset.

The Coker Cup for the best locomotive was won by Phil Beckey (left of picture, alongside Bob) for a 9F. Phil's S&D garden layout *Tucking Mill* featured in the March 2005 RAILWAY MODELLER. Peter Chapman received the Ernie Phelps Cup for a Hampshire diesel-electric multiple unit.

The Chairman's Cup was won by Peter's son. This cup is for a scheme in which everyone has the same subject to construct and finish. This year the chosen wagon was a Parkside 16-ton BR mineral wagon. The kit is supplied



by the Club and the inevitably well-finished vehicles all go into the Club's stock.



PO and van for G1

The Northern Fine Scale injection moulded range of 10mm scale wagons and vans comes as complete kits including transfers. Despite their high level of detail, they are easy to construct and are designed to withstand outdoor use. Parts such as axle-guards, sprung buffers, brake gear, split-spoke wheels, and transfers/decals are all available separately.

The kits are also available RTR. The seven-plank side-door wagon is £55.00 and the van is £60.00.

Contact: **Northern Fine Scale (Peter Armstrong), 8 Greenways, Highcliffe, Christchurch, Dorset BH23 5AZ. Telephone 01425 276587. peter.armstrong@hemscott.net**

Comet Mk1 restaurant coach

The latest release from Comet is the BR Mk.1 Restaurant First (later Restaurant/Buffer D17/D26).

Thirty-seven of these coaches were built by the BRCW and the BR works of Swindon and Ashford between May 1961 and January 1962. They went into service on BR Midland Region to replace the ageing pre-nationalisation vehicles.

In 1970, all but three were rebuilt internally and given a buffet bar in place of some seating. One of the unrebuilt coaches was used in the Royal Train for a short time. To make better use of the shelving space, the internal arrangement was again changed. This required a window to be blanked off. This coach acquired the diagram number D28. This unique design had passenger access doors;

all other designs could only be entered from the adjoining coaches.

The kit follows the same pattern as previous Mk1 catering coaches. The sides, false ends and underframe are etched brass. The bow ends are white metal castings as are most of the other details. The roof is an aluminium extrusion. An interior pack is included. The sides pack contains a fret for the special underframe components required for this coach.

Kit KB18 is £37.50. Romford/Markits wheels and bearings £4.25. Sides only pack for r.t.r. conversion and scratch-building £8.50.

Contact: **Comet Models, 105 Mossfield Road, Kings Heath, Birmingham B14 7JE. Telephone 0121 242 2233. E-mail: sales@cometmodels.co.uk**

Sittingbourne steam timetable

One of the earliest and probably the longest concrete viaducts of its type in western Europe, and maybe beyond, is at Sittingbourne, Kent.

It will now be brought more to our notice by the Sittingbourne & Kemsley Light Railway that launches its 2006 timetable under the title 'Sittingbourne's Best Kept Secret'. Trains will

run from April 2. The timetables will soon be in local libraries etc. Phone 07944 135033 or visit www.sklr.net for a copy by return. Extra to the listings are diesel mornings on the Saturdays of Easter and August Bank Holiday when three heritage diesels will operate. Arrive before 11.00 to have the chance to travel behind all three.

Commemorate 40 years without S&D

The West Somerset Railway will commemorate the 40 years since the Somerset & Dorset closed by running an extravaganza of steam trains to Minehead; this includes two 7Fs!

The dates to put in the diary are 17 to 19 March and 23 to 26 March. For full details, see www.west-somerset-railway.co.uk or telephone **01643 704996**.



MS Simulator rural add-on

If you have a Microsoft Train Simulator, First Class Simulations could add to your fun with the *Pageants Field* add-on. This is a fictional journey through the rolling landscapes of rural southern England. It gives the player the opportunity to take control of the busy passenger services that meander through the imaginary countryside, using modern and traditional rolling stock.

There are fifteen different activities to play at three difficulty levels. The

thirty-plus miles of track includes a large four-track section and fourteen stations. Electric, diesel and steam fans will be satisfied by a good selection of locos.

Pageants Field has a suggested retail price of £19.99. Contact: **First Class Simulations, PO Box 137, Bicester, Oxfordshire OX27 7JS. Telephone 01869 345928.**

www.firstclass-simulations.com
richard@firstclass-simulations.com

Clapham Junction CD ROM

Two Capitals Publishing has issued a CD-ROM entitled *Clapham Junction – the Busiest Station in Britain*. It is a compilation of photographs of the station and the trains passing through it during the period from 1999 to 2005.

The notes that accompany each section of pictures help the viewer to understand and enjoy the shots of trains which appear in many liveries, the rolling stock and the station building with its surrounding structures.

The rolling stock is listed by type within each company section. Then each type is listed by class with a brief description of that class and sub-divided into company.

Each photograph is initially shown in the form of a large icon which can be enlarged to full-screen with a mouse

click. The quality of the images reflects the different conditions under which they were taken. This virtual album gives a well-rounded depiction of the life of Clapham Junction over an extended period.

The autorun disk, which is suitable for PC only, opened and performed without a hitch. It is also quite easy to navigate around the disk.

At just £5.00 there is plenty for the enthusiast, historian and modeller to see in a very convenient format.

Make your cheque payable to 'Two Capitals Publishing Limited'.

Contact **Robert Kinghorn, Two Capitals Publishing Ltd., 6 Wilmington Avenue, London W4 3HA. Telephone 07958 250436. www.twocapitals.co.uk**

The Old Rectory, Cadeby

The home of the late Revd Teddy Boston is for sale, including the track of the 2' gauge Cadeby Light Railway for which a suitable locomotive is available by negotiation. The 2' gauge line runs around the perimeter of the

grounds and includes signalling, two sidings and station/museum. A 5" gauge line is also included in the sale.

The four-bedroom Old Rectory is set in approx 0.7 acres in a small rural village situated just to the south of the historic town of Market Bosworth.

The site also contains a 40' x 20' model railway depicting the GWR c1935. The vendor, Mrs Audrey Boston, wishes to preserve as much as possible of the railway attractions at Cadeby and to reach an agreement with prospective purchasers to allow access for the model railway team to carry on maintaining and using it, as has happened over the past forty years.

The guide price is £495,000. More information is available from **Country Properties, 16a Station Road, Hinckley, Leicestershire LE10 1AW. Telephone 01455 890898.**

Model railway training course dates

In the February issue of RAILWAY MODELLER we announced the dates of the highly successful courses at Peco. These are run by Dr. Michael Watts in the Peco Lecture Theatre here at Pecorama in Beer.

We have, however, had to change the dates so here are the new and definite dates to put in your diary.

Track and control 28, 29 and 30 April.

DCC 00/H0 loco control 11, 12 and 13 August.

Baseboards and scenery 29, 30 September and 1 October.

These courses are always over-subscribed so make sure you book as early as you can.

Leaflets, further information and a booking form are obtainable from Pecorama on 01297 21542 or e-mail pecopubs@btconnect.com

Middleton model at Midhurst

As a prelude to the Brunel 200 events this year, Middleton Press will be demonstrating a one-eighth working scale model of the South Devon Railway's atmospheric system at The Grange Leisure Centre, Bepton Road, Midhurst, West Sussex on Sunday 26 February.

The show will be open from 10.00 until 17.00. There will be railways, boats, planes, cars and other models

with working displays, demonstrations and trade stands.

Admission is: adults £3.50, seniors £2.50, under 14s £1.00, family (2+2) £7.50. There is a free car park, train rides, licensed bar and catering.

An album of 170 illustrations entitled Brunel - A Railtour of his Achievements compiled by Middleton Press founder Vic Mitchell, will be published on March 18.

Haywood Railway 7mm wagon kits

Haywood Railway, which makes finescale 7mm products, has introduced three new 0 gauge wagon kits to form part of the firm's 20th anniversary launch of twenty kits.

The range includes revised versions of some old favourites, first released twenty years ago, together with a complementary selection of new kits. The old kits have been totally redesigned to make assembly even easier; this was the main criterion. There are no difficult edge-to-edge soldering joints to make, such as body corners. Unlike some other kits, the corners are formed by bending. Most solder joints are of the flat-to-flat lap type. Where this is not possible, accurately positioned slot, tab and fold construction techniques are used.

The new wagon kits are all GWR: bogie bolster Macaw (£48.00), Monster Mink (£55.00) and covered

carriage truck (£45.00). Add £2.00 per kit for postage and packing.

Kits include wheels, sprung buffers, couplings and, where applicable, pre-formed roofs.

Also ready for release are two new 7mm carriage kits, both LMS: Period 1 full brake D1778 and Period 3 full brake D2007, each at £99.99. Add £2.00 per kit for postage and packing.

Contact: **Haywood Railway, 29 Lichfield Drive, Great Haywood, Staffordshire ST18 0SX. Telephone 01889 808052.**

Two Bachmann Collectors' Club issues

Two new 00 scale Limited Edition locomotives have been released by Bachmann Europe as exclusive models for sale through the Bachmann Collectors' Club.

For steam enthusiasts, Ivatt 4MT Class No.43050 is produced in lightly weathered BR black livery. The prototype was completed in July 1950 and was the first of the class to receive a single chimney from new. It was withdrawn from North and South Blyth (52F) in September 1967. This is the first weathered version of the recently-released Bachmann 4MT Class to be produced.

For modern image modellers, this

year's model is the Class 57/6 diesel No.57 601 in the unique Porterbrook livery of silver, mauve and black. It has full-height numerals carried as silhouettes on the bodysides.

The Club currently produces at least two 00 scale Limited Editions per year and will produce a Class 33 and a Class 60 for N gauge members this year. An exclusive Club wagon is also available annually, free to members in either 00 scale or N gauge.

If you would like to know more about the **Bachmann Collectors' Club**, write to **PO Box 7820, 13 Moat Way, Barwell, Leicestershire LE9 8WZ. Telephone 0870 751 9990.**



Robert 'John' Hockey

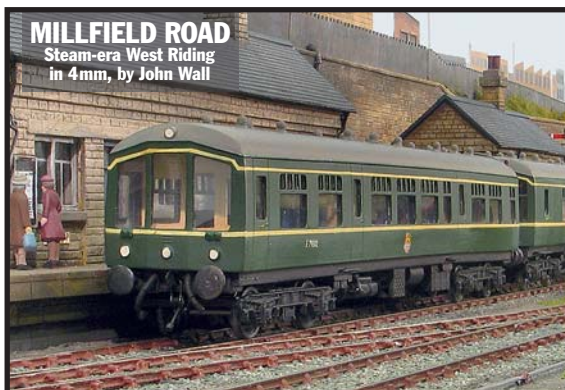
We are sorry to have to announce the death of Robert Hockey, known as John, from a heart attack at just 60.

For nineteen years he was the proprietor of the Great Eastern Toys and Model shop in Norwich, a business he started having sold his refrigerated transport business.

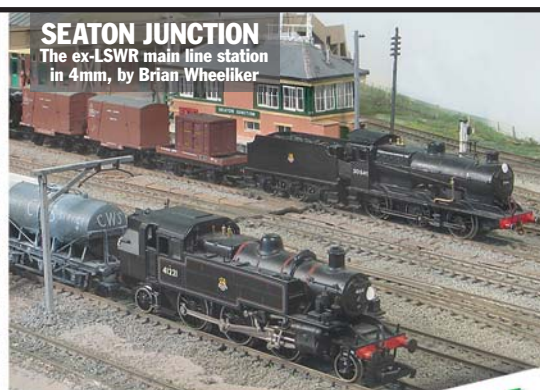
The model business grew from the love of his hobby; over the years a loyal and friendly clientele developed.

The original store was extended to include toys as well as railways; the family will continue to run the business.

Our sincere sympathies go to Mrs. Hockey and their children.



MILLFIELD ROAD
Steam-era West Riding
in 4mm, by John Wall



SEATON JUNCTION
The ex-LSWR main line station
in 4mm, by Brian Wheeliker



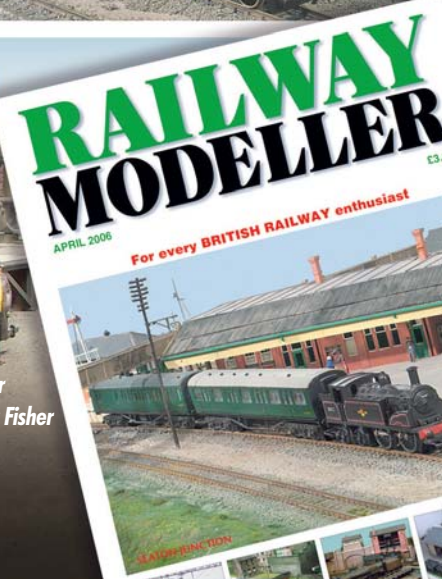
MELCOMBE MAGNA
A mix of S&D and industrials
in 0 by Mike Baker

Coming next month

- **KEW BRIDGE** 4mm scale trams in a small space, by Gerald Warner
- **FINNEGAN'S CROSSING** Irish narrow gauge in 3mm scale by Mark Fisher
- **DCC FOR DAPOL 45xx** Roger Miller shows you how

plus all the regular features

April Issue - Out Thursday 16 March



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APRIL 2006

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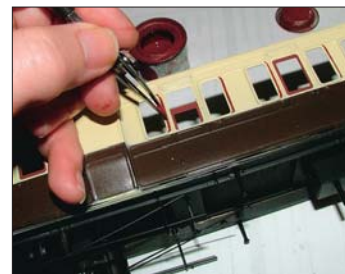
SEATON JUNCTION
– OO ex-LSWR Main Line



KEW BRIDGE
– London Trams in 4mm scale



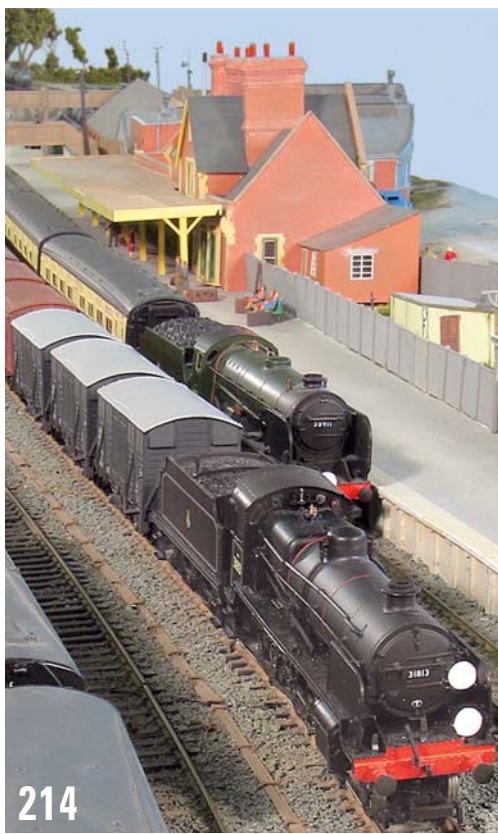
MILLFIELD ROAD
– 4mm West Riding Steam/Diesel



BUILDING A GWR E26
– 7mm Brake Composite Kit



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Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

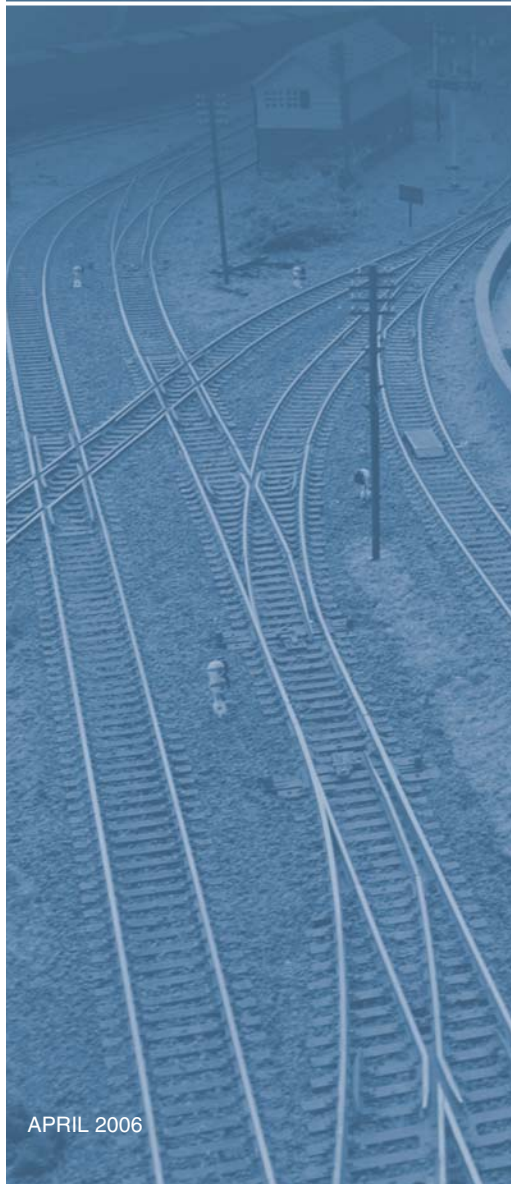
General & Advertisement Manager JOHN KING

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A big win!

We are proud to present the results of our latest Railway Modeller Cup Competition, which has now been going for well over four decades, and is a good gauge as to the interests of our readership.

As always, it is encouraging to note that there were comparatively few features in last year's mix that garnered no mention at all: we tend to think that all our contributors' words are valued, even if they do not relate directly to the reader's choice of scale, gauge or time period modelled.

Placed fourth was *Tapley* by Colin Chisem (November): as we noted at the time, just because a modeller is blessed with ample room for a layout, it does not follow that it has to be choked with track. A set of fine buildings clustered around a passing loop is all you need to evoke the rural byway, as Colin proved so well.

In third position is *The Ditton Chronicles* by John Thorne, three layouts in one, spread over the March, May, July and November issues. Taking a system, real or imaginary, and building it piece by piece results in a real sense of a railway going somewhere, and doing the job for which it was intended.

Two big layouts occupy the top two spots: in 'silver medal' position is *Hebden Bridge* (November) by the Huddersfield Railway Modellers, whilst top of the pile was *Kingsfield* (May) by the Barnhill MRC in Bristol. Both are big, busy main line layouts that are sure-fire crowd-pleasers at exhibitions. *Kingsfield*, incidentally, wins the prize for the biggest layout to date to have been man-handled up to our studio here at Beer: it was quite a logistics exercise!

Clearly the big layouts can more than hold their own in a tide of modest designs, often in the latter devoting more space to fiddle-yard(s) than modelled scenes.

To the winners of the prize draw! As is usual, the prizes are in the form of vouchers, each worth £25, which can be spent with any of the advertisers in this magazine. First prize is £300-worth of vouchers, second prize is £150-worth, and third prize £50-worth. The three lucky winners, in order, are T.R. Baker of Horsham, M. Jackson of Sheffield, and G.R. Dale of Stockport. Well done to all concerned!

Last, but by no means least, the 'Right Away' competition was won by Ian Pickering for Littleton to Biggerton, his home-based layout which appeared in the February, March and June issues. He will be invited to attend the Warley show this December. In passing, it is useful to point out that the 'Right Away' section is for newcomers as much as by newcomers, so is essentially open to all readers. Perhaps there is an idea or procedure that you recall being advised about or shown, that was of assistance when you began railway modelling. Why not share it with today's beginners, especially if it expands on a topic that is too-easily labelled 'assumed knowledge'? Then you could be in the running for the cup!

Nürnberg report

Our sister magazine CONTINENTAL MODELLER will produce its customarily-comprehensive report from this major international trade fair in its April issue, out now. A selection of scenic items, which will have 'cross-frontier' appeal, will be found in the news pages herein.

Naturally, we encourage those of our readers who are interested to learn of the new developments scheduled for our industry this year to buy a copy of CONTINENTAL MODELLER, since there is nothing quite like having all the words and pictures nicely printed and bound in a magazine. But as a first for ourselves we shall be providing all the information and more on a CD-ROM, which should be available by the end of March. It is only priced £1.95 including postage and packing. For more information see the advertisement on page 69a.

One of Gresley's best

Our fold-out scale drawings feature this month covers the Gresley A3 Pacific, perhaps a surprising omission from the late Ian Beattie canon – our own Bob Phelps has produced the linework – but, given that Flying Scotsman is such a well-known machine, perhaps it's better that the less well-known classes were treated first. The

feature does not claim to be exhaustive: the locomotives have too large a literature-base already to make that necessary.

Cover: Ivatt Class 2 Tank 41294 waits at Platform 2 at Rothern Bridge with an Up stopping service whilst E1R 32095 departs with the branch passenger train.

Photograph: Len Weal.

Seaton Junction

A 00 gauge Southern layout in 18' x 14'

This model of a station on the ex-LSWR main line in Devon is described by **BRIAN WHEELIKER**

This layout was built by SMRE (Sheffield Model Railway Enthusiasts) members Kevin Rayworth and myself. As the only 00 gauge Southern fans in our club, it was perhaps inevitable that we should collaborate on some project. Back in 1991 idle musings gave way to realistic planning. Kevin had a converted loft with an 18' x 14' space and I was happy to make the 20-mile round trip on Sunday afternoons. Little did I know that I would cover some 5000 miles over eight years before the project was finished. But what to model exactly?

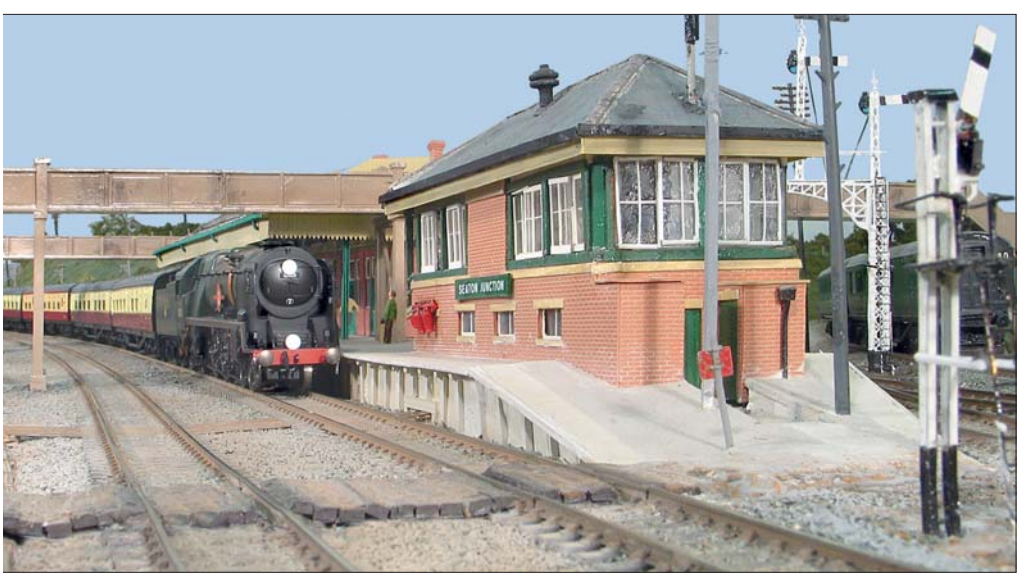
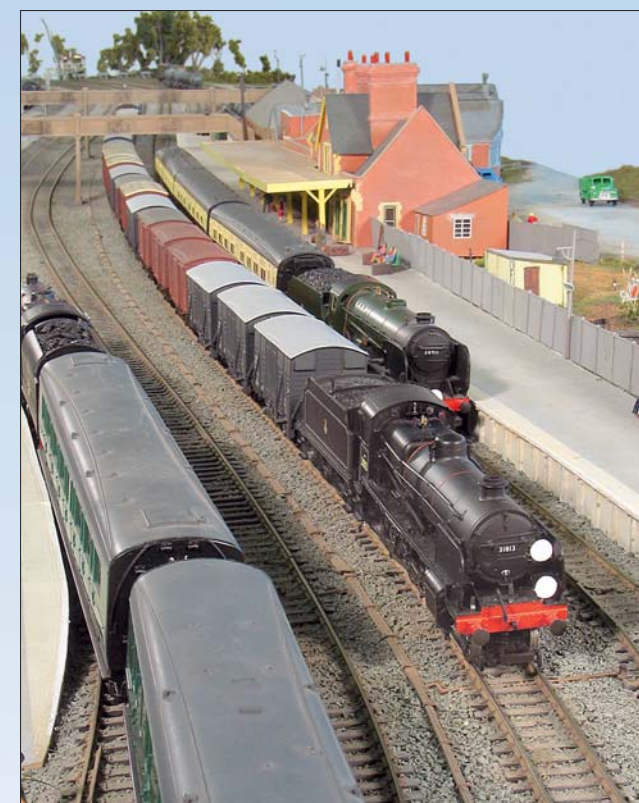
We agreed it should be a real location. We wanted a railway in a landscape, and we would resist the temptation to cram as much track as possible into the available space. It had to be of exhibition standard. A recreation of trainspotting days in our youth perhaps? A fiddle-yard to branch terminus we felt was too limiting, as we

'Merchant Navy' No.35020 *Bibby Line* coasts to a halt with a down express.

Photographs by Steve Flint, Peco Studio.

Transferred after the Kent Coast electrification, 'Schools' No.30911 Dover is on an Up all-stations stopping train to Salisbury. It is being overtaken by N Class No.31813 on a van train. Heading in the opposite direction is a Standard Class 4 4-6-0 on a Yeovil Junction to Exeter train.

As part of its duties on the branch, Ivatt 2-6-2T No.41221 shunts the dairy while Q Class No.30541 heads west on mixed freight.

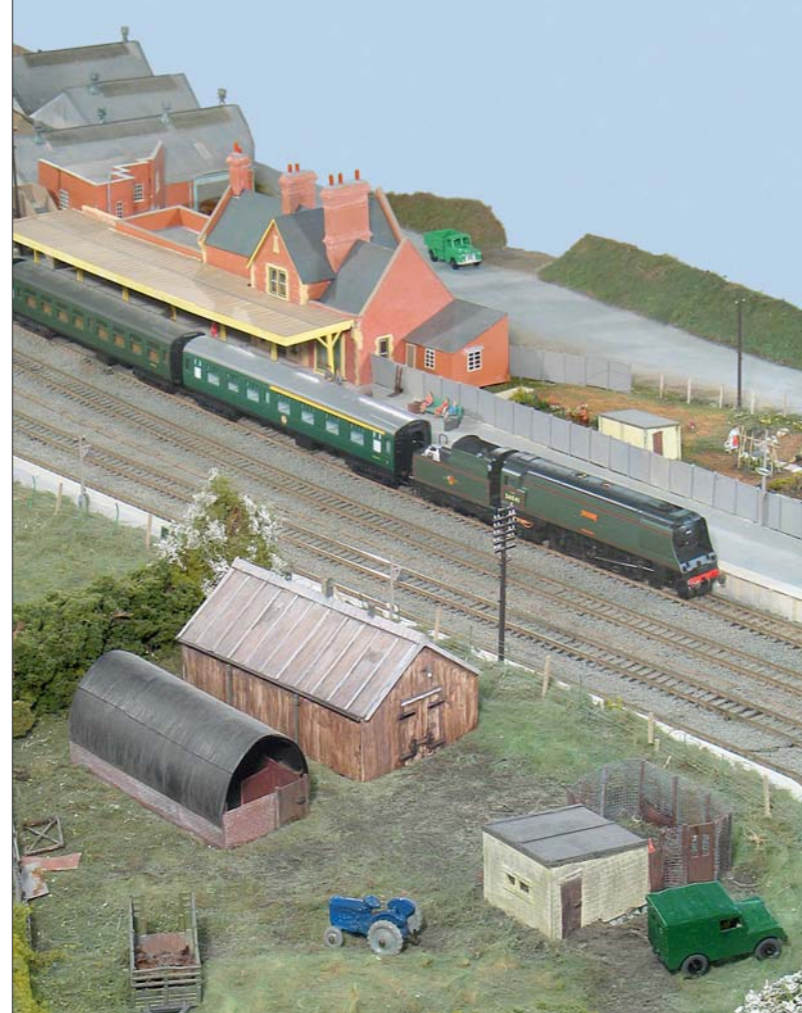


wanted to see express trains trundle past. Main line running but without tall-chasing, so it had to allow some sort of shunting. Out came books and videos and we quickly concluded that a junction on the Salisbury to Exeter main line would suit our purposes. Axminster with the Adams Radial tanks really appealed but we did not think we had the space for the branch to go up and over the main line. Chard Junction was a real contender, and we felt this was possible. But the possibilities of Seaton Junction came through in the end.

The ability to overtake a train held in a platform loop, a branch train connecting with stopping trains and attaching and detaching through coaches, plus a dairy and goods facilities, all this finally won us over. We also liked the lovely sweeping curve through the station, and a very long concrete footbridge carrying a public footpath over the railway. It would have to be foreshortened of course, but we reckoned we could still get a locomotive and eight coaches in the platform. And is there anywhere else that a branch loco would cross the main lines for a spot of shunting still coupled to its coaches?

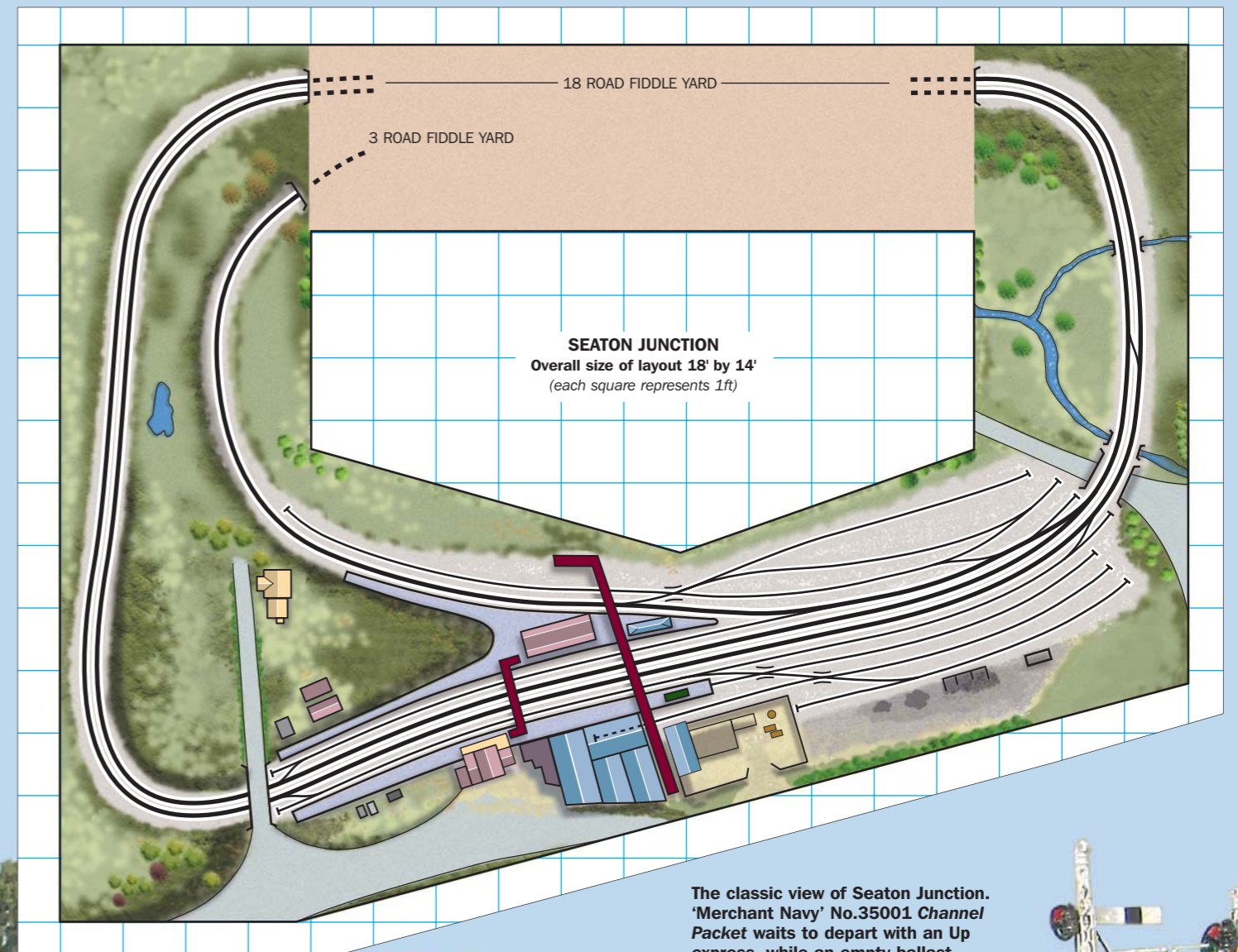
A weakness would be the tight curve east of the station necessary to return the track to the fiddle-yard and this curve would have to turn right as opposed to left on the prototype. We decided that the road bridge at this point would conveniently act as a scenic break, and together with a photographic display at this corner we could make it presentable. The only departure from the actual track diagram would be that the crossover east of the station would have to go.

Next came a visit to Seaton Junction armed with measuring tapes, notebooks and camera. You may wonder why, since the station had closed 25 years previously amid much demolition and the track had been singled. But this was crucial to get a feel for the place and to collect as much information as we could about what was not in books and videos: width of roads and verges, the extent of the dairy, what was in the fields, streams, culverts, the road underbridge west of the yard, the station forecourt and so on. It was during this visit, with the hawthorn blossom so evident, that we decided to set the layout in late spring. We also acquired architectural drawings from the South

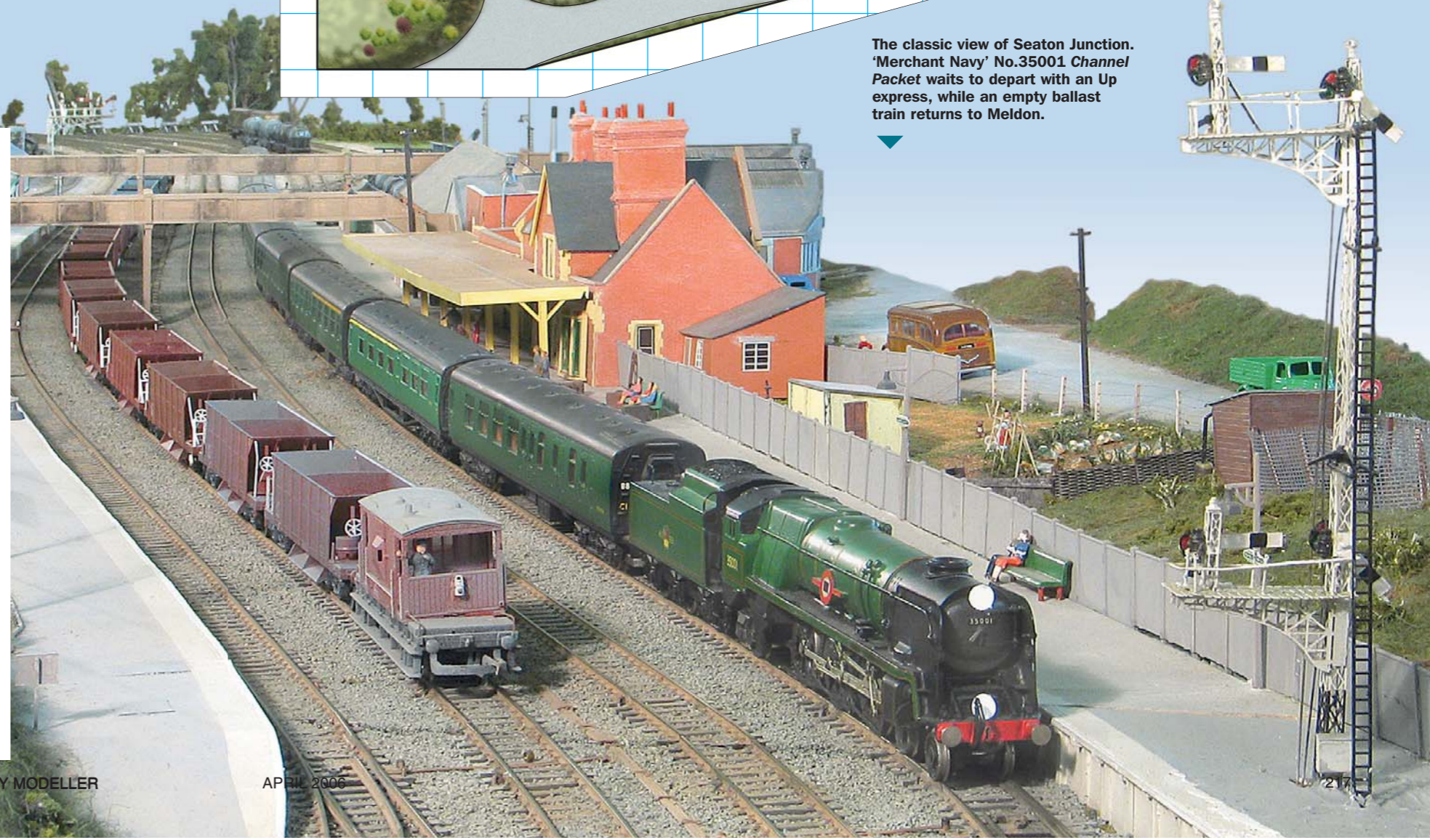


▲ Bulleid 'West Country' No.34041 Wilton waits at the Up platform.

The manner in which the dairy incorporated the old goods shed becomes clear in this view of No.34067 Tangmere departing for Exeter. The long footbridge, made of prefabricated parts from Exmouth Junction, carries a public footpath over the railway.



▲ The classic view of Seaton Junction. 'Merchant Navy' No.35001 Channel Packet waits to depart with an Up express, while an empty ballast train returns to Meldon.





▲ M7 No.30027 awaits departure for Seaton.

Western Circle of the signal box and branch platform building. This organisation has a wealth of material useful to the modeller and we would recommend it.

Construction

Our construction methods are largely as outlined many times more fully in these pages. We found Barry Norman's book on scenics very helpful, stimulating and informative. So the following is a brief guide.

Before starting on the baseboards, some time had been spent on hands and knees with points and flexible track trying to work out some basic dimensions and geometry. This showed that we needed a full 3' width to accommodate the amount of track in the yards west of the

station. It was at this stage we decided that keeping this width all round would give ample opportunity to model landscape. Our 13 baseboards are 1/2" chipboard on a 2" x 1" frame, two of which are not rectangular in order to take the curve to the west of the station. Another board is a long lozenge shape to allow the branch to curve away in prototypical fashion. The height of the layout, at 2'6", was determined by the purlins in the loft. Not all boards are free-standing, but on the ones that are, diagonally opposite legs have a hinged right-angle block for extra support when erecting and dismantling. It was necessary to have a

Having arrived from Seaton, the Ivatt 2-6-2T pulls its train forward in order to run round.



▲ Having marshalled its train of milk tanks, an unrebuilt Light Pacific awaits the all clear as No.35018 British India Line passes with the down Atlantic Coast Express.

removable piece of scenery bridging the space between the branch and the main line at one point to allow access into the corner. With this in place there is 8' of scenery across here.

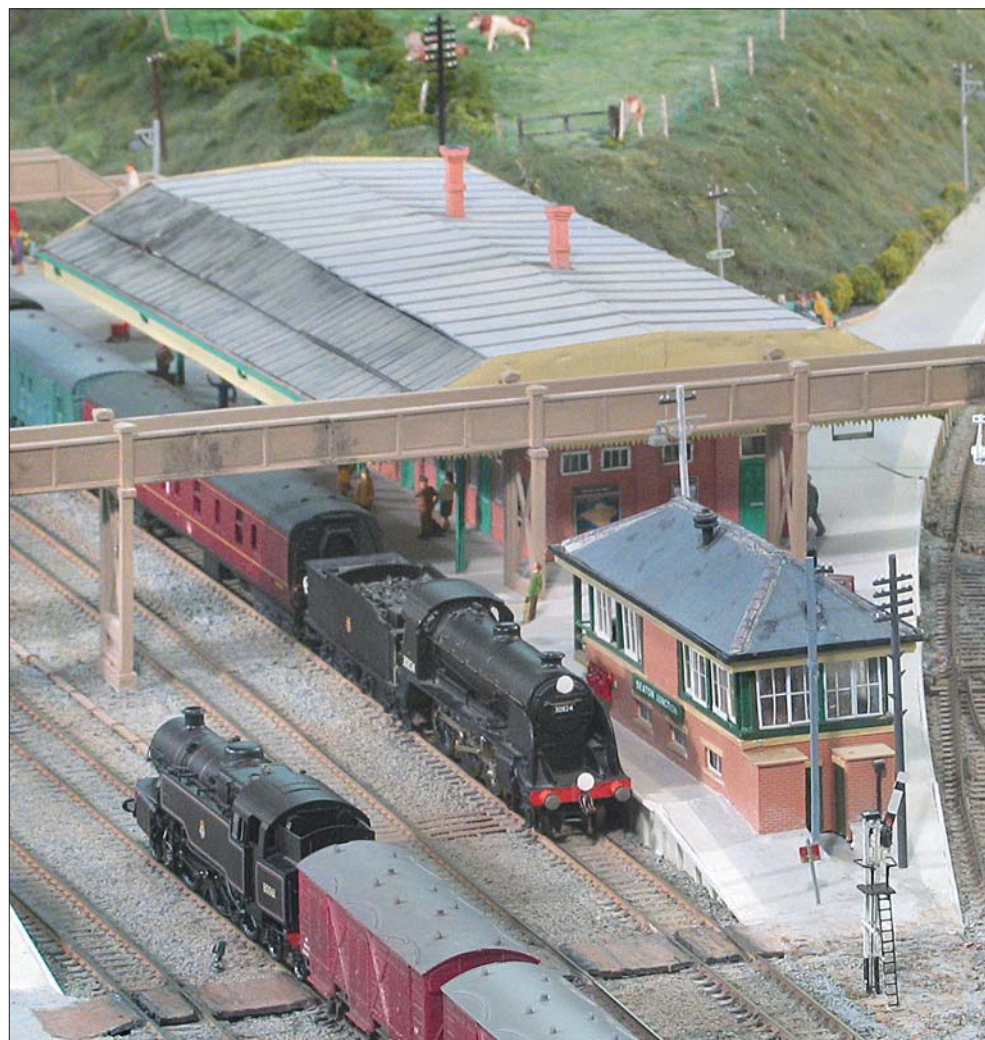
The track plan was then drawn out on the boards, followed by the track, which was laid on 1/8" cork. All track is Peco with live-frog points. The sides of the rails were painted in situ and ballasted using fine-scale granite chippings. The track was then airbrushed with track colour, point blades and tops of rails being wiped immediately. For all our scenic air-brush work we used acrylic paint diluted with meths, as this seems to penetrate better.

There are two controllers on the main panel for the Up and Down lines, and two on the branch panel, one of which can be bypassed by a hand-held walkabout for operating the dairy yard outside the layout. The trackplan is divided into sections, correlating to signal and ground signal sections. Each has a separate power feed from a switch on the trackplan on the panel. Basically power is either on or off in each section derived from the appropriate controller. However where a loco under controller 'A' would have running rights into the area of controller 'B', operator 'B' can set that specific

section switch, which is a DPDT (rather than simple on/off), into the opposite position thereby allowing controller 'A' to power that section. So when a Down express runs forward from the platform with a through coach, it reverses into the branch platform still driven by the main line driver. The same facility is available with the yard panel on the Up side and over the crossover west of the station, in order to get the branch loco and through coaches across to wait in the Up yard before attaching to the rear of a London-bound express. Point operation is by CDU to stud contacts on the trackplan. Signals are worked by simple on/off switches wired to slow-action motors. There are also four electronic track cleaners.

Scenery is carried out by sawing polystyrene blocks for the landforms. When stuck down and shaped, it is then covered with carpet underlay, lint or glass fibre insulation according to the effect desired. When this in turn is stuck and dry, it is ripped up leaving the grass to be teased up and cut to length. The whole is then air-brushed. We find that a final light spray of bright yellow over the greens just helps to lighten and lift it.

Trees are all heather twigs draped with the usual foliage items. This is a quick and simple method of making trees, and in our case there are over 200. The trunks are sprayed lightly with a grey aerosol and touched up with oil pastels. The concrete posts, of which there are over 250, were all cut from styrene lengths, drilled with seven holes at appropriate scale centres, and finally threaded with fishing line before



◀ S15 No.30824 arrives on a down stopping train as a Standard Class 4 2-6-4T heads east.

planting. The point rodding is from lengths of steel wire of the sort used for flying model aeroplanes, with shorter lengths from plastic microstrip. The idea was to create an impression and it is best not to inspect too carefully.

The buildings and bridges are all scratch-built and were drawn to scale from the measurements and photographs we took, except for the ones where we had architectural drawings. Some of the dimensions of the dairy were reduced to make it fit the available space. The agricultural sheds and buildings are more freelance. They are made from card covered with embossed plasticard. Details such as downpipes, chimneys, handrails, etc are adapted from Plastruct or brass items. They all have a slightly weathered finish. The gardens, vegetable plot and flora employ different strings covered in flock and foliage. Blossom is either dyed flock or simply painted on. We tried to arrange figures and animals into group scenes, and the pond has rusting debris in it.

The signals are from components supplied by MSE. Below the baseboard the signal wire is attached to a small rocking lever which is pushed and pulled by a slow-action point motor. The amount of push/pull can be

Light Pacific No.34067 Tangmere attaches the through coach for Seaton onto the branch train prior to continuing its journey to Exeter. In the reverse direction the coach for Waterloo was crossed to the dairy sidings and then propelled on to the rear of an Up train.



adjusted under the layout, and the mechanism can be removed without disturbing the signal above.

Stock and operating

We will not trouble the reader with a detailed list of stock, but rather a few thoughts. The main fiddle-yard runs to 18 trains, with nine on both Up and Down lines, and the branch fiddle-yard holds up to four. In the 1960s the real Seaton Junction largely saw Bulleid Pacifics, S15s, some BR Standards and an M7 on the branch. But this could be rather boring both for us and the public. We have these classes but also try to introduce a greater variety than would normally be seen in a day's trainspotting. We are after all Southern fans, so why not have a T9 on its way back to Exmouth Junction after servicing, or a 'Lord Nelson', even though such appearances were rare. We are both fond of models from our youth such as the Wrenn Bulleids, and we do sometimes run them with a rake of old Triang stock. We accept that they have been superseded by better models, but a little self-indulgence we feel is acceptable.

We have kits from DJH, Wills, Nucat, K's and Millholme and also many proprietary items. Many of the latter have been renumbered, detailed and fitted with real coal and route discs. Recent Bachmann and Hornby products run very well indeed, and any new Southern release, such as the Q1,

will see it appear on some out of the ordinary working. Diesels are largely banned except for an occasional multiple unit on the branch. The last few years of Western Region control, that saw 'Warship' diesels on expresses and a pannier tank on the branch, we have wilfully ignored. Coaches are proprietary except for a few Ian Kirk examples, but brake coaches have jewelled tail lamps, and there is an Atlantic Coast Express with coach destination boards and loco headboard. Goods stock is again mainly off-the-shelf but brake vans have a guard and jewelled lamp. Many wagons have loads, tarpaulins and real coal, and there is also some severe weathering.

We are not too sure why some stock runs well one way round but not the other, but it does. Trains are organised into strict formations and kept that way to ensure trouble-free running. Notes are kept, down to the exact position in a rake each coach or wagon should take. We find it easiest to run trains in the order as set up in the fiddle-yard, but we alternate expresses with local stoppers, pick-up and through freights, parcels and milk workings. We hope this introduces variety, and we reckon that someone has to be watching for at least 25 minutes before seeing the same train. With four operators there is really no excuse for something not happening, and we also drive to the signals. When the layout is fully stocked, there is a lot of pleasure to be had

from recreating the halcyon days at the Junction.

Another important aspect of the layout is the chance for the operator at the front to engage with the public. Many a pleasant exchange has resulted in a youngster being invited to shunt the dairy. There have been no accidents yet, but it is a good job the buffer stops are well anchored down. This type of informal sharing has added a gratifying and unplanned dimension to exhibition running. At several exhibitions where chairs have been used as barriers, it has often led to people turning the chairs round and staying to watch the trains go past for quite long periods. Our display called 'Seaton Junction then and now' was also well worth it judging by comments. As the builders we tend to forget that not everyone knows the geography of the Salisbury to Exeter line. It has been confused with the various Seatons in the North East.

The layout is currently erected at our clubroom and any club member is welcome to have a go. In practice this means it is used as a test track for new stock. Anything from a Virgin Voyager to an American Virginia & Truckee 4-4-0 can be seen passing through. If only this was so at the real Seaton Junction! And so far our ambition to take it near to its actual location in East Devon has not been realised. Finally, our many thanks go to Tony, Keith, David, Nick and Richard for their help at exhibitions.

Seaton Junction is due to appear at the Sheffield MRE's own exhibition this month. Details in Societies & Clubs.

GWR brake composite

The E26 first/third in 7mm scale

'Armchairs on wheels' in c1900-livery, built by CHRIS GWILLIAM from the Blacksmith Models kit.

In the 19th century the Great Western paid scant attention to the comforts of its 'Parliamentary' 3rd class passengers, but the well-heeled gentry who were the company's target market rode in considerable style, and even those of slightly more modest means were also well provided for in second class compartments. The batch of three brake first/second composites built in 1889 to drawing 35094 (later given Diagram E26) was designed to meet the needs of the company's more up-market clientele, with a hugely generous 7' compartment width for the nobs and a still more than adequate 6' for the middle classes.

Upholstery was luxurious in first class, dividing the space into an opulent three-per-side seating plan. There were two first class compartments, each adjacent to a central luggage/guard's compartment, needed for the considerable quantity of baggage which was a prerequisite for any journey undertaken by the wealthy. There were four seconds, two at each end. Swindon was on the cusp of one of its periodic design changes, so the lower roof is of later three-arc pattern, but the upper roof is of the early single arc type.

I had been commissioned to build and paint a model in c1900 condition, in the gloriously complicated fully-lined chocolate and cream livery, complete with cream panels in the clerestory deck. Lettering in this era was 'first' and 'second' (ie before the seconds were downgraded to third class), and as the guard and luggage shared the same double doors the human took priority and the lettering was 'guard', not 'luggage compt'. All this livery complication is just my idea of fun.

The kit

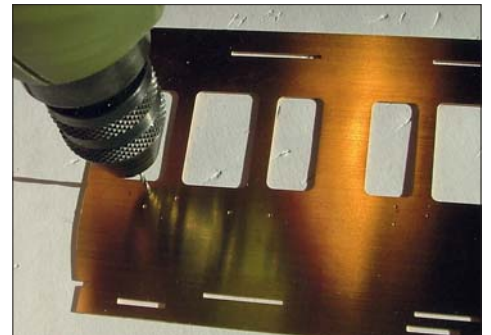
The 7mm Blacksmith kit for this Diagram is one of the firm's new range of second generation products. I've been a big fan of the earlier etched brass clerestory kits for many years, right back to the first 4mm incarnation under the great Fred Blackman's original Mallard label about 25 years ago, and I must have built dozens. The first generation of 7mm kits made up into sturdy and realistic models, but were perhaps a little lacking in fine detail (for example, no lower running boards were provided for the body so if you were modelling the kits in pre-1914 condition you had to make your own or do without).

The newer designs were computer-drawn for Blacksmith by the late Carl Legg, who was an early adopter of CAD, so it came as no surprise when I opened the box of the E26 to find that the Blacksmith house-style has swung from somewhat sparse to complex. The etches

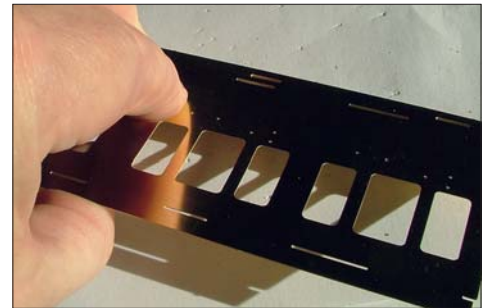


Above: the completed model.

Right: while the bodyside etches are still flat drill for door furniture, working from the rear to avoid potential damage: a 1mm bit is used in my Proxxon FBS12 power drill to open out the holes for the T handles and commode handles. I ran it at about 3/4 of full power. If you are going to add door-bumps from wire, drill the marks for those as well. If you are modelling your E26 in post-1910 condition you'll need to mark and drill for the lower commode handle on the RH guard/luggage door, which was a retro-fit by Swindon, and can be made up from brass wire.



Below right: the tumblehome-curve in the half-etched lower body is easy to bend to shape using just finger pressure, with eight fingers on top and two thumbs beneath to create a shallow angle, pressing onto several layers of scrap paper. Use the etched ends as a template to ensure the right degree of curvature. But score the base-of-side fold-line with a knife blade first or you may get an unwanted kink on the beading along the lower edge of the body panel.



Photographs by the author.

contained a lot of extra detailing parts. Maybe rather too much detail? Soldering on 24 separate bolections – the beading around each quarter-light – is a mind-numbing job, and it is the very devil to get paint to fill the microscopic joint between bolection and panelling.

However, Carl has largely stuck with the original Blackman constructional style (eg solebars slotted into the base of the tumblehome) and the original Mallard Dean 6'4" bogie etch is still included, but with updated running boards and revised castings. The kit sells for £86, very reasonable when you consider many coach kits are now over £100.

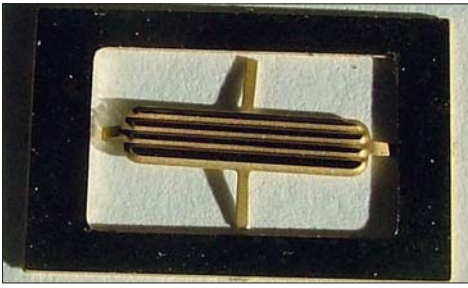
Other innovations include overlays containing rivet detail for the solebars and headstocks, and much more realistically etched commode handles. The instruction sheet is much improved as well; with the older kits you would really struggle if you did not have a decent library of GWR books. Now you get a

parts list, a numbered silhouette of the etch, a Swindon drawing and a step-by-step guide, though some research will still be needed, and the part numbers are not mentioned in the text of the build sequence, only in the parts list.

You will need to buy two packets of Slater's GW-pattern Mansell wheels and bearings (ref.7124G), plus couplings of your choice. The kit provides gas lighting apparatus only. Turned brass T handles were missing from my example, so I had to phone for some spares. I was also short of one buffer casting.

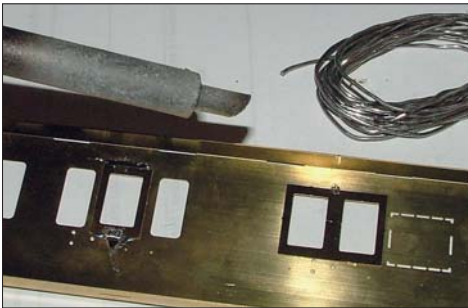
Building the body

First, droplights and door-ventilators need to be separated from the etch for the clerestory deck. Then each bodyside needs preparing: witness marks for the door-bumps are etched on both sides of the lower waistline. As an experiment I tried forming a bump using a

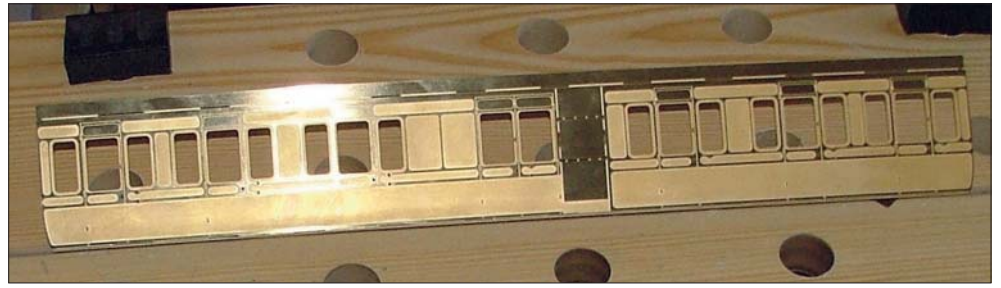


tack-hammer and centre punch from the rear of the body panel, but the result was not very life-like, and it is clear that you are meant to drill through 1mm and solder in tiny scraps of 0.9mm wire which can be filed to the correct height. But life is too short and in any case experience tells me that lining-out is impeded by the bumps, and one's bow-pen delivers an unwanted blob of paint every time it hits an obstruction, so in my view a little detail can be sacrificed in favour of a smoother paint job.

Once the various body-holes have been drilled, the tumblehome can be formed: the instructions suggest leaving it until after the bolections are added, but I feared that the stress induced by the process might cause some sweated joints to ping open so I formed the curve at an early stage, and then folded the top and bottom flanges before any soldering. I departed from the instructions which imply a 90 degree top flange and bent it to the same angle as the roof profile. Now add the droplights as shown in my photo.



When you come to roll the guard's look-out (aka ducket) to the correct profile you will encounter the first error in the kit, and it is a big one. At the kit's CAD drawing stage the top and bottom panels of the look-out have been drawn to their two-dimensional size as shown on the Swindon drawing, with no allowance for the additional length which is needed once the curves have been formed, so the part is short by about 2mm in both top and bottom panels. The gap at the top is not too much of a problem as it can be hidden by the overhang of the roof, but as supplied the lower edge beading sits higher than the rest of the body



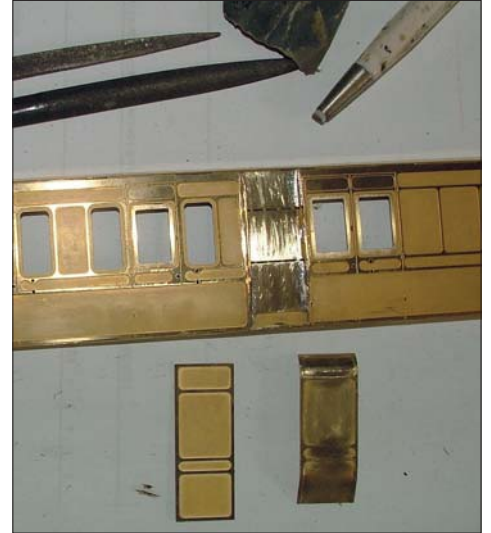
Above left: the ventilators are etched into the void of the droplights to save space on the etch, but it does mean there is rather a lot of cleaning up with files to remove the tags, and if you don't cut onto a hard surface (eg MDF) you may crease the parts as you cut them out – I used a new Stanley blade.

Above: the base of the side is clamped in a woodworker's adjustable bench so the long fold can be made in one movement. Then the side is released and upended so the fold at the top of the side can be made in the same way. Note the relieving slots to assist with the folding, though I am not keen on them, as from some angles they can be seen on the finished model.

Below left: soldering the double droplight in the guard/luggage doors. Place the droplight carefully in position and secure the upper edge with just a tiny tag of solder, turn the side over to ensure the droplight is square, adjust if need be, then seam up the lower edge, finally spreading the tag on the upper edge into a full seam. If you are quick you should be able to avoid solder showing from the front, though I once saw even the great Carl Legg himself having to use a blade to remove excess solder from a droplight, during a demo at a York show some years ago, so take heart if you have some cleaning up to do! Some droplights could be chopped in half and inserted to represent partially open windows. I'm using a Weller 40w iron with an elderly and much abused bit, and 188 degree tin/lead cored solder. If you want access to the rear of the guard's look-out to insert glazing, you'll need to remove the rectangle of brass within the dotted lines, but I left it in place so I could make use of the longer vertical slots to secure the sides of the look-out.

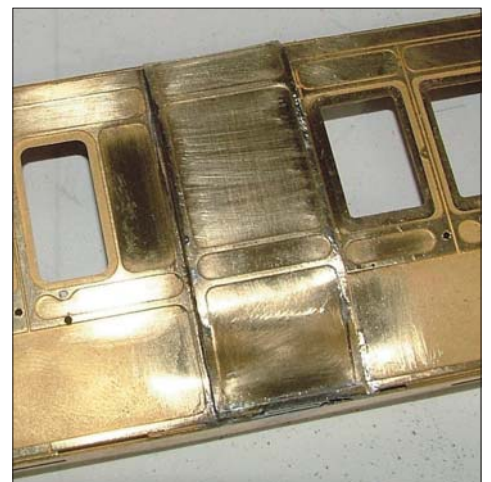
beading and lots of bodging is needed, as my photographs reveal. You should ignore the drawing in the instructions showing how to fit the look-out, as it applies to the old-style all-in-one etching in the first generation kits and is useless for this revised model. Boredom beckons at this point as you can't put off adding the bolections any longer. If I had been building for myself I would have simply left them off altogether and just painted the recesses into which they fit, because I reckon that from normal viewing distance their absence is barely visible, and the old-style kits looked fine without them.

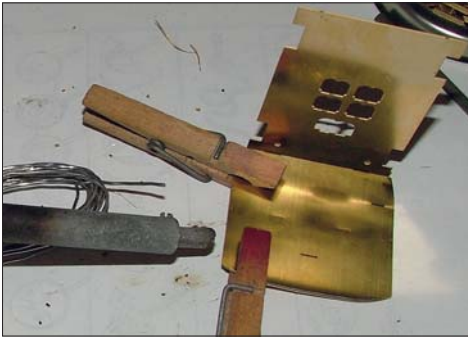
Left: big snag! The look-out panelling has been drawn too short. In the flat it is the same height as the body, whereas it should have been drawn with top and bottom panels each 2mm longer to allow for curvature. When the component is curved and fitted to the look-out sides there is a gap at top and bottom if the waist is in line with the body panelling. A clear case of a fault which should have been rectified after the test etch was built, if indeed the manufacturer *did* do a test build.



Above: here is how I mitigated, but not entirely solved, the undersized look-out problem. The side panels of the look-out were soldered in place and burnished, then from the waist to the base of the tumblehome their edges were filed back by about 1mm to produce a less pronounced curve; finally the process was repeated on the edge which will support the uppermost panel. The front panel had already been bent to shape before I spotted the difficulty, which was a pity as I then had to unbend it so I had a flat component again. The beading at the bottom edge of the lowest look-out panel was filed off and cleaned up with fine wet/dry paper and a fibre glass pencil, then the lower 'S' curve was restored, but to a rather shallower profile to match the newly reduced curve on the sides. The unmodified part is also shown for comparison.

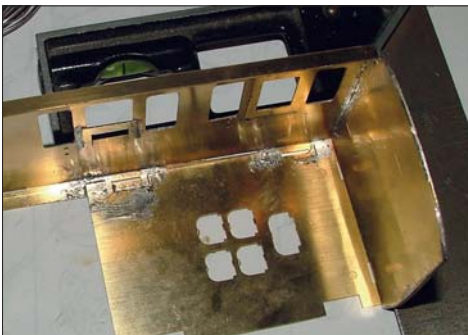
Below: the look-out has been soldered in place, the missing lower beading has been replaced with a strip of scrap brass in line with the beading along the rest of the lower body, and the inevitable solder marks have been cleaned up with a glass-fibre brush.





On to the ends, and to the best of my knowledge steps were at one end only, though the kit provides extra steps (but not slots) for the second end. The sides are a mirror image of each other, and the off-centre look-out is nearer the plain end, so make sure you orientate the parts correctly. GWR practice was to have a tumble-home on ends as well as sides so there are more curves to be formed using finger pressure, and the ends come as a double layer, with the inner (un-detailed) one a full 18thou thickness, so a fair amount of force is needed. The panelled outer skins are etched integrally with the end panel of the clerestory, but this means that you have to cut a slot in the roof through which it protrudes if you build as suggested. This has always seemed to me to be an accident waiting to happen, and my preferred method is to crop off the clerestory end from the body end, leave the roof intact, and solder the severed upper end to the top of the roof at a later stage. At the end with steps there are rivets to be formed by punching out witness marks on the rear.

The inner and outer end layers can now be soldered together. File all the cusp off the ends of the long flanges at top and bottom of the sides, or the double-layered ends will not fit snugly inside the sides. Now join your laminated end to one side and check again that you have got the right one – plain end with the look-outs closer! The instructions say you have



Left: if you do not fancy cutting a slot in the roof for the clerestory end, this is my alternative. Use a big pair of tin-snips to crop off the upper end, and put it aside so it can be soldered to the top of the roof later. The slight curl imparted by the cutting action is easily flattened, and the lower edge of the cropped piece can be cleaned up with a half-round file. The inner (dummy) end has already been decapitated. Note that the slots for steps are not needed on the inner layer at this end of the coach.

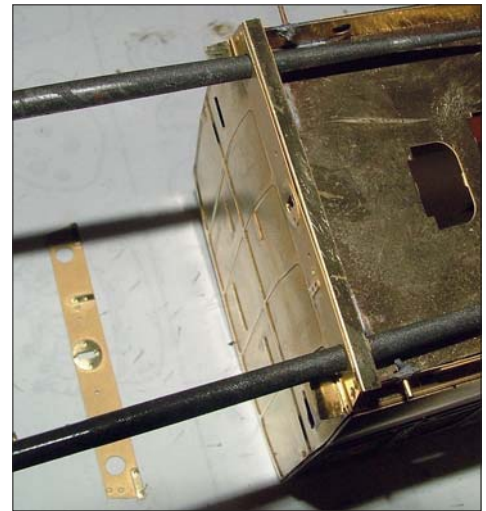
Lower left: a stealth raid on the laundry basket produced some old-fashioned wooden clothes-pegs to hold the two end layers together during soldering. One has evidently been nicked before during a BR carmine paint-job. Don't blame me if you get caught; best to ask nicely before you 'borrow'. Plastic pegs are unsuitable, obviously. Sweating the parts might cause distortion so I simply ran a fillet of solder along the exposed edges and filed clean afterwards.

Bottom left: the laminated end has been fitted to one side, with the floor panel sitting on top of the lower side flange. The engineer's square is there to ensure a 90-degree angle; if you get it wrong the coach will be skewed for ever. I ignored the order advised in the instructions. In my opinion the crucial first tack-solder is the one beneath the half-open droplight, and before you make the joint check that the side and end are a perfect match. Note that the floor-pan does *not* butt up tight against the lower edge of the side – there is a gap of about 1.5mm. If you don't leave this gap, you won't get a 90-degree angle at the end. Once the floor has been tacked at three more points the end/side joint can be seamed up.

Bottom centre: once you have a basic box structure it is well worth adding a bracing piece from scrap etch between the look-outs. Not only will it prevent the sides bowing in, it will give you a hand-hold during painting. The rather more elegant second lookout is visible: being forewarned about the 1.5mm gap, I managed almost to close it. Check again that the coach is square and parallel after you add the cross-piece, as it might have introduced distortion.

to cut a piece away to make room for the solebar tabs, but I did not find this to be the case. Being left-handed and a creature of habit, I always do a RH end/side joint first, as it's marginally easier than a LH one, with my right hand holding the work pieces together and the hot iron in my left. Right-hookers should do this in reverse order!

Repeat the process for the remaining side/end, and then join the two L-pieces to form a four-sided box. The end details are vulnerable to handling damage so I left them until later and moved on to the underframe.



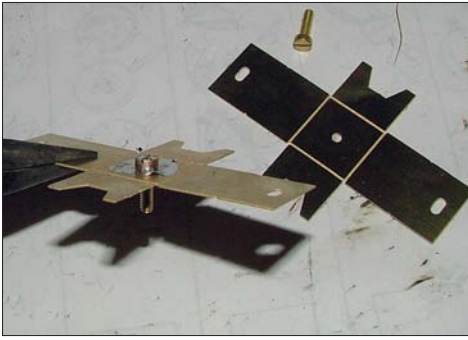
Top: the solebar overlay can be secured to the inner solebar layer simultaneously with the brass wire for the running board supports, and any excess wire behind the solebar can be snipped off with side-cutters and filed back.

Above: two rat-tail files were stuffed into the buffer-holes to ensure that the headstock overlay stayed put whilst it was being soldered to the inner layer. Remember to form the rivet detail before you add the overlay. The pins for the running boards can be seen on the solebars.

Underframe

The instructions advise adding V-hangers and queen posts next but it seemed more logical to me to add the solebars and headstocks first. The solebars are double-layered, with a 1mm half-etched rebate on the wider inner layer, which is nowhere mentioned in the paperwork but I assume that it is meant to be folded over to provide a flange at the base of the solebar. Frankly it is so thin and narrow that the chances of getting a clean fold are nil, so I simply filed it off. The holes in the headstocks for the buffers needed opening up slightly for the rear of the buffer housing to fit. There are also tiny holes for fitting safety chains and hooks if you are modelling the coach in ex-works condition as at 1889, but these parts are not provided.

The benefits of CAD become apparent when the tabs on the solebar fit into slots in the body flange perfectly at first attempt – the old hand-drawn kits sometimes needed some fettling. Rivets need punching on the overlay, then it can be added to the rear layer simultaneously with the short pieces of 0.9mm wire which form the running board supports, with the solder which holds the wire also flooding the two layers of solebar. I changed from my 40w Weller to a smaller Antex 25w iron for this task. Note that the rivet detail on the etched pads for the bogie stanchions (sometimes called scroll-irons) duplicates the rivets on the

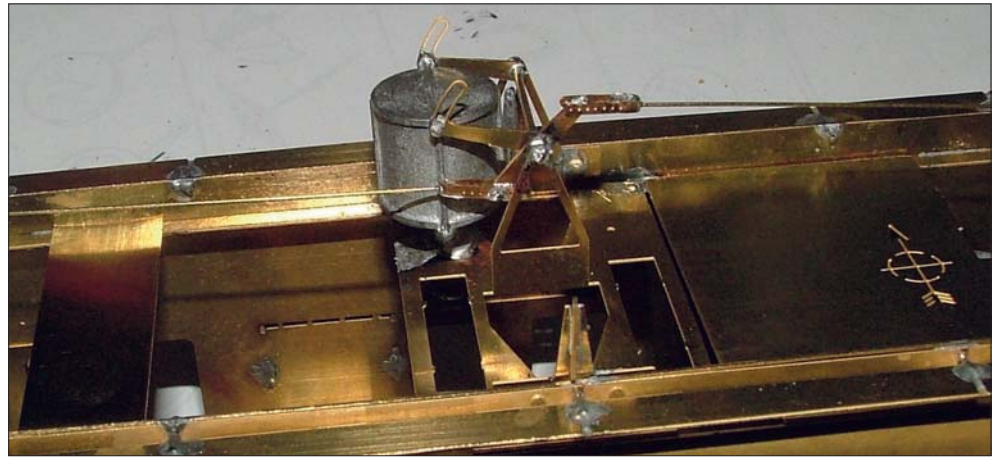
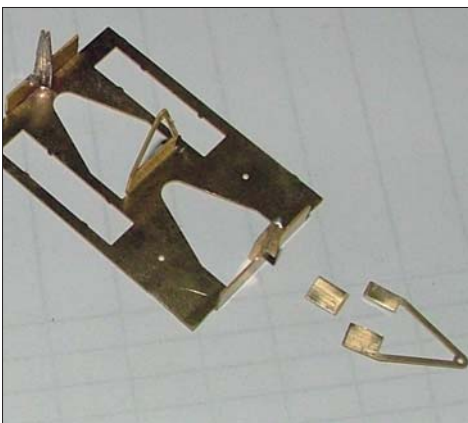


Above: it is easier to solder a 6BA screw into the bolster while it is still flat. I used shorter ones than those in the kit so they would be less obtrusive under the floor. The central hole will need reaming out slightly. Alternatively, solder a nut to the inner face of the bolster so a screw can be inserted from below once the bogie is in place. The pliers prevent burnt fingers. Time to replace the scorched scrap-paper I'm working on, methinks.

Below: the V-hanger next to the solebar is problematical. It is meant to be folded against the adjacent queen post, but the fold line is too narrow, so it's easier to fatigue the V off and re-solder it, otherwise you will get buckling. You will also need to cut out a rectangle of metal as shown to make room for the rear of the queen post.

castings and should be ignored, or the raised bumps will prevent the castings fitting flush. I realised somewhat late in the day that I had cut all the wire step supports a bit on the short side – ideally they should protrude by 6mm clear of the solebar, and I had only allowed 4mm, which was just sufficient but hardly overgenerous. File back the stubs of wire at the rear of the solebars where the queen posts need to fit until the surface is absolutely flush.

You should add the whitmetal bogie stanchions before the upper running board as it is very hard if you leave them until afterwards. Take great care when removing the running boards from the mother-etch; the half-etched witness marks for the step support brackets make the long parts very vulnerable to kinking. I clamped the up-stands on the running boards in a vice to form the folds. The V-hanger/queen post etch was always a difficulty on the old kits, and whilst this one has been improved it is still not possible to use straight from the box and some modification is called for. One V needs cropping and trimming, then re-fitting – see my photo for details.



Once this has been done you can add the assembly to the underside of the coach. The V immediately next to the solebar is on the side with the end-steps to the right. Two large bolt-heads etched onto the solebar overlay indicate the centre of the coach, and the queen posts should be exactly on the centre-line. I added the brake cylinder and associated rodding next, but it would have been a bit easier to solder the support brackets for the lower running boards first – make them from 0.7mm wire, 18mm long with an L-foot 8mm wide. They are fixed to the inner face of the solebars, behind the upper step brackets each side of the centre-line, two on each side of the coach. The truss-rods (152mm of wire, bent into a shallow V) would also have benefited from being fixed to the queen posts and solebar rears before the brakes. I found out the hard way. The lower running boards, once in place, need to sit at the same height as the steps on the bogies. I shortened each lower running board by 2mm at each end to be sure there would be sufficient room for bogie swing on over-scale curves, but in practice I discovered that they could have been left as etched. One of the witness marks on the underside of the step is in the wrong place, on the centre-line instead of off-set, so fill it with solder to prevent it kinking, as the centre-line is an instinctive place to grab a coach when you are picking it up and damage will otherwise be inevitable.

Ignore the stuff above if you model after about 1910 by which time the lower running boards were being removed from the body. Double-check that you cut all your supports the same size and that the lower step is parallel to the upper one.

You will need to source some more 0.7mm straight brass wire for these tasks, as there is insufficient in the kit. I had used well over two metres of the stuff by the time I'd finished, as I used it for roof gas pipes and for rainstrips as well in preference to the plastic strip provided, which was also too sparsely supplied for both lower and upper roofs to be done. MetalSmith sells 0.7mm nickel silver or brass wire in metre pieces, whereas most stockists pre-cut to 12" which is too short for roof strips. A witness mark on the floor shows where the bolster centre-line should be – pencil a line through the mark so you can see it underneath the two oval holes in the bolster. You could drill the floor and fit the bolster in place with screws

Above: the GWR Dean brake gear has the reputation of being difficult to model, but it's not too hard if you first study the photos of the prototype in Jim Russell's *Pictorial Record*. The new-style Blacksmith kit provides much improved double-layer perforated brake adjusters, which after a brief but spectacular first and last flight from my desk are now living a life of Riley somewhere in my shag-pile, so I've substituted some spares from a Slaters kit. The 'rabbit-ear' cranks are to an improved drawing as well; the old ones were too small to fit comfortably and I always had some bodging to do. The end of the coach with steps is to the right of the picture, and the chunk of floor with a compass rose is simply part of the scrap mother-etch from the kit, soldered between the solebars to give an anchorage for two gas tanks; the arrow has no significance. There is another scrap cross-piece to the left to provide a purchase for a safety loop from a fragment of thin 16thou etch. Pull rods are 0.45mm brass wire, not supplied.

Below: the gas cylinders themselves were suspended from the floor by wire hoops, which can easily be fettled up from strips of scrap brass formed into omega loops. The pliers both hold the loops tight during soldering and prevent burnt fingers. The castings for the cylinder ends will need filing to remove flash and the brass tube supplied is a tad short when compared with the scale drawing. Valves and dials are not provided.



through these holes, but no nuts or screws are provided for this, so I soldered the bolsters firmly to the floor.

The final task on the underframe is to fit the sprung buffers. It is easier to assemble the spring, shank and retaining nut and check all is well before you use low-melt solder to add the assembly to the headstock. The nut needs a dab of solder to hold it on the thread or it will surely unwind into the four-foot during service. I always put a tiny amount of light oil inside the barrel to make for a smooth action and to prevent any corrosion of the steel shank during subsequent washing.



Left: the early-pattern upper lamp-irons came from my spares box – the ones in the kit were only retro-fitted after c1910, and even then not to all vehicles. The lower limb needed cropping slightly to fit between the waist beading and the etched mark for the handrails. The kit provides etched irons for the lamp bracket just above the LH buffer, but I chose to fabricate them from a long piece of scrap etch, which avoids scorched fingers, and can be cropped to length with side cutters, then rounded off with a file. There is a slight etching error where the lowest-but-one LH step will fit – the upstand should be below the slot ('downstand?'), as this step was fitted upside down to provide a bit more clearance for the guard to fit a lamp. Handrails cannot be fitted until after the roof is in place.

Below left: the completed body was sprayed overall with two thin coats of Simoniz cellulose satin black aerosol, and once dry (left overnight, even though it's touch-dry much sooner) masking tape was attached to the underframe and a coat of well-thinned Comet cellulose GWR chocolate brown was airbrushed onto both sides and ends, but if you are modelling 1912 or later mask off the black ends as well. Low winter sunlight makes the brown appear very pale; in reality it is a rich deep chocolate.

Top right: the devil is in the detail. Using a bowpen to fill the bolelection/panelling joint with paint which is tricky and time-consuming. The 'teak' is a mixture of Humbrol 186 brown and Railmatch LMS crimson lake. If I had been painting the so-called 'simple' livery I would only have filled in the inner recessed area of the bolelections, as I find it impossible to get a crisp enough 'teak' paint-line against the cream panel-beading. With the full livery, as begun here, a later line of black can be used to cover any imperfections. I did not notice I had smeared paint on my fingers and, yes, I did blob the cream surface, but was let out of gaol by quick action with a tissue dipped in turpentine substitute, the vulnerable cream and brown cellulose mercifully having been protected with a coat of varnish which had been allowed to harden fully before lining commenced.

Top far right: black horizontal lines have been added with a bowpen, and the broad black stripe at the cantrail has been filled in with a No.2 brush and allowed to dry. Now the verticals can be added, and any ragged edges of 'teak' around the bolelection can be covered over with black to give a neat finish. The wooden cocktail stick is an essential tool for scraping away any mistakes, using the point for minor errors, and with a wedge cut at one end for major blunders.

Detailing the ends

There is an omission when you come to detail the ends. Despite what the perspective sketch (unchanged from the old kits) implies, none of the earlier-pattern upper lamp-irons are supplied; the tall angled ones on the etch were retro-fitted from about 1910 on some but not all coaches. Four of them are spares so it's a pity four of the early pattern were not provided instead. Luckily I had some spares of the early quarter-circle-and-upstand type from another project, but if this is your first Blacksmith kit you will have to try fabricating four from scrap, which is not easy. They fit in the corner immediately above the waist beading, not below as shown in the perspective sketch, and they are missing entirely from the photo of a 4mm scratchbuilt model which is what the instructions provide. A picture of the prototype would have been really helpful.

Alarm apparatus of standard 'modern' GWR type was only fitted from the beginning of the 20th century, so I was able to leave it off; if you model a later period fit alarm piping and 'telltale' ears at the plain end, using 0.9mm wire.

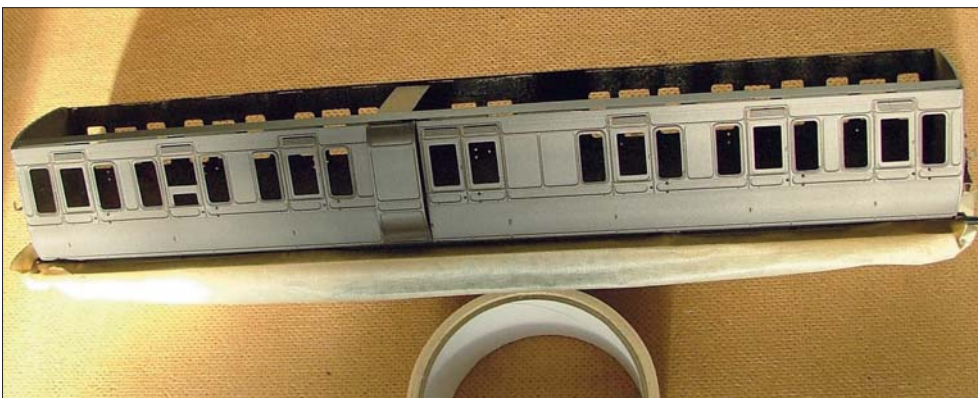
The end-steps slotted into place with no problems. I forgot to add a gas-light switch on the plain end since there was not one on the etch to remind me. I used a spare from (I think) an SE&CR kit and had to glue it on after painting – drat. Failing that I would have used a length of 0.7mm wire with a stirrup formed in each end with a pair of snipe-nosed pliers. I omitted the whitmetal steam hoses, having accidentally broken off so many in the past due to their extreme fragility. If you want steam heating I would strongly advise sourcing some lost-wax brass alternatives. There is no rhyme or reason to GWR policy on which side of the coupling the vacuum hose was fitted, so in the

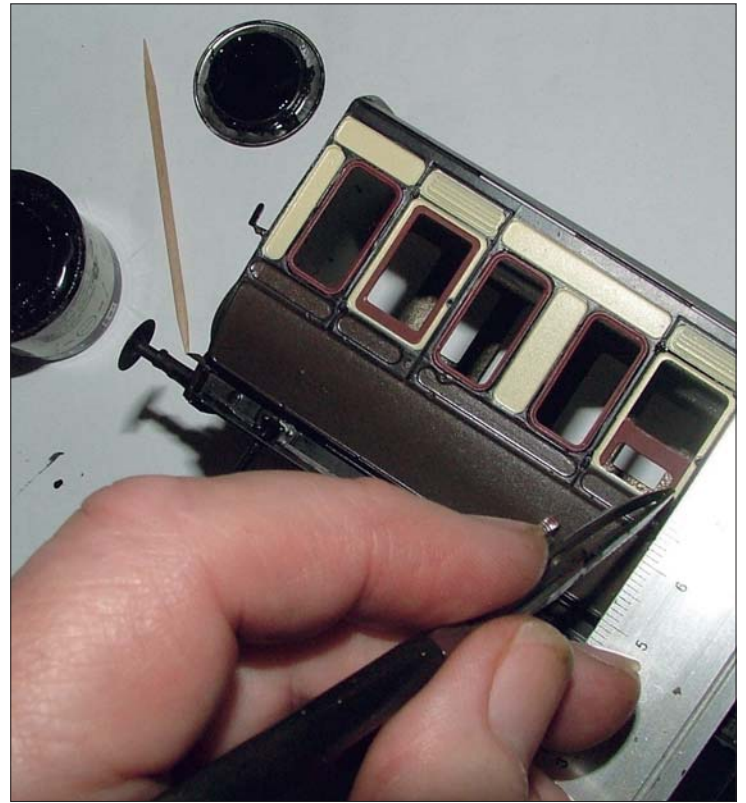
absence of photographic evidence I have gone with the flow and fixed them where the brass pads are etched on the end, ie to the right of the coupling at both ends. There are two miniscule washers on the etch which are unidentified so they went in the spares bin. Last of all the body was washed in Viakal to clean off any flux, and when it was dry the door vents were fixed with superglue prior to priming and top-coating.

Painting the body

A card floor is a useful addition before priming is done to prevent black aerosol paint from the underframe over-spraying into the interior. I sprayed the entire body and underframe black. While it is drying you can be getting on with assembling the roof and bogies (see below). When the black is dry, mask off the underframe (and also mask the black ends for both the 1912 lake era and the reintroduced 1922 two-tone livery) and spray chocolate over everything visible.

For the main body colours I used well-thinned Comet cellulose GWR chocolate and so-called 'primrose' which gives a wonderful finish, but it does need an airbrushed coat of varnish before any lining-out is done, as otherwise it remains slightly soft and vulnerable to damage. After another delay for drying, further masking can be applied to the lower body as far up as the upper waist beading and the entire ends, and the final top-coat of cream can be sprayed on. Remove the masks immediately.





Some touching up with Humbrol black 85 in a No.2 brush will probably be needed around the solebar and headstocks, as it is almost impossible to get a paint-tight seal with the tape where it has to cover raised objects like stanchions and buffers. That is why I don't advocate soldering the door furniture yet; the fewer obstacles to a tight seal of masking the better. I used super-glue to add T-handles and commodes after painting, lining and application of HMRS Pressfix transfers was complete, but before a second and final airbrushed varnish coat, and the varnish then prevents the brass from tarnishing.

In this instance I used a 50/50 mix of Wilkinson's hardware store's own-brand satin and gloss varnish as my client wanted an almost-ex-works look. The varnish was thinned with petrol (stored in a garden shed, not indoors) and sprayed out of doors, using a face-mask of course. The brake hoses are picked out in a matt mid-grey. One more paint job remains to be done, but I tend to leave it until after lining out; brush-painting the running boards in what my client refers to as 'drift-wood grey'. A simple task: mix roughly two parts of sand 63 and three parts of pale grey 64, brush lengthways so any streaks will look like grain, and when the steps are fully dry wash them with thinners discoloured with a little chocolate 98. After further drying time, a final light dusting with talc on a No.6 dry brush completes the trick.

Lining out

The sequence to which I always adhere is as follows: 'teak' droplights; 'teak' bolections; black horizontal beading (Humbrol 85 straight from a fresh tin); black vertical beading; 'gold' curved panel areas (actually slightly thinned Humbrol 63 sand), then horizontal and vertical 'gold' straight lines inside the

black with the line actually on the cusp of the beading, neither inside the panel nor on top of the beading. Finally I use slightly thinned Railmatch GWR chocolate for the door ventilators and the very fine line inside each cream panel, because the Comet cellulose which is the sprayed body colour dries too quickly in my bowpen to be useable for this task. The Railmatch is a tad darker but the deception is not apparent.

I used three different pens, a narrow-tip Ecobra for the curves and the fine brown lines

Below: adding a final bit of lining I'd forgotten before I glued the door furniture in place, the fine chocolate stripes on the door vents. On the real thing the brown was actually feathered in to provide a graduated area where brown and cream merged! The test-lines on the scrap paper are visible: it's always best to check that the jaws of the Ecobra pen are the right distance apart before you attempt to add any paint to the precious model.

inside the cream panels, a well-worn German Riefler with a broad tip for the relatively coarse black lines, and a lovely old but barely used medium-size Riefler for the yellow. Laying hands on good pens is very hard since the advent of computer design, and you may have to place a small ad (Wanted – draughtsman's bow-pen in good condition) or trawl e-Bay and/or car boot sales and auctions for a decent second-hand example. If you can, check the tip carefully for wear before you buy, and if the seller knows he/she has a quality product you may have to pay up to \$25, or even £50 for a top-notch Kern.

My vintage Riefler came as a set of three pens with some other drawing instruments in a near-mint boxed set of pre-war vintage which set me back £65 second-hand a few years ago, but it was money well spent as they are a joy to use, and improved the quality of my work significantly.

This article will be concluded next month.



Melcombe Magna (S&D)

An O gauge workshop layout with a garden loop

MIKE BAKER incorporated industry into an S&D-influenced scene, as **ROBERT ILES** discovered.

The Somerset & Dorset Joint Railway has been a life-long interest for Mike Baker, and why not? Years ago he was a fireman around the Templecombe district and has great affection for the locality. He and his wife still live in Dorset in a bungalow with magnificent views over fields and hills.

Throughout the time he has been modelling, Mike has constructed layouts in 00, EM and SM32, but for the past ten years finescale O gauge has been his chosen medium. His purpose-built railway room houses *Melcombe Magna*, a layout idea based on aspects of several S&D locations that come together to form a compact but active layout. It combines the terminus station of *Melcombe Magna*, a lime works and an engine shed with all the features associated with running and maintaining steam locomotives in the years around 1960. The idea for the layout came from Iain Rice's book *Light Railway Layout Designs*.

The railway room is approximately the size of a single garage. The layout runs at around waist-height along a side wall and turns 90° to run against the end wall. A pair of cat-flap size sliding doors allows the use of an external loop of track that takes a short tour around an outdoor undercover extension. At the time of writing, the loop was undeveloped but there is potentially a large amount of garden space available if Mike decides to take it further. At the point where the loop returns is a 'fiddle-deck' which uses cassettes constructed from aluminium angle and MDF.

The baseboards are made mostly from 6mm ply. The section that runs outside the building is 19mm shuttering ply supported on Dexion. The ply is treated with a water-based preservative and covered with a sheet of twinwall polycarbonate.



Left: Collett 2251 0-6-0 No.2223 departs with the afternoon goods.

Lower left: 0-6-0PT No.4691 sorts a couple of 16-ton minerals in the goods yard.

Bottom left and right: industrial locomotives powered by steam (Hawthorn Leslie *The Trooper*) and diesel (a Ruston & Hornsby).

Right: 3F 'Bulldog' No.47374 arrives, as Valerie descends the gradient with a couple of loads.

Below: the station building during a lull. It was built from a Highland Castings resin kit.

The track underlay is 1/8" foam, ballasted with 4mm scale ballast from the C&L range. The trackwork is C&L ready-made plain track with the turnouts constructed with the same firm's components. The outside track is Peco Streamline on a 4'6" radius. Some of the trackwork in the limeworks is Peco code 100 rail soldered to copper-clad sleepers to represent lightly laid track with flat-bottom rail. The narrow gauge line, for the interchange of minerals at Waterloo Wharf, is Peco code 60, again soldered to copper-clad sleepers which are well buried in the ground.

The other side wall of the room is largely devoted to a working area; the worktop and neat storage boxes form a fine example of how to organise this important modeller's territory.

Mike, who runs his own oil central-heating boiler maintenance company, is aware of the necessity for comfort when modelling and for good conditions in which to house the layout. To this end he has installed a small oil-fired heating system in his railway room; a nice touch.

The central feature of the layout is the lime works which is reached from a headshunt via ferocious gradients. It is situated at the corner where the side wall meets the end wall. This



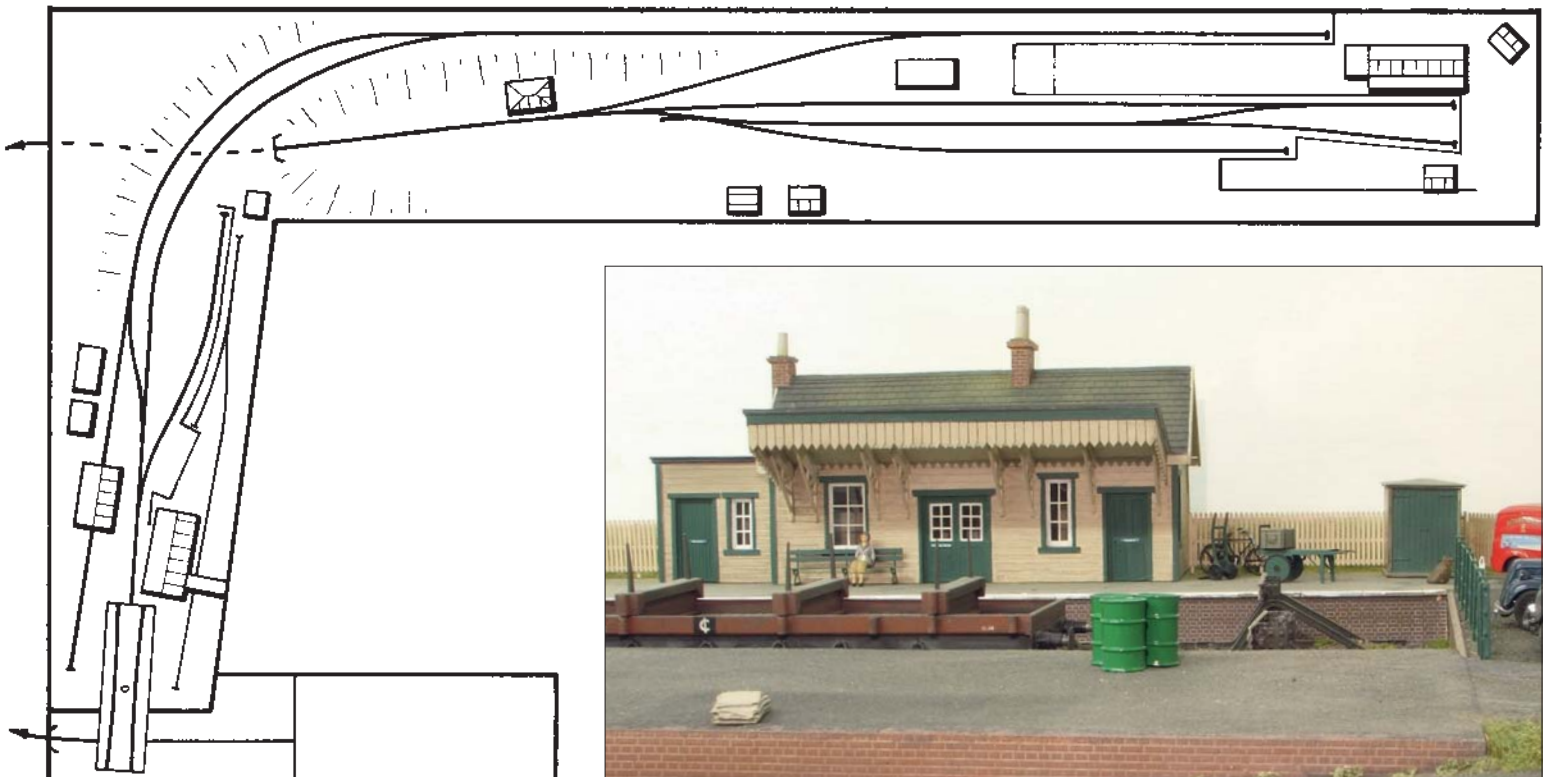
raised area is made to look realistic by using real limestone which is ground into a powdery grit and applied to the face of the mound. The quarry line passes over the top of the 'main' line. The surrounding area, rolling stock, site excavator and lorry are weathered very effectively to give the impression of hard-working equipment in a tough limestone-laden environment. The signal box, located down an embankment near the lime works, is based on an S&D pattern and is scratchbuilt from card.

Running to-and-fro on a narrow-gauge line from the lime works is a Ruston diesel, built from an Impetus kit. The side-tipper trucks it pulls are the appropriate rolling stock.

Melcombe Magna station is at one end of the layout and is principally a goods terminus. The rolling stock is made exclusively from kits; the purchase of a Parkside Dundas box van kit started Mike in 7mm modelling. The kits come

complete with transfers for BR and pre-nationalisation periods. Mike does, however, have a selection of SR coaches which are all kit-built. The Ian Kirk kits represent the LMS suburban coaches used on the S&D until about 1960. With the addition of a few details, these kits build into very nice coaches at a very reasonable cost. There is some interior detailing with a few passengers; too many would be out of place. Mike has also used a Westdale GWR B-set kit to represent coaches used when the Western Region encroached on the S&D.

A look around the station area shows more goods activity and just one passenger waiting on the platform for a train. The milk churns remind the viewer of the west country location. The Highland Architectural Casting station building is the focal point. The platform opposite has a yard crane and a grounded wagon body acting as a store. A service road forms the boundary to this end of the layout.





Above: a Simplex on the narrow gauge feeder line, with a couple of skips.

Below left: the modest coaling and watering facilities for the industrial steam fleet.

Below right: 0-6-0PT No.4691 emerges from the tunnel with a local passenger train.

Photographs by Mike Baker.

Some effective weathering and subtle plant growth at ground level around the platform base and buildings help to set them realistically into the ground rather than giving them the appearance of perching artificially on top of the ground.

The water tower, which is a combination of a kit and scratchbuilding, sits neatly within a low embankment about half-way along the layout between two tracks that run at different levels. The PW huts are scratchbuilt and help to define the front edge of the layout. The ladder hanging on the outside wall and the stack of discarded sleepers are examples of the kind of detail that make all the difference to the overall impression created. Boundary fencing is placed near the lime works to form a further point of reference to add depth to a necessarily shallow layout.

Some fanciful items have found their way into the scene such as the WW2 Willys Jeep, many of which were still used as fun vehicles in the 1960s, the time of the layout.

The opposite end of the layout depicts an area for loco maintenance. Many of the buildings are scratchbuilt from card; the signal box has a detailed interior and there are plans to install interior lighting.

The loco shed and accompanying buildings are scratchbuilt largely from Wills 'corrugated iron' sheet. The effect of rust, grime and weath-

er is well executed. This is another focal point where the standard and narrow gauges meet and a location for some interesting operating. Small scenic touches add to the S&D atmosphere such as the old tractor. The red oil drums provide a note of colour to an otherwise utilitarian scene.

Mike has handbuilt the turnouts which are driven by Tortoise slow-acting motors which are each mounted remotely from their respective turnout. This is for maintenance reasons; the motors are easily accessible from the front of the layout and operate the turnout with wire control rods. The system uses small compression springs which can be set to hold the blade at the correct tension via the adjusting nuts. A similar system is used to operate the signals, which are by MSE and Scale Signal Supply kits. These plug into the baseboard and can easily be removed for cleaning. They are operated manually through a linkage by small levers protruding from the baseboard fascia.

The home signal is an LSWR lattice post lower quadrant type; the starting signal is a more modern SR rail-built signal with an upper quadrant arm. Both were common on the S&D. The track ballasting is tinted to reflect the local lime working.

As an engineer, Mike has developed some track control systems himself, but Pentroller hand-held units are much in evidence.

The locomotives are kit-built and come from several sources such as Connoisseur and Parkside; the saddle tanks are Agenoria kits, the Simplex is an ABS kit. An exception is the Ruston shunter which was bought for £5 at a sale! All the locomotives have compensated chassis and are fitted with Slater's wheels. Reliable running of the kits is assured by the use of Mashima and Canon motors linked to 50:1 gearboxes. The layout is not huge so accurate scale speeds are more desirable and easily achieved with this slightly lower gearing.

LMS 3F 0-6-0 No.43734 is built from an Alan Gibson kit with a few added details.

SR G6 0-6-0 No.30258 is a Connoisseur kit and could be considered a little out of place on the layout. Templecombe shed did have a G6 in the 1950s, but it was mainly used for shunting. The loco was scrapped in 1960.

GWR Collett 0-6-0 No.2223 started out as a Majestic Models kit. After much modification, it turned into a reasonably accurate representation of its class. The Collett tender supplied with the kit was incorrect; it should have been the 3000-gallon flush-bottom tender that was originally specified. No.2223 was at Templecombe in the early 1960s.

GWR Pannier No.4691 is from a Vulcan (now ABS) kit. It too has a Canon motor with 50:1 gears.

Under construction is an Ivatt 2-6-2T from a DJH kit; these were used extensively on the S&D in the latter days of the line. Another locomotive under construction is a 3F 0-6-0, from a J&M kit, to represent one of the batch specially built for the S&D.

Although fully operational, the layout still needs plenty of work. The scenery has to be developed and other matters such as telegraph poles and oil lamps for the station platform require attention. The backscene is currently in the planning stage but will eventually appear on the ply backboards.



That 'Dam' Railway

A water industry construction site in 009

JOHN LEE describes this layout, set in Wales at the turn of the 20th Century.

The building of a dam looked like an interesting subject to some of the 'narrow-gauged' members of Chelmsford Model Railway Club. There could be a dam face with cranes, little engines busying about down in the valley, stone quarrying for the material and a stone crusher plant with feeder lines along the valley side and some mountainous scenery.

Inspiration

The detail inspiration and factual information came from two books – *Stone & Steam in the Black Mountains* by David Tipper and *The Elan Valley Railway* by C.W. Judge. The first describes the building of the Grwyne Fawr Dam near Abergavenny during the period 1912 to 1928, where narrow gauge locomotives were used to move the materials. This site included an intriguing hole through the incomplete dam face to gain access to the future wet side, and a zig-zag up the valley side. Also included were the workers' accommodation, school and chapel, which were necessary because of the remote location.

The Elan Valley site also used steam locomotives on an extensive series of lines to service the building of four dams from 1893 to 1904, which were built up the valleys to supply water to the city of Birmingham. A visit to these sites resulted in us realising that these dams are very large and impressive pieces of civil engineering, with heights of around 150'. This was a challenge that appealed to the small group of members interested in narrow gauge modelling, and planning began.

Incidentally, the name *That Dam Railway* was coined for obvious reasons at an early stage by the Club members and has stuck with us ever since! A translation into Welsh – *Hwn Argau Rheilffordd* – is also used but it doesn't trip off the tongue quite so easily.

Layout planning

The premises of the Chelmsford Model Railway Club had the usual space limitations, and so all the features that we wanted to depict were going to have to be limited to about 9' in length, but we realised that we could model a dam height of about 100' (or 16" to scale) if we used an open-fronted box construction for our baseboards. We wanted to model the near-completed dam face as a massive wall and have the zig-zags going up the valley side.

Discussion brought us to an L-shape overall plan for the layout, such that we could see the



face of the dam on the short leg of it: the track plan in this area closely followed that of the Grywne Fawr dam works. The track then curved around to show the zig-zags along the other leg of the L-shape. Several small models of the layout were made, and these helped us enormously in depicting the proposed layout in three dimensions, this being particularly important in view of the heights and gradients we were planning to use.

Included in our planning was provision to use the slow-moving Tortoise point motors for

Above: the dam dwarfs the buildings and the narrow gauge locomotives, and the cranes stand out on the skyline.

Below: a Bagnall 0-4-2T pulls a train of skips up the incline past the chapel.

added realism and current switching. As these motors require about 4" of clearance below the baseboard the supports etc. had to be positioned carefully. The locations for the stone crusher, the stone cutting shed and the workers' accommodation were also defined, and these were modelled at an early stage to ensure that the plan and scenery would fit in the limited space available.

As this was a club project it was considered important to plan the layout in great detail, such that any of the half-dozen or so members working just one or two evenings a week would be able to know precisely what to do and be able to keep to the initial concept. Detailed full-size drawings of the track layout and the baseboard construction were made to keep us all 'on track'.





Baseboards

Our planning had concluded that an open-fronted box-type construction in 9mm ply would suit our layout and a local wood yard was used to supply dozens of cut pieces to suit the four baseboards. This saved us a lot of tedious cutting and gave us good square pieces with which to work. These baseboards were to be arranged in an L as can be seen on the layout plan.

Each of these baseboards had a 3' x 2' back face, two roughly triangular 2' x 2' ends and a shallow 6" front. Vertical 3" deep cross-pieces were added to give an egg box-type support for the trackbed at the lowest levels. Further verticals were added as necessary to support the track as it zig-zagged up the valley side. These zig-zags were confined intentionally to two of the baseboards, and the whole trackbed for these was cut from just one piece of ply, which was laid initially across the baseboard joint and screwed in place to vertical supports to give smooth and even gradients between the positions of the points. Obviously at the points themselves, and beyond, the trackbed was made level.

Only at a later stage when the trackbed was fully glued and screwed in place were the two boards cut apart, and this resulted in an excellent continuity of gradient between the boards

and leading into the points. The gradient chosen, after some off-scene experiment, was around 1 in 25 as this would allow 0-4-0 locomotives to haul short trains up the fairly straight sections of the line ascending the hill.

Baseboard alignment pins from Red Dog were installed in three locations at each join, two lower and one upper to look after the alignment of the higher lines. Joining bolts used were 6mm thread going into T-nuts, which have teeth which sink into the ply and become part of the baseboard.

The river beds were cut into the lower baseboards, and areas were provided for the buildings. The dam face was built from similar ply material onto some supports which were cut to a curve of 8' in plan view to replicate the profile of a dam. This dimension was simply a guess, but the final model looks just about right and this subtle curve gives the dam profile a realistic appearance.

Track

Standard Peco 009 track and pointwork was used throughout. It was pinned down to the ply trackbed and at the baseboard joints the rail was soldered to copper-clad strip and cut after fixing.

Initially, the Tortoise point motors were not keen to work properly with the Peco points,

Above left: the baseboard construction, showing the zig-zag trackbed made from one piece of plywood.

Above: a view of the zig-zags and the entrance to the dam yard.

which have overcentre springs incorporated in them. We took these springs out and this made the motors work much better. However at a later stage we stiffened the supplied actuating wire with a piece of brass tube and achieved a more reliable operation. Possibly this would have been the best first step but we will never know on this layout! Positioning the Tortoise motor to give a little pre-load in the direction of the frog helped to keep the point blades in place without the overcentre spring.

The track was ballasted using a mixture of fine granite, birdcage sand and crushed rock to represent materials found within the location. It was painted a dark brown over the trackbed and the sleepers. Loose rocks, cement, etc simulating material dropped from engines and wagons was glued in place to give a well-used appearance.

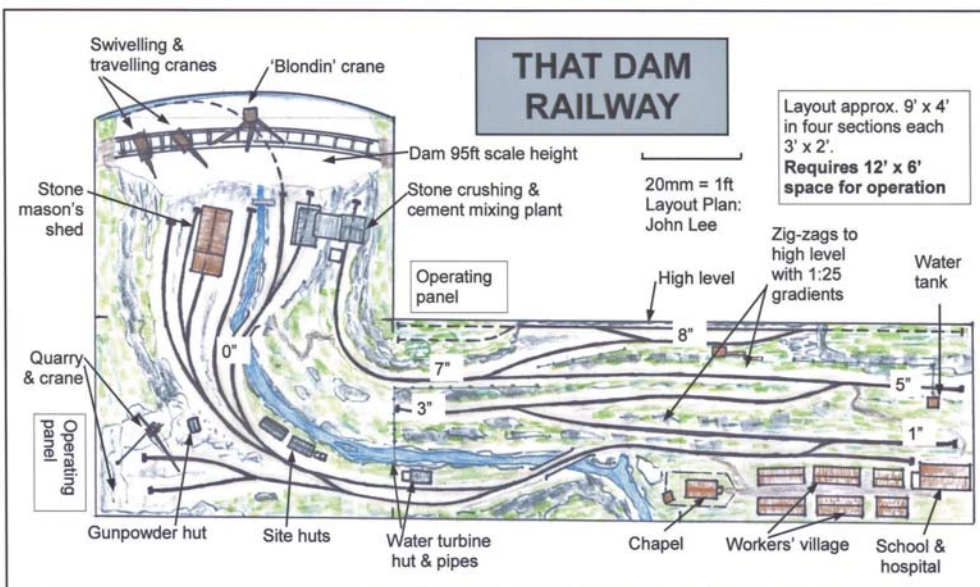
Electrics

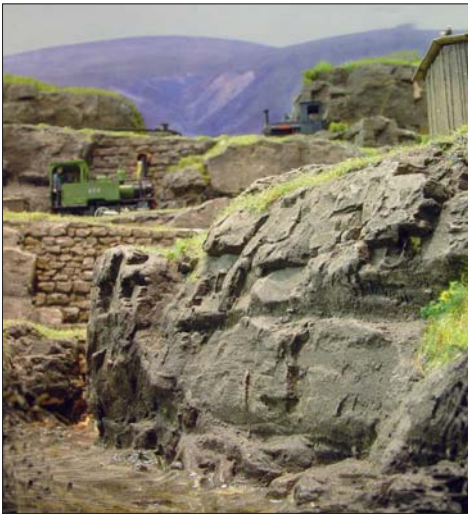
The layout has two control panels, one at the back which covers the inclines and one at the side for the dam works and quarry areas. The lower board includes switching for the bottom loop to allow either operator to bring in and take out a train and pass the train on. The panels include indicator LEDs on a track plan-type panel. At exhibitions we have found that people like to study the visible side panel and find it easy to talk to (or distract!) the operators. The hand-held controllers are normal Gauge-master non-feedback.

Some lighting has been added to the interior of the sheds to enable the detail to be appreciated.

Scenery

Many who study the layout appreciate the rock faces and the realistic scenic work. During the planning we knew that this was key to setting a realistic scene and we wanted to make it worthy of the prototype location. At exhibitions many people have asked how we achieved these effects and so here goes on a detailed explanation.





Rock faces

The terrain and rocks at Grwyne Fawr have a distinctive stratified nature and this in fact gave the original builders problems of water leakage – and still does in fact, the valley just below the dam is oozing water! Some Woodland Scenics moulds were selected which had this stratified appearance but we needed more for variety. You may have noticed that some pieces of coal exhibit this same sort of appearance and some moulds were made using coal as the master.

First the chosen face of the coal was a supported with a little retaining wall of Plasticine around it and sprayed with silicone furniture polish as a mould release agent. A latex mould-making material was poured over it, jiggled about to release the bubbles and allowed to set for a couple of hours. This was repeated many times to build up the thickness and was helped on occasions by ladling the semi-set material onto the top of the mould.

After a few days this dried out to give a brown latex mould which could be peeled off the master and had a thick rim but a good skin with the detail of the future rock face moulded into it. We used dental plaster for the actual mouldings but any good moulding plaster would do. Dental plaster gives excellent detail and is strong and cheap if you can locate your local specialist supplier.

To try and keep the weight down to reasonable levels some polystyrene beads (from a beanbag) were mixed in with the plaster before casting in the moulds, which were wetted with water and washing-up liquid. The plaster was jiggled about to release air bubbles and to encourage the polystyrene beads to come to the upper, unseen-side surface, and this resulted in a good moulding after 15 minutes or so. Dozens of these rock castings were made and then cut and shaped to suit their intended location and held in place with an ordinary plaster/PVA mix. In some locations a backing of plaster-impregnated bandage was used to bridge a gap. Around 10 different moulds were used and it is difficult to pick out repeats because they are turned or cut to suit their location.

Painting was completed using the Dulux Matchmaker matt emulsions, which are obtainable in 250ml quantities as 'testers'.



Above left: a view from the river level up the hillside with engines tackling the gradients.

Above right: the rock faces and incline grades are clear in this view.

Below: the stone crushing and cement plant hugs the steep valley side while trains work on the supplies. The dam face overshadows all.

Photographs by Jas Millham or as credited.

Colours can be chosen from the firm's enormous range but note that, helpfully, it groups compatible colours on one sample card. (We used colours 'Pebble mosaic 1, 2 & 3'.) For the base coat the darkest colour was diluted slightly, worked well into the cracks and cranies and over all the areas of rock, grass and scrub. The main colour coat was dry-brushed with a large brush onto main rock surfaces and not into the cracks. For the highlights, lighter colours were dry-brushed sparingly to pick out protruding rock and newly-quarried rock, depending on how recently it would have been cut away.

Weathering was achieved with a very diluted black emulsion washed over every surface to weather down colours. It was dried immediately with a hair dryer to force paint into cracks and away from highlights.

Grassy areas

For these, flock materials were used mainly as we believe that they are so much superior to other materials. Products from Woodland Scenics, Heki and Gaugemaster were used to create areas which looked different in various places. Details such as rock plants, reeds and bushes were also added, but no trees as the original was just above the tree line.

Dam face

This has a gentle radius of about 8', and no commercially-available simulated rock plastic or paper sheet would cover it without the joins showing. So again we turned to cast plaster.

Two 6" x 4" commercial plaster castings of cut stone walling from the American firm C.C. Crow were reworked so that each interlocked with the stone pattern at both ends. A mould was made in the same way as for the rocks and pieces were cast. However the mould was laid on a piece of convex board of the same radius as the dam face, and as long as the plaster was not too runny then a curved moulding resulted, which matched the dam face. These were then stuck on with tile adhesive, any little gaps between pieces filled and after painting we had a dam wall that looked consistent and solid, without joins.





Left: the yard below the dam (photo: author).

Centre left: life goes on in the workers' village whilst the trains progress up the incline.

Bottom left: the foreman issues the orders from outside his office whilst a train runs around the upper level.

Near right: a supply train comes through the temporary tunnel in the dam down by the river which is still being allowed to flow through.

Far right: skips filled with rock are pulled up the incline by a Bagnall 0-4-2T.

Below right and far right: the cranes dominate the skyline on the top of the dam, whilst that in front of the face loads rock onto flatbed trucks in the quarry.



Buildings

These were built or at least footprinted at an early stage, and are nearly all commercial kits modified in places to suit. The stone crusher was from Faller, the stone cutting shed is a Wills kit with lean-to added: this has details inside of the stone cutting equipment made from odds and ends. The foreman's huts are from Wills as are some of the village huts and the chapel. Other huts are American logging hut kits in laser-cut wood, suitably Anglicised, and all the roofs are 'rusted' consistent with the effects of the Welsh weather.

The generator hut down by the river supplied electricity to the original project and on our model is fed with water via a pipeline from high up in the hills. These sorts of projects were the first to have an electricity supply to equipment and houses at the turn of the century.

Cranes

The big 'Blondin' tower crane was built from our best information – which was not a lot. It was scratchbuilt from Plastruct sections for the tower and 0 scale lattice signal posts for the jibs. Figures in the cab, motors, cables and hooks make it look as though it has some real function in bringing material from the rail line at the back of the dam wall. A skyline was added to show these features and add to the illusion of depth.

Two cranes run along the top of the dam. The practice, as we understand it, was to raise up the track as the dam wall grew, and our cranes run on 0 gauge rails; broad gauge was used in these sorts of locations. One crane is motorised, with a Spud unit, and has been fitted with a modified Barnhart log loader from the US. It runs back and forth on a time-delay controller. The other similar model just swivels and is otherwise static, but looks the part.

The crane in the quarry is a Wills kit but with chop-sticks for the jib, column, etc. The taper on the chop-sticks seems ideally suited to representing this type of crane!

Rolling stock

We use mainly 0-4-0T and 0-4-2T locomotives from Parkside Dundas, Paul Windle, GEM, etc – small industrial engines which would have been used in this sort of project. On many occasions other engines from members and



friends have a go at tackling the gradients and limited clearances.

The Vee skips and the small flat wagons are part of the scene and run well as long as they are well weighted (and weathered). These skips run in rakes of six whilst regular narrow gauge wagons – supplying cement, wood etc – run in groups of four usually.

The locos using Bachmann chassis have benefited more recently from the fitment of Nigel Lawton can motor kits, and these now perform far better than the original motors. The start-up reliability and smoothness of running is very superior and can be recommended to all 009 modellers. *[These motor kits were reviewed in RM last month – Ed.]*

Exhibitions

During the various stages of construction the layout was on show at our Club exhibition, and we have found that the public is interested in seeing the early stages of the building of a layout.

To enhance viewing we now have full lighting bars, and because it is of an unusual subject we do have some short 'explanatory



notes' and children's questions on the front face of the layout. These are mounted in some shop shelving pricing strips and explain the different parts of the scene and generally what is going on. The adults also like doing the children's questions, and it all helps in the appreciation of the five years' work that has gone into the layout.

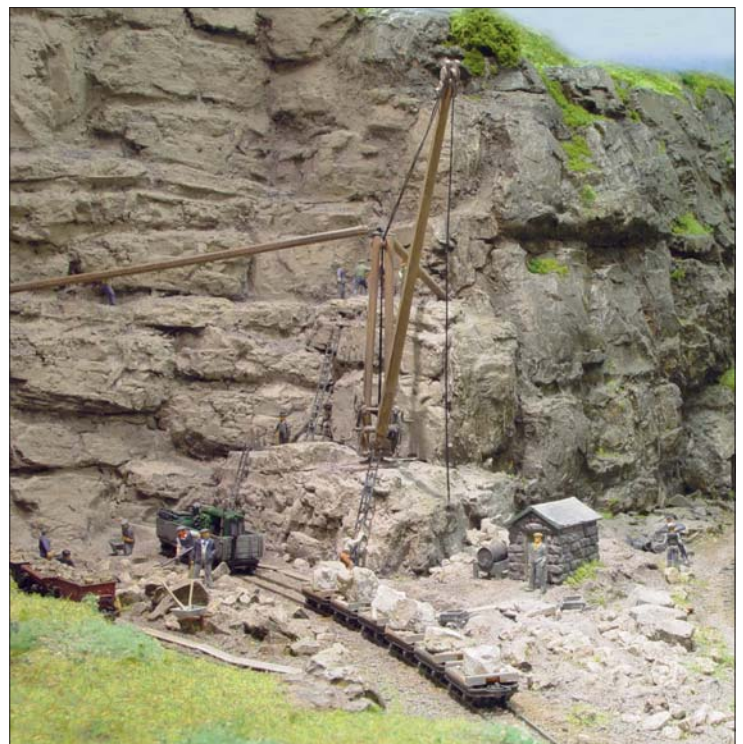
We have been at a number of exhibitions and our highlights include a TV appearance whilst we were at Alexandra Palace, which was shown as part of a model railway programme on the Home and Leisure Channel. We have been credited with 'Best in Show' awards and we were particularly pleased to receive this award at ExpoNG 2006 – the leading narrow

gauge show in the UK. In 2006, planned appearances include the Epsom & Ewell show on 22/23 April, the Ashford show on 13/14 May and Romford on 11 November. In December 2007 we will be at Warley.

Credits

The layout was built by members of the Chelmsford Model Railway Club and particular thanks are due to Brian Bassington, Paul Bentall, Tony Clay, John Lee, John Rumble and Geoff Tiller. The club website can be found at www.chelmsfordmodelrailwayclub.org.uk

Details of the Epsom & Ewell exhibition are in Societies & Clubs – Ed.



Gresley A3 Pacific

A superlative steam class drawn and described

BOB PHELPS produced the drawings to accompany a brief history by **ROBERT ILES**.

There is only one early Pacific that survived to be preserved. After its completion at Doncaster in February 1923, No.1472 acquired its LNER number and name, 4472 *Flying Scotsman*, in February 1924. This was in time for it to be shown at the British Empire Exhibition during the summer of that year.

It is, however, one of a class of 79, designed by Sir Nigel Gresley, that worked many heavy express passenger services on the LNER. Two initial locomotives were constructed at the GNR works at Doncaster in 1922. It was subsequently agreed to build 50 duplicates under the auspices of the LNER. These were classified as A1s and performed well by the standards of the day, but they later evolved into the revered A3.

The last A3, No.60052 *Prince Palatine* was withdrawn in January 1966. It finished its days in the Scottish Region working freight trains on the Waverley route.

Basic construction

The main frames of the three-cylinder engine were steel plates $1\frac{1}{8}$ " thick. They were set $4'1\frac{1}{2}$ " apart, but bent inwards beneath the firebox then to become parallel, spaced at $3'5$ " under the cab. A set of outside frames 1 " thick was bolted to the main frame at the rear end, $6'0\frac{1}{2}$ " apart. Extra strengthening plates were bolted and welded to the inside of the main frames to create a double frame to support the firebox.

Forward of the firebox, the frames were supported by stays, motion plate and the inside cylinder casting. Lightening holes were drilled in several places.

The Pacifics' bogies were similar to those used in the Ivatt-designed Atlantics. The bogie frames were steel plates $1\frac{1}{8}$ " thick, set $4'0\frac{3}{4}$ " apart. The coil springs were stiffer to support greater bogie loadings. The wheelbase was $6'3$ " and pivoted $3'3$ " from the front axle, $3'0$ " from the rear. The $3'2$ " diameter wheels had a similar tyre profile to the leading coupled wheels.

The coupled wheels had cast steel centres with 20 spokes. Upon the rims were shrunk $5\frac{3}{8}$ " steel tyres secured with rivets. All three cylinders drove the second coupled axle.

The trailing axle was suspended in a Cartazzi slide arrangement.

Gresley was aware of developments in America. The Locomotive Testing Plant of the Pennsylvania Railroad and the plant at the American Locomotive Company were there to



Above: with double chimney and Great Northern coal-rail tender, No.60050 *Persimmon* stands cold on Doncaster shed on 7 May 1960. Built there in October 1924 (as an A1), she was scrapped there in August 1963. Photograph: Frank Hornby.

spearhead the latest ideas. An experimental Pacific was built with particular emphasis devoted to the firebox, boiler and cylinders. From the results of this loco, the Pennsylvania designed a K4 Pacific with a boiler that could produce a sustained supply of steam in great quantities. Gresley was impressed by the K4 boiler and used some of its features to design a coned boiler with a tube length not longer than $19'0$ ". The overall length of the boiler was $20'0\frac{3}{8}$ ". The outside diameter of the coned section was $6'5$ " at the firebox end; at the front end, the outside diameter was $5'10\frac{3}{8}$ ".

The side sheets of the cab had twin windows set $8'2$ " apart. The side sheets were cut away by 10 " at window level. The eaves overhung the side sheets by 1 " and were at the limit of the GN loading gauge.

The handrails ran the full length of both sides of the boiler, $1'2\frac{13}{16}$ " above the centre line of the boiler; each had eight support pillars. The handrails curved around the front of the smokebox. On the firebox, there were more handrails, level with cab rails.

The original design did not incorporate front-end footsteps. Engines after 1470/1 had an iron-bar type of step fitted to obviate the need for the fireman to walk the length of the running plate to change the headlamps.

Vacuum brake equipment was standard; two cylinders were located behind the rear axle of the bogie, between the frames.

Several design changes by the LNER occurred after grouping to rein in some of the generous dimensions allowed by the GN load-

ing gauge. These measures included reducing the chimney and cab height, and cutting away the lower corners of the bufferbeam to clear some platform edges.

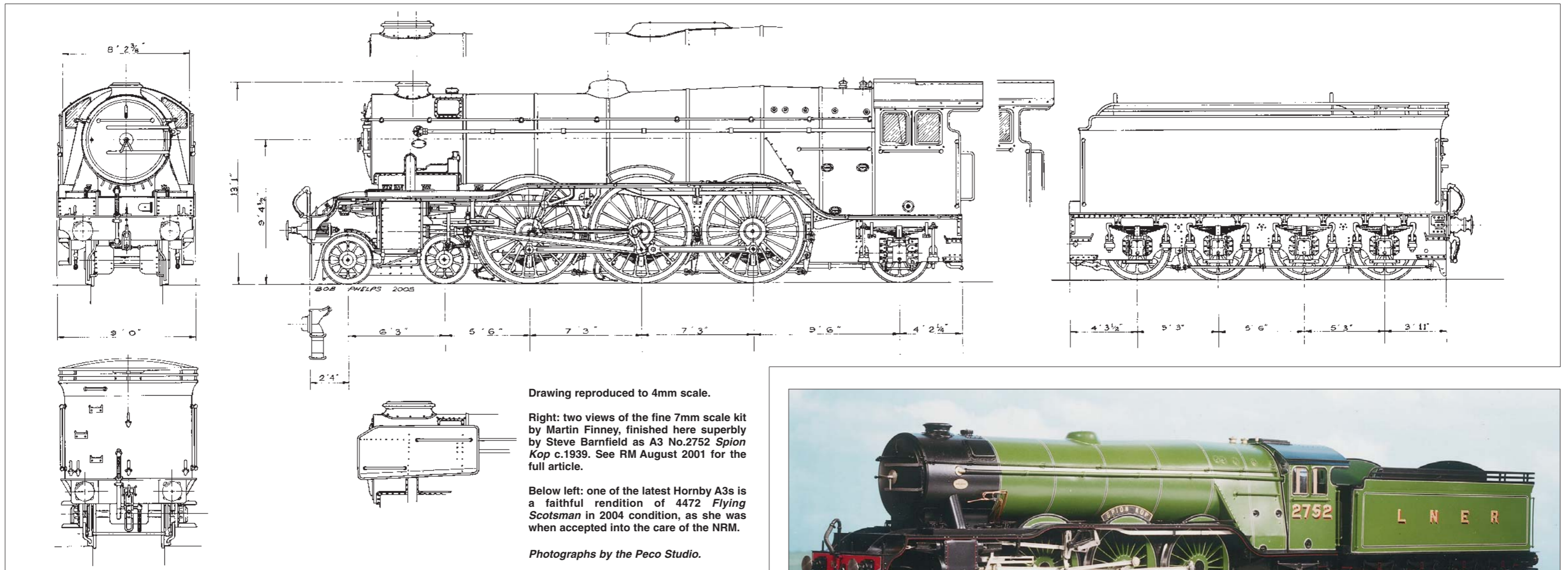
A1 to A3

In 1925, a trial was organised to compare examples of the A1 Class with two 'Castles', the GWR's top performers which had more advanced valve design and configuration. The smaller GWR locos performed equally well but with better coal economy. As a consequence of this, Gresley redesigned the valve chests to benefit both power and economy.

During 1927, a further modification to No.4480 *Enterprise* increased the boiler pressure from 180psi to 220psi and increased the superheater volume. The results were unexpectedly good, enabling the locomotive to meet the timetable requirements at less than full regulator. No.2544 *Lemburg* was modified in a similar way, but smaller diameter cylinders were fitted to enable a fairer comparison. It was found that the higher-pressure boiler needed little more maintenance than the 180psi version. A3 variants with different cylinder specifications were designated A3/1, A3/2 and A3/3.

Starting in 1928, the remainder of the A1s were converted and 18 more Pacifics built to the revised specification. To the crews, the major difference was the conversion to left-hand drive. The rebuilds and new locomotives were completed in 1930 and classified as A3. Another nine were completed in 1934/35 with 'banjo' style domes replacing the standard design.

Between 1958 and 1960, double chimneys became a standard fitting on A3s following experiments in 1956. The new chimneys and modified blastpipes improved steaming. But



Drawing reproduced to 4mm scale.

Right: two views of the fine 7mm scale kit by Martin Finney, finished here superbly by Steve Barnfield as A3 No.2752 *Spion Kop* c.1939. See RM August 2001 for the full article.

Below left: one of the latest Hornby A3s is a faithful rendition of 4472 *Flying Scotsman* in 2004 condition, as she was when accepted into the care of the NRM.

Photographs by the Peco Studio.



the LNER found that the double chimney, fitted to *Humorist* as early as 1937, caused less exhaust pressure than a single chimney. This meant that the exhaust did not rise sufficiently to clear the driver's view. In the 1950s, BR found the same problem with the A3s, so small wing-type deflectors were fitted, but unsuccessfully. The solution came from German-style trough deflectors. These were fitted to all but the four A3s that worked on the Midland Region. Not all the A3s survived long enough to receive deflectors.

Tenders

Eight-wheeled non-bogie tenders accompanied the Pacifics. Those used for the long-distance hauls incorporated a small corridor on the right-hand side to allow the changing crews to enter the train via an orthodox carriage connection. These tenders were

designed particularly for engines rostered to non-stop Kings Cross to Edinburgh runs, and similar types were adopted for many of the later streamlined Pacifics. They had a capacity of eight tons of coal and 5000 gallons of water.

The twelve-spoke wheels had a diameter of 4'2" and were mounted in axle bearings outside the frames. The springs were 5" wide. One plate in each set was 5/8" thick, the remaining ten were 1/2" thick. Two vacuum brake cylinders of 18" diameter were vertically-mounted side-by-side between the frames in front of the first axle.

Between the two middle axles was the water scoop which was operated by a lever on the driver's side of the tender footplate.

Two designs of non-corridor tender were also deployed; one was the same as the corridor version externally, the other had lower side-sheets and coal rails.

Liveries

The boiler, wheel centres and cab were apple green, with white-black-white lining. The cab roof was light grey. The engine number was on each side of the cab below the windows and was repeated on the vermilion bufferbeam. The cylinder covers were black. Brass workplates were located on each side of the smoke-box wrapper. The engine and tender frames, and buffer shanks were initially brown. The tender body was in lined green; the rear had holly green borders.

In 1923, the LNER standard livery was adopted for all Pacifics. During World War 2, plain black was used. British Railways initially specified blue for the larger passenger locomotives, but in 1951 BR used Brunswick green with black and orange lining.

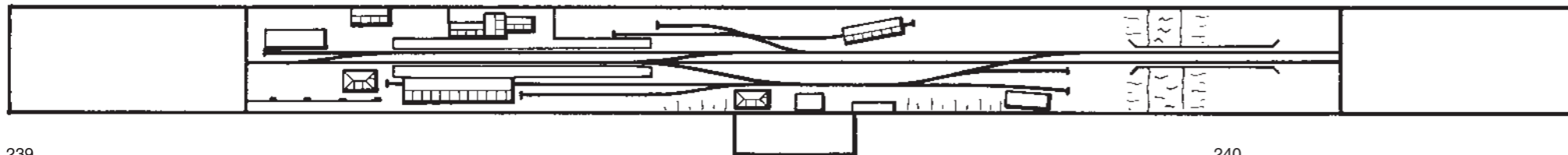
Achievements

No.4472 *Flying Scotsman* was the first steam loco officially to be recorded at 100mph on 30 November 1934; it was, however, still an A1 at the time. This was timed between Leeds and Kings Cross. It also set a Kings Cross to Leeds record that stood for more than thirty years.

On March 5 1935, A3 No.2750 *Papyrus* broke the record for a Kings Cross-Newcastle-Kings Cross run at 108mph on Stoke Bank.

The mileage record holder was No.60106 *Flying Fox* at more than 2,600,000 miles.





Rothern Bridge

On the 'Withered Arm' in 7mm scale

CRAWLEY MODEL RAILWAY SOCIETY members took *Torrington* as an inspiration for this layout.

Thoughts of a new 0 gauge layout began to take shape in the early 1990s, when our previous layout, *Tilgate* was becoming both time-expired and rather smaller than was required. The usual discussions took place – what size? what shape? what area? prototype track plan or freelance?

We are lucky enough to have a largish hut, provided at a reasonable rent by the local council and, with Committee approval, we were given the go-ahead to use almost the whole of one wall apart from the area then occupied by a small workbench with lathe, vice etc. The available length was approximately 45', and it was decided that a width of 3' was a reasonable compromise between desire and practicality.

Size and shape having been determined, the next major issue was that of where the layout was to be set, and whether the basis of the layout would be an actual or fictional setting. There were advocates for both approaches. Eventually, the usual art of British compromise was put into practice, and it was decided that the new layout would be based on a prototype situation, but that we would not adhere slavishly to the detail of the chosen area, but would try to retain the 'feel' of it. The North Devon station of Torrington was suggested by a member keen on the LSWR in the North Devon/Cornwall area, but most of the members involved at that time felt that the prototype had insufficient operational potential and features, so a few alterations were put forward. It was decided to include a cattle dock, an extra siding or two, and to dispense with the narrow gauge quarry line. It was also decided that we would maintain the idea of a through station, and have a fiddle-yard at each end.

A small committee was formed to plan baseboard construction, final track plan, etc, and the layout was 'born'.

Top left: Ivatt Class 2 Tank No.41294 approaches Rothern Bridge with a Down stopping passenger service.

Centre left: a Ford Popular and Austin 7 wait in the station forecourt for the arrival of the next train. The station master obviously has time to keep his garden tidy between trains!

A short branch pick-up goods train departs the yard hauled by B4 tank No.30089.

Construction

We are fortunate in having a wide variety of skills available within the membership of the club, and detailed plans for baseboard construction, electrical matters, trackwork etc, were soon in hand.

Baseboards are of 3" x 1" softwood construction with plywood tops, joined using metal dowels for precise location. The exceptions are the dropped boards where a bridge crosses a river valley; these are a ply sandwich with open tops to achieve the different levels. Legs are of softwood, with ply cross-members and adjustable feet. The legs are bolted between each board using 6mm studding, and have a step on which the baseboards rest. The two fiddle-yards are fitted with large sector plates, driven by hand-operated gearing constructed by one of our members who is also a member of the local engineering society. Locos are turned where appropriate on small cassettes – but we do not allow these to be lifted when a loco is in place! At exhibitions, the fiddle-yards are 'hidden' behind screens. These have been constructed at such a height as to encourage visitors to lean over to view the stock in the yards, and to have a chat. Over time, it was felt that operation would benefit from longer fiddle-yards, so that longer trains could be accommodated. This has the effect of lengthening the layout to 53'.

Electrical matters were attended to by our team of 'sparks', who had great fun in devising a system which would enable the best use to be made of the traffic potential inherent in the track plan. There are five operating positions, with the necessary duplication of wiring to allow control to be handed to/from the main central panel and the two fiddle-yards, and a colour light system of communication between them was also installed. As a rule, trains are driven towards the controlling operator. The main panel can be dismantled and positioned at either the front or back of the layout. We have to operate from the front when the layout is in the clubroom, but prefer to be behind for exhibition operation.

Trackwork is by C&L and is laid on a cork base, with pointwork being constructed in situ from C&L parts, electrically driven by Fulgurex motors. These are noisy in an exhibition hall. Ballasting was done (tediously!) using real granite chippings, and the tried and tested methods of diluted PVA with a dash of washing-up liquid. One member was insistent on counting the number of grains of ballast between each pair of sleepers! A mixture of 4mm and 7mm scale ballast was used as we felt this gave a better appearance.

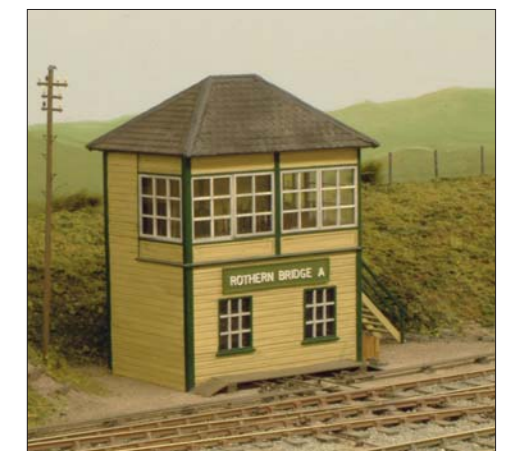
Scenics were attended to by our in-house landscape gardeners, using all the normal materials. We have tried to represent the sort of scene which is so common in the North Devon area. The figures have been expertly painted by our one lady member, and are mainly from the Phoenix range, now owned by S&D Models.

Buildings were constructed by our own team of contractors. Virtually all railway buildings were built using plans obtained from the South Western Circle, and the station building, loco shed, goods shed, and water tower are all models of the actual structures at Torrington, although the water tower was constructed using a single photograph as a guide and is not claimed to be an accurate model. These buildings were constructed using plywood and/or foamboard, covered by Slater's plastic embossed sheets. The two signal boxes were built from kits, the smaller one being a model of that at Swanage. Other buildings are freelance and use varying methods of construction.

One of the virtues of using Torrington as a basis for the layout is that the prototype has a bridge at either end of the station area, and these are of course used as convenient scenic breaks to hide the entry to the fiddle-yards. The bridges are not scale models, but meant to represent the typical style of the old LSWR.

Signals were built by members skilled in that area, using parts supplied by Model Signal Engineering, and the semaphores all work, including the shunt signal on the Up Starter bracket. This was a job requiring a high degree of patience! Unsurprisingly, we could not find anyone willing to build working ground signals!

Point rodding was added by our point building expert, again using parts from MSE, and we feel that this feature adds considerably to the realism of the scene as a whole.



Operation

We operate the layout to a sequence which was devised by a couple of members, who in addition to their modelling skills are adept at using steam-driven computers! There is no doubt that a sequence adds enormously to the pleasure of operating the layout, and puts quite a pressure on the operators to keep up with demands. The sequence is a necessity with a layout 53' long, requiring several operators spread along its length who have no desire to spend exhibition weekends wearing headsets. Input to the sequence also came from a couple of members who actually worked on the railways and know something about prototypical operation, so we feel that although the service is very intensive, it is otherwise fairly realistic.

A minimum of four operators is required to operate the layout to its full potential, and it can accommodate a fifth. One operator is in charge of each of the fiddle-yards, with two on the centre panel, and the fifth operating the goods yard from the same panel when required. It can get rather congested with three operators vying for space!

It will be seen from the track plan that the layout features a double-track main line on the Up (London) side, converging to a single line on the Down end. This makes for some interesting workings and keeps the Down fiddle-yard operator on his toes – this position is otherwise the 'easy' job.

Trains are offered to/from the main panel and the fiddle-yards, using the previously mentioned colour light system.

Most trains stop at the station, but the wiring gives us the ability to run non-stop from one fiddle-yard to the other, and it is nice to see a long goods train trundle through without stopping.

Above right: 'West Country' No.34092 *City of Wells* heads a Down express across the bridge on the last leg of its journey from Waterloo.

Right: a 'Road Van' awaits collection.

Below: N Class Mogul No.31836 arrives off the single line section with an up parcels train.

Photographs by Len Weal.



Stock

Rolling stock is provided by the members, and for exhibition running consists exclusively of Southern or GW types, plus appropriate BR vehicles. We try to use stock which would have been seen on the North Devon lines, but interlopers do appear. Most of the stock is in BR livery, but the occasional SR- or GW-liveried trains do sometimes turn up. The only 'rule' in this context is that we do not have passenger stock hauled by locos in inappropriate liveries, e.g. a train of BR Mk.1s with a loco in LSWR, SR, or GWR colours.



Virtually all stock is kitbuilt, with the odd scratchbuilt vehicle, and one or two professionally-built and painted items. Most locos, and a fair amount of rolling stock is either sprung or compensated, which we have no doubt improves running qualities, particularly of locomotives. Most locos are fitted with flywheels to help with smooth running. It is our aim not to have trains stalling or becoming derailed. If this happens, it is usually the result of Operator Error!

Couplings are automatic (we do not like the Big Hand from the sky!), and are the Sprat & Winkle 4mm coupling supplied once again by MSE, and which have been slightly modified in the method of mounting. Uncoupling is achieved by strategically-placed permanent magnets under the track, their position being marked on the operators' side by white paint on the rail sides. Although there are some disadvantages to our system, we think these are outweighed by the benefits.

Conclusion

All CMRS layouts are built with a view to attending exhibitions, and *Rothern Bridge* is no exception. Therefore, we have endeavoured to make the layout interesting to operate, and interesting to the onlooker. We firmly believe that we are at an exhibition to entertain the paying public, so the latter point is very important and we try to keep something moving at all times. Hopefully, we have succeeded.

Rothern Bridge is still undergoing minor 'tweaks' and development, but is essentially 'finished', after approx 10 years' work.

The layout can be seen at the forthcoming exhibition at Alexandra Palace, at the beginning of April, and a week later at the club's own exhibition held in Horsham, W. Sussex.

The club maintains an excellent website (www.crawleymrs.org.uk) which contains details of *Rothern Bridge*, other club layouts, and those belonging to individual members, many of which can be seen on the exhibition circuit. The website is regularly updated, and is well worth a visit.

Details of the Crawley MRS' show are in Societies & Clubs.



Kew Bridge

A tram layout in 4mm scale

GERALD WARNER explains how a local group of the T&LRS constructed this 7' x 2' model.

Adrian Batt had just shown the group his prize-winning model of a London United T class tramcar when a voice was heard to say: 'Now you've built the tram, where are you going to run it?' The answer was soon forthcoming from our leader: 'Listen chaps, we have a centenary coming up in three years which is right on our doorstep, so why don't we build a layout to celebrate?'

'We' are the Thames Valley branch of the Tramway & Light Railway Society and we meet from time to time in the Kew Bridge Steam Museum. The centenary mentioned was of the first electric street tram in London, which ran from Shepherds Bush to Kew Bridge at 0700 on 4 April 1901. So here was our excuse to run Adrian's tram and to build a club layout at the same time.

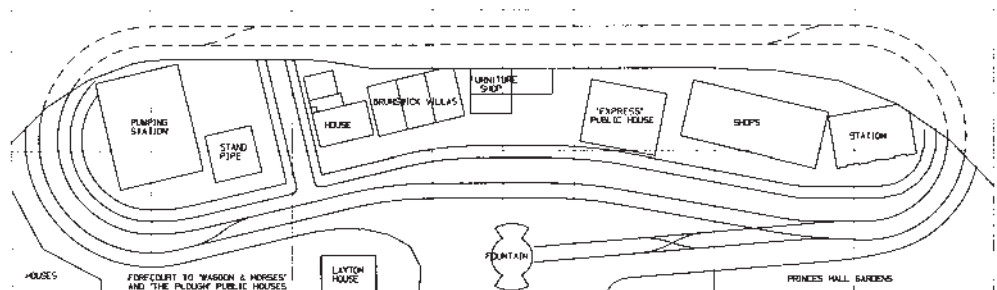
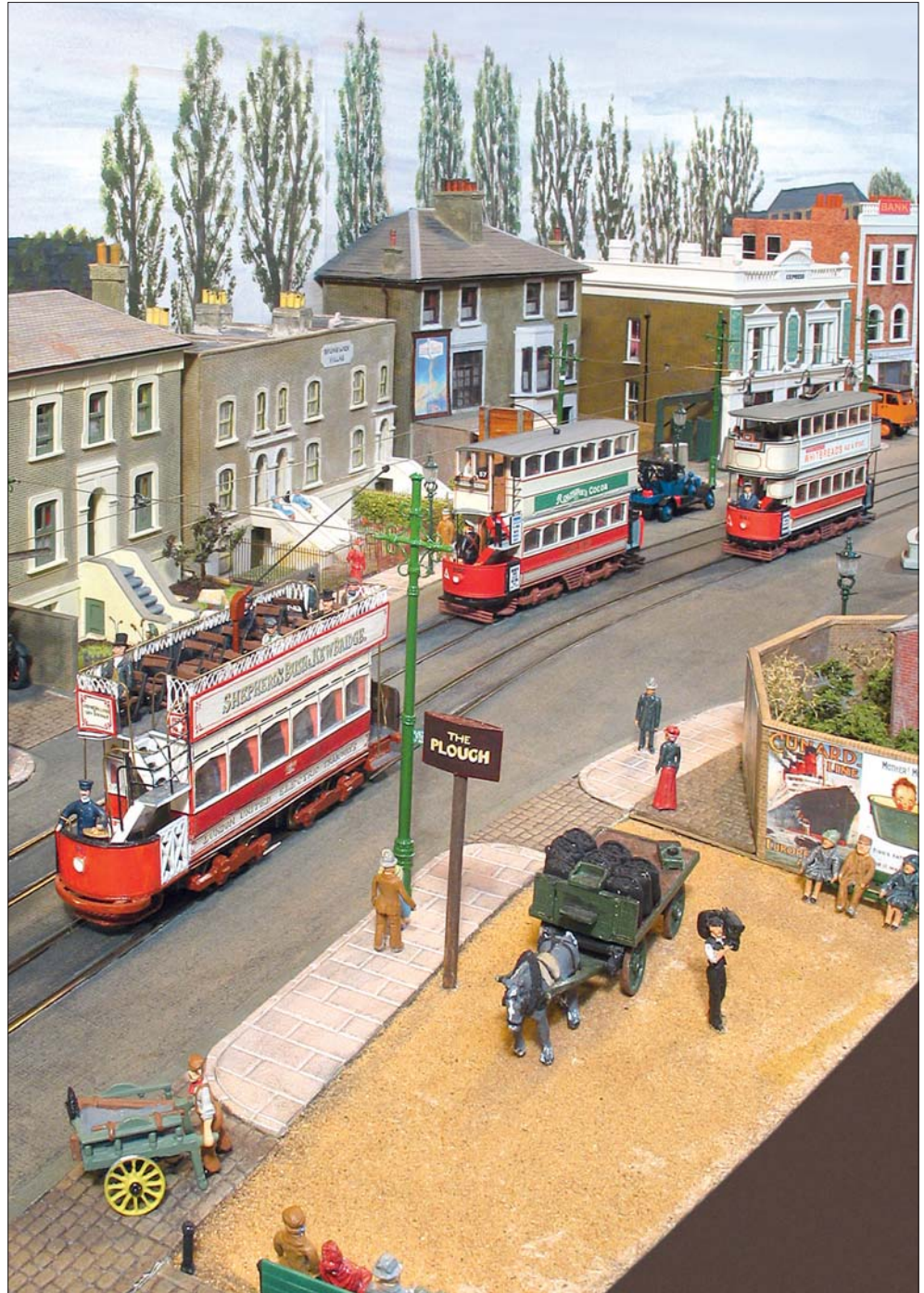
So that was decided upon and we set forth to plan it. Because our first tram had already been built, three decisions had already been made for us. It was to be 00 gauge two-rail electrification with dummy overhead.

We had an Ordnance Survey map of the terminus in late horse tram days and an overlay of the area as it is today. Nolan Doe went out to photograph the buildings that still existed. First ideas were to have a 6' long board with a 2' square board attached to the front, to house the terminus and the approach to the bridge itself. This was rejected as being unpopular with exhibition organisers, so we finished up with a plan for a board 7' long by 2' wide, actually two boards 3'6" bolted together. This gave sufficient space for us to model the north side of Kew Bridge Road from the railway station to the Water Works (now the Kew Bridge Steam Museum) if we left out the block of houses that had been demolished and replaced by a new block of flats.

We kept the buildings on the south side to a minimum. It was at this point that I went out to measure the ground plans of the remaining buildings. At the same time the rest of the group were busy collecting pictures in books and on postcards, from which the buildings could be modelled.

We finished up with a plan for a double oval of track, representing the line coming from Hammersmith and continuing as the extension to Hounslow and Hampton Court, with the double track of the original terminus branching off outside the railway station and, over a scissors crossover, to terminate by the fountain/ horse trough at the head of the bridge. There was a crossover outside the Water Works and two 'round the back' behind the backscene.

We had spent six months on deciding what to do and now, with 30 months to go to our



deadline, it was time to start building. Volunteers came forward to take on various parts of the layout, some of whom had never undertaken anything like this before. Baseboards, track, electrics, houses, streets, street furniture and of course trams all had to be built. Baseboards were made using a 2" x 1" timber frame covered with chipboard.

Next all the copper clad sleepers were laid followed by code 75 bullhead rail soldered in place with nickel silver strip to form the groove. A lesson here had not been learned, as we found out later: we should have painted the boards black under the gap between the rail and check rail – clean white chipboard is very noticeable!

A wiring diagram had been drawn up and the track was gapped accordingly. As we laid the track we tested it using a pair of BEC bogies with the 'little black motors' removed. These under a piece of 1mm plywood with holes drilled to give truck pivot points for a W car and a Feltham were pushed around by finger power, checking that the wheels would negotiate the gaps, particularly on the scissors crossover. Where wheels dropped into gaps we plugged the bottom of the gaps with balsa wood to support the flanges of the wheels. Several points were required, so to start off we invested in one SMP 7" radius tram point to see how complex its construction was. It looked straightforward so sufficient rails were purchased for the double continuous oval with three crossovers and a double spur with a scissors crossover. As in railway practice, we celebrated the 'last spike', when all the rails were in place.

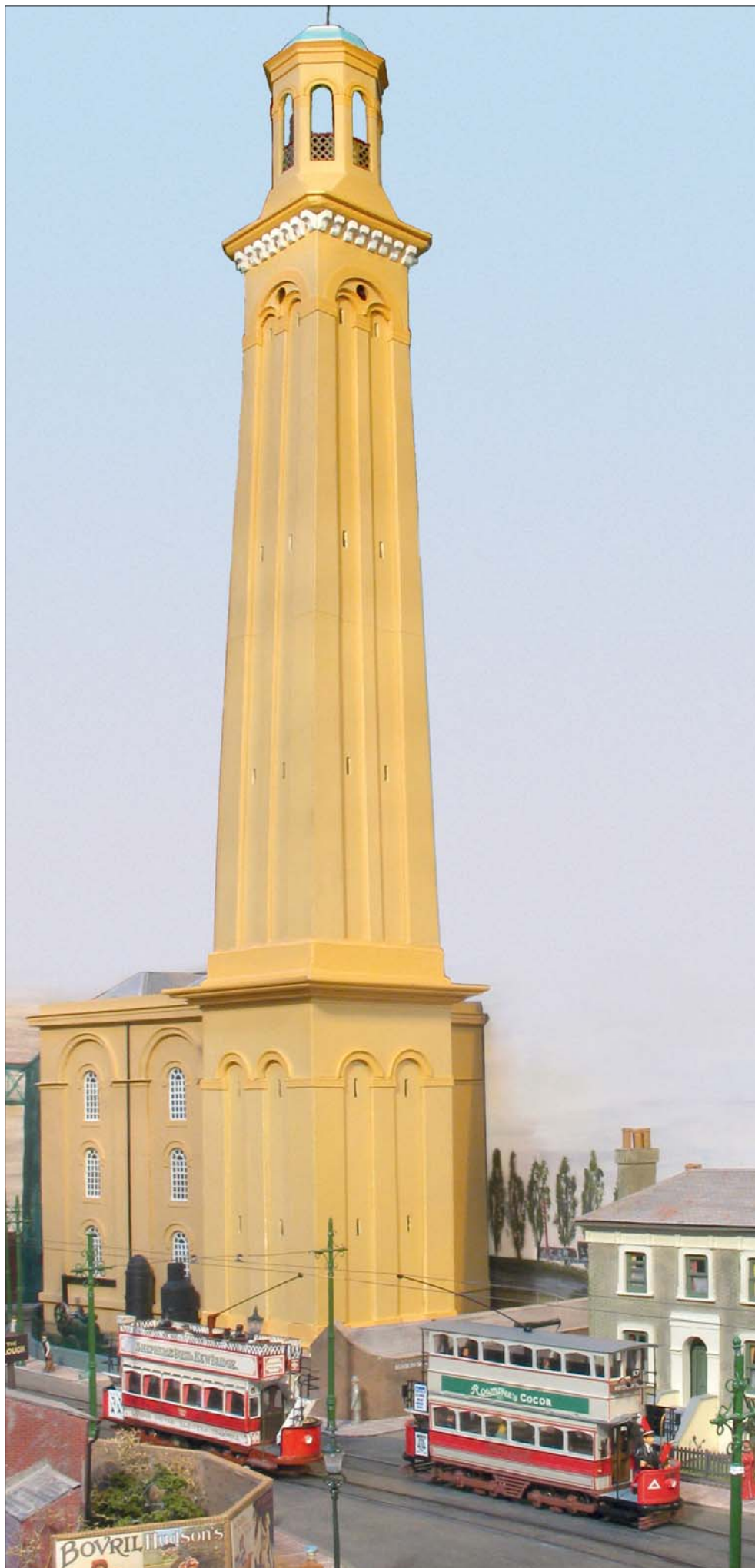
The months passed and we realised that with a year to go we had only laid the track, so our monthly meetings changed to weekly. Gradually we began to see some progress. Baseboards built, track in place and tested, then came the electrics. The undersides of the baseboards were wired and a control panel was built to form a bridge over the tracks behind the backscene. The control panel also bridged the gap between two baseboards and provided the electrical link between them. Two feedback controllers were used with an array of switches for all the sections, which allows us to run a reasonable tram service with up to seven or eight trams in view at any one time, including reversing cars into the terminal stub.

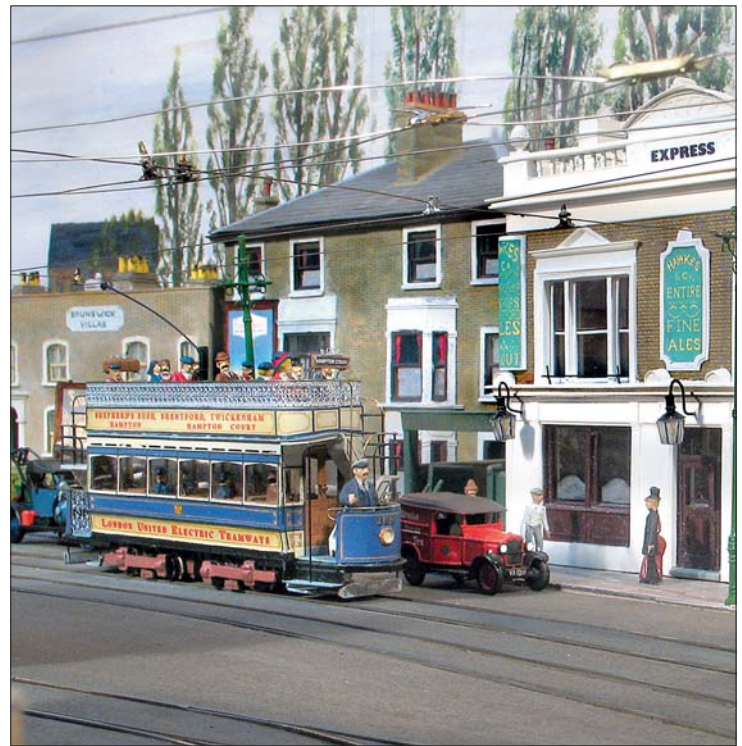
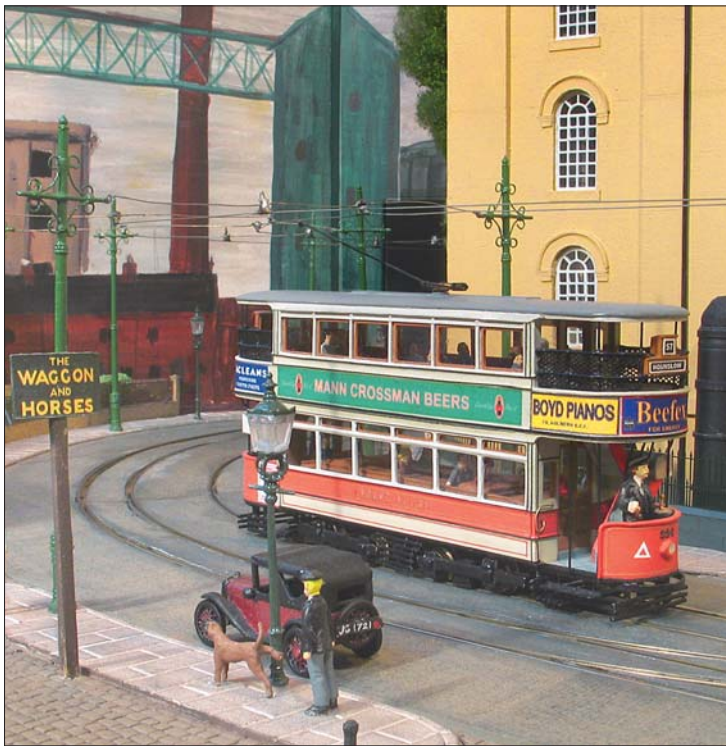
Once the track was complete we could set about the road surface. To the best of our knowledge this was woodblock continuous over the whole surface, so a supply of 1mm ply was obtained, cut to shape and then many happy months were spent quietly going potty over the task of scribing 3mm x 1mm rectangles in the ply to represent the woodblocks. The blocks should have been end grain upwards, but there are limits! I am told that there are about 10,000 of them on the layout.

Left: always a tram in sight.

Right: the standpipe tower at Kew Bridge pumping station.

Photographs by Steve Flint, Peco Studio.





Pavements were cut from 1mm ply and covered with self adhesive paving slabs, but not until we had put in the traction poles for the overhead.

Alan Kirkman had kindly travelled to Kew Bridge to give us his 'how to do it' talk as we had acquired some traction poles. After we showed our proposals at the 1999 Festival of Model Trams, a letter arrived from Clive Croome to say he had produced castings of LUT pole bases and rosette rings. He offered to produce our traction poles, an offer gratefully accepted. Those who have seen Clive's Feltham tram will know how privileged we feel to have his work on our layout. Derek Norman took these poles home and brought them back complete with cross bars and wrought iron scrollwork. We left the finials off

until the very last job, as the points look very sharp and dangerous. Now we could start drilling the holes for the poles. This is when we managed to blow sawdust over Dorothy Weise, not just once but several times. We had fun ensuring the drill was absolutely vertical by having two 'sighters', at 90° to each other, looking like cricket umpires. Then the soldering started again, on span wires, ears, and at last, the trolley wire. Len Hodges, Adrian Batt, Derek Norman, and myself were the principals in this act of the play, with supporting roles played by Arthur Weise and various other members from time to time. This was the period when the verb 'to twang' was coined. "It's twanged round the back" meant a soldered joint had failed, but Derek had devised a block of wood to support the trolley wire in a groove while it was

being soldered to make sure it stayed in place. Finishing touches were put to the overhead at Christmas 2000 on my dining room table with many thanks to Monica for allowing this intrusion. Also on the same day we applied the first of the fixed scenery to the boards in the shape of pub and station forecourts and side road. Almost everything else in the scenery line was done as homework. In this regard we have to thank Leon Labistour for the railway station. When we read the boards at the station entrance showing a list of places served by the LSWR we demurred at the inclusion of Swansea but Leon said he grew up there, so it stayed. No one has yet complained. David Balharrie built the bank block, Len Hodges built the *Express* public house, complete with interior, and Nick Britton made the pair of houses next to the *Express*. He also made 'Brunswick Villas', the group of three houses with a lion on top. Geoff Tribe made the house on the corner of Green Dragon Lane and Ron Howes made the engine house and standpipe of the pumping station together with Prince's Hall gardens, Layton House, and the terrace houses opposite the water works. The fountain and horse trough were exquisitely made by Clive Beech in Beeston, Nottinghamshire, and travelled to Kew Bridge via the AGM in Bristol.

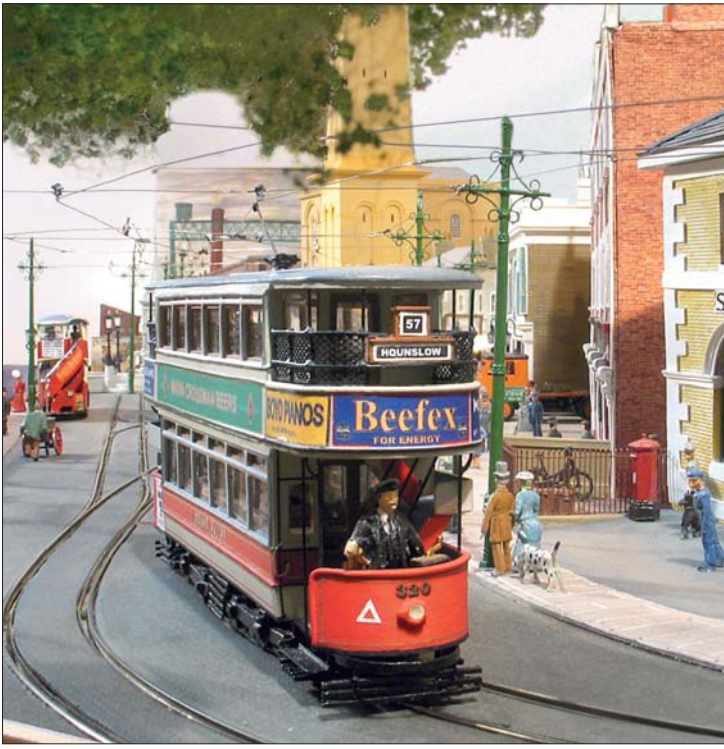
To disguise the fact that the straight line of the tramway we were modelling is in fact an oval the track disappears behind a backscene. On the backscene there are glimpses of Brentford Gasworks, the waterworks filter beds, the railway goods yard, and Brentford Market. When this was in place, around June

Above left: a Type T rounds the curve beside the pumping station.

Above: a Type W passes a Brooke Bond delivery van outside the Express public house.

Left: closeup of Type U No.255 passing the pumping station.





2001, together with all the other scenery, the model began to look a little like Kew Bridge Road at last. We had previously populated the streets with people, dogs, babies in prams, and a variety of other figures produced mainly by Bernard Norgate and the Batt family.

Buildings started to arrive from their makers and were fitted into place, and just two days before the exhibition we saw everything in place for the first time – what a relief! All the buildings are scratchbuilt either with plasticard and covered with embossed bricks or made from Imm plywood.

Kew Bridge is set in the period 1901-1935 when the system in this part of London changed to trolley buses. Many different types of tram ran between Shepherds Bush, Kew, Hounslow, and Uxbridge, and to represent these there are models of T, U, W, and Z types, together with 'Poppy' (an experimental car prior to the introduction of the Felthams) and LCC E1s.

Different groups of people are shown, some in Edwardian clothes and some clothed for the latter period. It is a tradition that we try to include ourselves where possible in the layout and to that end two of our members are represented. Ron, our leader, is about three months old and is being taken out in his pram and Derek is about seven years old and has just arrived at Kew Bridge railway station to do some tram spotting.

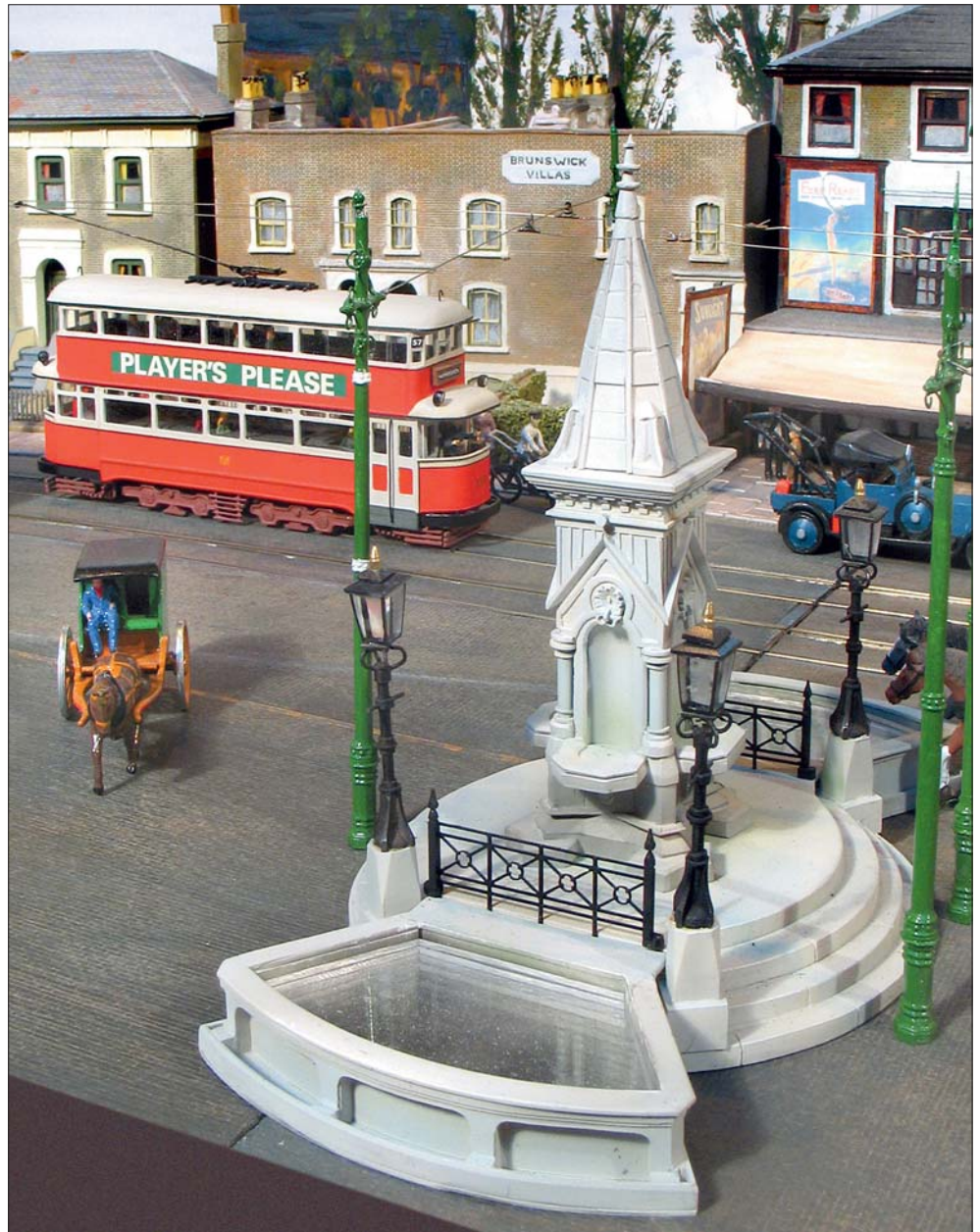
A tour of the layout

Let's take a trip on a tram. We find ourselves riding on LCC E1 tram No.583 on Route 26

Above: a Type T negotiates the sharp curve outside the railway station.

Above right: a Type U on its way to Shepherds Bush passes a Private Hire car at the station.

Right: 'Poppy', the forerunner of Feltham trams, passes behind the drinking fountain.





Above: our 'tour tram', No.583.

Below: the inspector checks his watch at Kew Bridge terminus.

from London Bridge to Kew Bridge. This tram is one of two painted blue. We believe at the time of the change from tramways like LUT and LCC to the London Passenger Transport Board, Charlton Works tried perhaps to influence the LPTB authorities with their own paint scheme. Needless to say it never caught on.

We eventually arrive at Kew Bridge Terminus when the conductor is heard shouting, 'Kew Bridge – all change, this end off the car, please'. The inspector is waiting to check that we have arrived on time whilst the conductor is changing the trolley poles for the return journey to London Bridge. In the centre of the road is a magnificent fountain together with water troughs for the horses. At the trough stands the horse-drawn removal van of J.Goddard from Brentford for the two horses to drink before continuing their delivery of goods to the owner's new address.

Our way to the pavement is hampered by one of those new motor buses on route 27E to Hounslow, having come from Finsbury Grove via Chiswick. Reaching the pavement we stroll past the Prince's Hall with its gardens .

The pigeons are feeding on the grass, whilst the barmaid from the *Express* public house has slipped out to meet her young man in the corner of the gardens. It is time to cross the road now to the South Western Railway station of Kew Bridge, and outside we bump into seven-year-old Derek who is tram spotting. He is doing well here with a tram passing every few minutes. Inside the station we can see a man buying a ticket and through the two windows can be seen a map of the LSWR.

Strolling down the path we can see some bicycles against the fence next to the newsagent and tobacconist shop owned by John Payne. Next door is a café and restaurant. A horse-drawn delivery van is pulled up at the edge of the pavement with supplies for the café. The next shop is Montague Kent & Co., House Agents, where a selection of houses for

sale can be seen in the window. Above on the first floor is a dentist. At the end of the block is the London & South Western Bank Ltd.

Before crossing the entrance to the station yard, we wait for a Sentinel steam lorry to pass. The next building is the *Express* public house. As we enter the front door, the Bishop and his 'niece' are coming out. We are greeted inside by the landlord, Mr Aldington, and join the other customers for a pint of the Hawkes beer. The public house is one of two buildings on this layout where full interiors can be seen (the other is the railway station) and it is interesting to note that it has been run by the same family since 1880 right up to the present day – a total of 123 years. The model is the work of Len Hodges, who sadly lost his fight against cancer soon after Kew Bridge made its debut. It is his memorial.

Suitably refreshed, we depart and carry on past the Rolls Royce breakdown truck, belonging to a garage in Barnes, which is parked at the roadside outside the furniture shop. Between the furniture shop and Brunswick Villas is a passage that is a shortcut to the Pumping Station, but we are not going that way today. On top of the three terraced houses can be seen the lion and on the steps are the Blue twins of Brentford with the pumping station cat, no doubt the great great grandfather of Boulton, the Kew Bridge Steam Museum's present cat. On the pavement are two mothers pushing their prams and in one is Ron, who is about three months old and is screaming his head off – he denies this, and says he is just too excited at seeing the trams! Simon the pie man is carrying a tray of pies on his head as we pass the last house before crossing Green Dragon Lane. Watch out for the steam lorry carrying a length of replacement tram rail.

Across the road we can see the horse bus coming round the fountain on its way to Ealing from Kingston.

Layton House stands on the corner and looks derelict, but next to it are the *Plough and Waggon and Horses* public houses. Outside dogs do what they do against the lamp post.

It is time now to go down Green Dragon Lane into the Pumping Station. As we go, I hear someone in the street ask 'What's that huge chimney for?' It is not a chimney, it is a stand pipe to maintain the water pressure when the beam engines pump water to West London.

Well, I hope you have enjoyed your tour of the Kew Bridge Terminus which, just to confuse you, is actually in Brentford. If you wish you could join us in the Kew Bridge Steam Museum where we meet regularly to discuss all aspects of trams, models and full size, and also to build trams to run on the layout.

It has been a lot of hard work sometimes but very satisfying, though as the months have passed the creation of the layout has begun to be rivalled by the pleasure we have derived from just being together and it has been a lot of fun, though tinged with sadness by the loss of our Len. Would we do it again? Possibly – but not yet!

One last word – thank you to all who contributed, especially those not mentioned here by name.



Kew Bridge is booked to appear at the Crawley show this month. See Societies & Clubs pages for details.



Finnegan's Crossing

Irish narrow gauge in 3mm scale, 9mm gauge

*This circular layout, with a variety of Irish 3' lines' stock, was built by **MARK FISHER.***

Finnegan's Crossing is all the fault of RAILWAY MODELLER, the May 1968 edition to be precise. I cannot now remember much about what was in it but my brother Richard and I were hooked. 37 years later we still are. After a period as a teenager modelling the SR in 00, frequent family holidays in North Wales brought us in touch with the narrow gauge. And then buying the Bradford Barton book on the Tralee & Dingle converted me to all things 3' and Irish. At the time I was still only 16, and did not have the ability to make 12mm undergear that ran. But I realised that if I modelled in TT I could represent the 3' gauge using N and 009 track and parts. And so I started, with a very crude model of Tralee & Dingle 2T on a Farish chassis, and some rather less crude plasticard stock (some of which I still use). A long period of inactivity followed; what with university and a job to think about. Settling in Yorkshire ten

years ago, with some time and space, made me dig out the old models again. I rejoined the 3mm Society, discovered Worsley Works and its

extensive range of Irish narrow gauge kits, and met up with Charles Insley and his layout *Caher Patrick* at Warley.

Above: a Tralee & Dingle cattle train, with Nos. 2T and 5T in charge, lets County Donegal railcar No. 20 pass through.

Right: the West Clare petrol railcar – a Worsley Works body on a modified Fleischmann chassis – rattles past three loaded coal wagons.

Photographs by Steve Flint, Peco Studio.





Left: Schull & Skibbreen *Kent* with a train of the line's 4-wheelers approaches the station. The Cavan & Leitrim vans in the siding are cast from resin.

Below left: Tralee & Dingle Nos.2T and 5T on a cattle train.

Right: CDR railcar No.20 and trailer No.5 (both Worsley Works etched brass kits) plus a 'red van' in the station.

Below right: Clogher Valley *Erne* passes O'Malley's shop.

cular layout, with some provision for shunting (a loop and a siding), and lots of provision for letting the trains run, and discussing them with anyone interested enough to listen. Track is Peco 009, with the points controlled by wire in tube, with additional microswitches to confirm polarity of the frog which is essential at exhibitions. The buildings (the station, one pub, one butcher's, and a funeral parlour) use Alphagraphix kits as templates, scaled down to 3mm on my home computer, and are painted using household emulsions. I checked this out with the kit maker, and it seems right to buy a new kit for every building I make.

The trees are the common Bowden cable/rubberised horsehair combination, and the hedges are wire wool. The only noteworthy feature is probably the street-lighting, which was done cheaply using discarded Christmas tree bulbs under the layout and fibre-optic from a cheap light filament toy run up the brass tube light standards. The tops are Langley 4mm. It means that replacing bulbs is straightforward.

The backscene is hand painted using the techniques described in Barry Norman's book. I know there is debate about whether backscenes are a good thing, but I am convinced that they add depth and perspective to the model. A tip I would endorse is Iain Rice's idea of ensuring that there is balance in the scene – the station and buildings are deliberately well to the right, the trees well to the left.

It all adds up to something people have been kind enough to say reminds them of the real thing, and rural Ireland in particular. I suppose that is the entire point.

The locomotives are a mixed bunch: Cavan & Leitrim 4-4-0T No.2, scratchbuilt body and chassis in brass. Tralee & Dingle 2-6-0T No.2T and 2-6-2T No.5T, plasticard bodies on a Minitrix chassis. West Clare diesel, Worsley Works kit on a modified Arnold chassis i.e. outside cranks added. West Clare petrol railcar, Worsley Works kit on a modified Fleischmann chassis. West Clare 2-6-2T No.9 *Fergus*, plasticard body on an much-extended Farish 08 chassis. Schull & Skibbreen 4-4-0Ts *Erin* and *Kent*, both by Paul Windle on modified Bachmann chassis. Clogher Valley 0-4-2T No.3 *Erne*, and 2-6-2T No.4, again by Paul on Bachmann chassis. County Donegal railcar No.3, Worsley Works kit on a Branchlines power bogie. County Donegal railcar No.4, scratchbuilt using Salford Models wheels and gears. County Donegal railcar No.20, Worsley Works kit on a much modified Bachmann 'Doodlebug' driving the rear wheels. County

A chance discussion with Simon Castens of the 'Titfield Thunderbolt' bookshop (then at the canal side near Bath) resulted in a rash promise to build my own exhibition layout to show at Camrail – the small but perfectly formed show he organises every year. And that is how *Finnegan's Crossing* came to be.

The Crossing is a depiction of a small Irish narrow gauge station. Its track layout and buildings are based on the Cavan & Leitrim, although I have stock from a wider assortment of the Irish lines, both north and south of the Border, than ever graced the C&L.

The model is designed as a simple 4' x 4' cir-





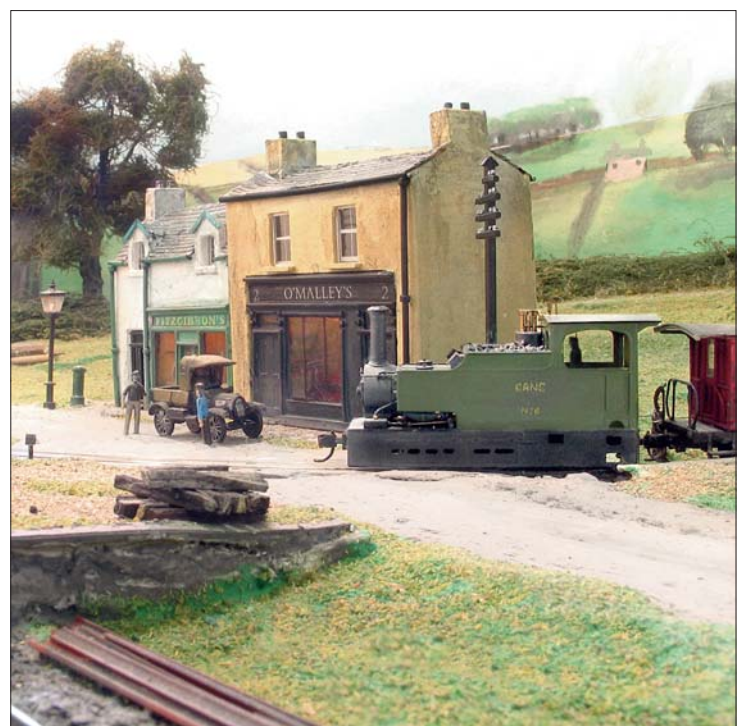
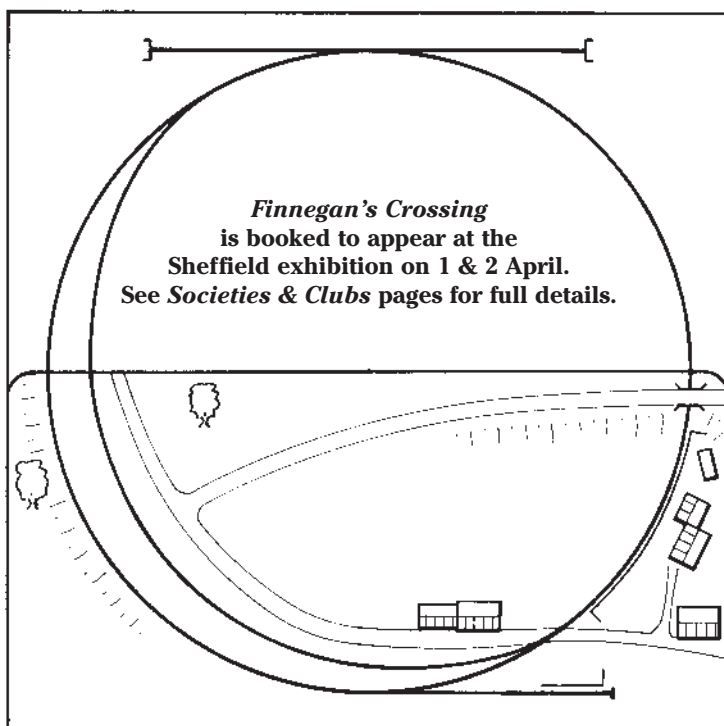
Donegal 2-6-4T No.2 *Blanche*, Worsley Works kit on a scratchbuilt chassis; rather a dodgy runner and needs a rebuild, and in reality is too big for this line.

The rolling stock is an equally diverse collection. I have a mixture of Worsley Works etched brass, scratchbuilt plasticard, and a number of wagons and coaches built up from resin sides. Charles Insley and I have collabo-

rated on some of the masters for these, and I also have some old Paul Windle masters. These are all fairly basic, but do cut out masses of boring repetition, and I would recommend the technique to anyone who models the peculiar!

What next? I want to exhibit *Finnegan's Crossing* a few more times and then I want to build a more Northern layout for my growing collection of Donegal and Swilly stock. I also

want to do some Irish standard gauge (5'3") on 15.75mm track. So that should keep me going. Particular thanks are due to Charles, Paul Windle and Allen Doherty, without whom I would have achieved less than half as much. And of course to Helen, who puts up with a lot! If there is anyone out there modelling Irish narrow gauge railways in 3mm scale, it would be good to hear from them via the Editor.





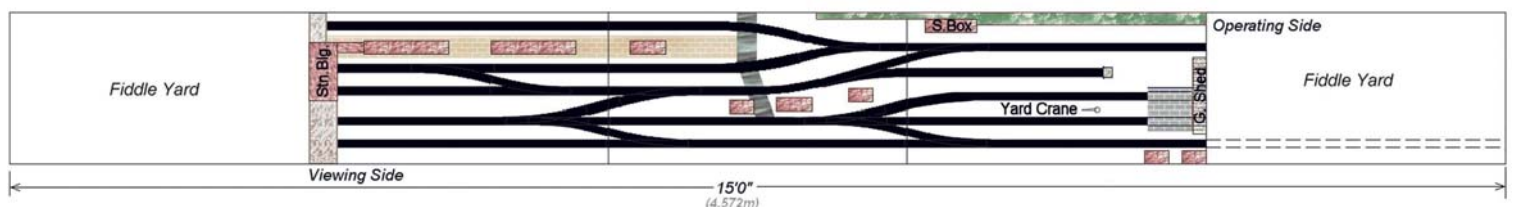
Millfield Road

West Riding steam/diesel crossover in P4, controlled by DCC

JOHN WALL developed this ex-Great Northern town station from a spot of armchair modelling.

One Christmas, while assisting my son Simon with the construction of his own layout, I indulged in a spot of armchair modelling. I had been mulling over quite a few ideas and wanted to build a P4 layout myself. I insisted that it must work well and run smoothly by the application of sound engineering techniques rather than hocus-pocus.

Once home after the holiday, I went upstairs immediately and assessed the space available. I worked out I could easily find room for a 12' x 18" layout, with the option of adding further fiddle-yard space for exhibitions. There followed several pleasant evenings loafing through my collection of books searching for inspiration. I decided to depict a small town station on the former Great Northern Railway in the West Riding during the BR period towards the end of steam. The lines around the





Above left: a 350hp diesel shunter moves some vans around as the Millfield signalman looks on and ponders the future.

Below left: an N1 in charge of a Bradford local is glimpsed through the yard entrance during a lucky break in activity.

Above: J39 No.64967 attracts the attention of two gentlemen on the platform as it clanks by with a long train of coal empties.

Photographs by Steve Flint, Peco Studio.

Bradford/Halifax area seemed to be suitably atmospheric.

I finally settled on some pictures of Laisterdyke from the *Steam in the West Riding* series. This setting allowed a compact station hemmed in by retaining walls with an over-bridge carrying the station building. Further flipping uncovered an interesting goods shed in the shape of Pellon, on the Halifax St. Paul's branch. Whilst sketching track plans, I cunningly arranged for the exit track of the goods yard to match with Simon's *Seagate Wharf* layout, explaining why they are often seen together at exhibitions.

All I needed now was a name, and someone suggested *Millfield Road*. This is, in fact, a station near Horbury on the L&Y, but by the time I found out, the name had stuck.

Layout construction

The baseboards are all of conventional construction, consisting of 2" x 1" softwood timber topped with 6mm birch ply on the scenic boards and 6mm MDF on the fiddle-yards. This keeps the main baseboards lightweight yet rigid. (4½ sq.ft. of ballast is heavy stuff.) They

are joined together by toggle case fasteners and aligned by pattern makers' dowels. The legs are also 2" x 1", with the uprights locating in pockets and the top of cross-braced frame extended to carry the baseboard sides. A clever self-supporting arrangement of the centre set of legs makes it simple and safe for even one person to set the entire layout up.

The bottom of the legs have adjustable feet with over 2" of travel and are therefore able to cope with the most uneven of exhibition hall floors – even the Lickey Incline of the Caird Hall in Dundee (it really is 1 in 37!) When travelling, the layout boards are bolted together in pairs by module ends.

Trackwork

The layout is built to P4 standards using a combination of C&L flexible track and riveted ply sleepers with cosmetic plastic chairs. It is laid on 8mm foam (camping mat) covered with a layer of cork, the whole fixed with rubber glue. This provides a good keyed surface allowing the track to be glued with PVA.

The main line is ballasted in the usual manner by sprinkling on granite chippings, brushing them clear of the chairs and rail before flooding the whole with dilute PVA (with detergent added to act as a wetting agent). Fine sand, coloured by adding black powder paint to the PVA glue mix, is used to represent ash ballast in the yards.

The points are all handmade using ply and rivet construction. The functional tiebars are rectangular blocks of hardwood, bushed with tubing into which swivelling brass droppers are slid. The tops of the droppers are hammered flat, bent into an 'L' shape and soldered

to the point blades. The ends pass under the stock rails, ensuring the blades cannot lift. The swivelling action of the droppers gives a nice fluid movement and prevents stress fractures of the soldered joint. Around the point tiebars, stiff paper was slotted into place and painted a dark colour to indicate lubrication.

The fiddle-yards use cassettes made from MDF and ply with plain flexible track. Brass tube and rod is used for current transmission and alignment and has proved to be extremely reliable over time.

Layout wiring

The layout was originally wired for conventional cab control, using DPDT switches to allow either one of two Pentrollers to take control of a train in any section. Whilst exhibiting at the Nottingham show in 2003 though, I bought a Lenz Compact DCC unit. I experimented with this for some time until coming to the realisation that I could convert the layout to DCC by simply moving all the section switches over to one position and substituting the analogue controller for the digital one. I have since upgraded to a Lenz Set 100 with LH100 and LH30 handheld controllers. Locomotive decoders are from Lenz or Digitrax: the most recent I have used have been the Lenz Gold series, which are particularly to be recommended.

Points, however, are still operated conventionally. Push-buttons on a track diagram operate solenoid point motors through a capacitor discharge unit, ensuring a positive action but preventing the coils from burning out. Codar solenoids are used mostly, but have been modified by altering the crank drive to make it less



Left: Doncaster-built D3658 presides over a busy period in the yard. Meanwhile, a local for Bradford wheezes by.

Below left: the signalman has left his bike in its usual place by the locking room door, but has paused for a breather after having climbed all those steps.

Right: a tramp on the cutting-top watches the 10:43 depart for Leeds behind a Doncaster B1, on a running-in turn fresh from overhaul.

Below right: BR Standard 4MT Mogul No.76114 drifts by on the goods avoiding line with a parcels train. The model is of the last steam locomotive built at Doncaster.

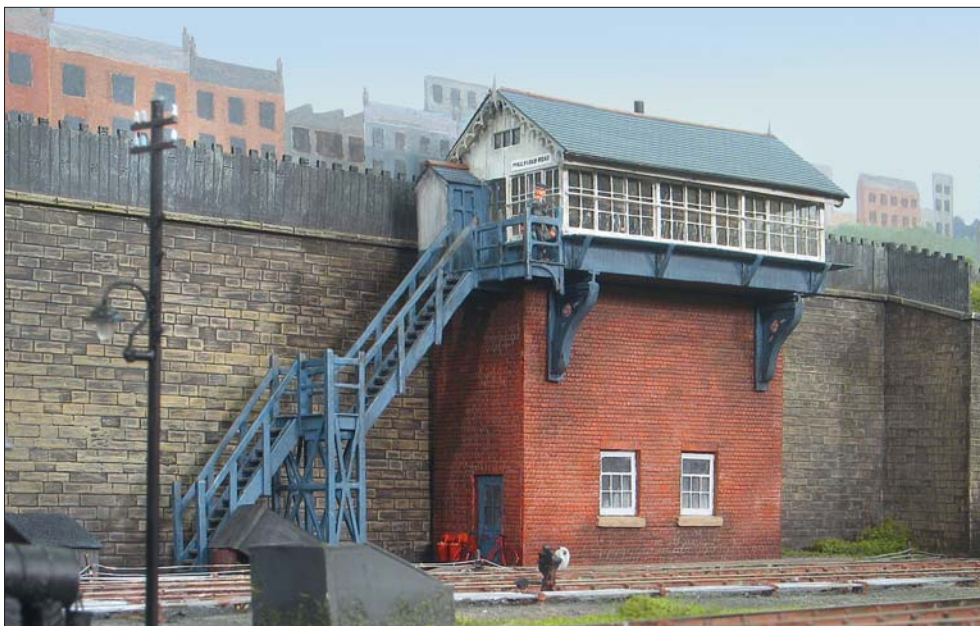
violent, and micro-switches have been added to change the polarity. Push buttons also control a smooth DC supply to the electromagnets that perform the remote, delayed uncoupling. These coils are of various manufacture, although there are some home-made ones.

Scenery and buildings

The basic ground cover is fine sand, painted and weathered, with flock powder here and there to represent grass. The retaining wall is thick card covered with Slater's stone-embossed Plastikard, painted with acrylics. I apply a dark base coat and then build up the layers, ending up by dry-brushing the high-lights. Whilst the occasional hut is from a kit, all the main buildings are entirely scratchbuilt, utilising a card structure covered with Wills moulded plastic brick or stone sheets, and painted to convey the image of a grimy Yorkshire mill town.

The signal box is to a standard GN design, made from a D&S kit with an interior fitted out using Wills parts, perched atop a scratchbuilt locking room. The ladder up the outside however, was entirely hand-built using square section brass bar, soldered together. The main signals are detailed Ratio kits, with Model Signal Engineering ground discs. The point rodding stools, cranks and compensators are from Brassmasters fixed to wooden bases, whereas the square section rod comes from Eileen's Emporium. Signal wires and pulley wheels complete the picture. Hand levers in the goods yard are castings.

The figures are an assortment of Dart Castings and modified Airfix. I wanted to achieve a plausible effect of characteristic poses, without that 'frozen in mid-air' look so commonly seen. As such, there are several cameos dotted about, where people could be expected to be stationary for long periods. Asleep on a trolley, perusing a timetable, simply engaged in conversation or even having a sly fag resting against a truck radiator!





Locomotives

Locos are a mixture of kit/scratchbuilt or converted RTR, mostly with Mashima motors. Every one, however, has a compensated chassis. They are typical of the area in the late 1950s and include a model of the very last steam locomotive constructed at Doncaster works, Standard 4MT Mogul No.76114. It is

based on a Dapol (ex-Airfix) kit, and has a Crowline chassis, High Level Models gearbox and Alan Gibson wheels.

An archetypal locomotive of ex-GN lines in Yorkshire was the N1, an example of which runs on *Millfield Road*. At the time, I couldn't find a kit for this, nor was there a reasonable route for conversion, every detail being differ-

ent. So I scratchbuilt one from brass and nickel silver. Another item characteristic to the West Riding in the late steam/early diesel era was the four-engined, two-car Derby Lightweight DMU. DC Kits was happy to supply the spare mouldings and extra engine castings to allow me to convert its model, and I motorised it using a High Level Models power unit.





Above: the yard is quiet, allowing us an unrestricted view of N1 No.69443 departing on a Leeds local.

Below: J72 No.68717 assembles some coal empties whilst a through Bradford train coasts into the station.

My experience of kits over the years is that they can be of variable quality; material can be too thin for the job, castings are distorted and parts sometimes simply don't fit together. However two that I have enjoyed building are the Connoisseur Models J50 and Agenoria

Models Hunslet 'Jazzer' 0-6-0T. This latter was a dream to put together, and is a beauty of a runner. The boiler-band lining was made by painting gummed paper with body-coloured paint and then lining with a bow-pen. The thin paint layer was then soaked off and applied to the model in the manner of a waterslide transfer.

Digital steam

I have found that with most hand-built locos, or those in which I have replaced the chassis, there have been no problems in fitting in and wiring up the decoders. With a cast RTR chassis, there is often no room to fit in a chip, and disconnecting the motor can also be fraught. However, an etched brass chassis will have plenty of nooks and crannies where you can squeeze in something like a Digitrax DZ123 or Lenz Gold Mini.

I always build and test the loco on analogue first, to make sure it's a smooth runner. Once that is done, I un-solder the wires from the pick-ups and substitute the decoder in place. The actual wiring is quite straightforward. Firstly, I attach the red wire to one pick-up and the orange wire to the motor connection to which this pick-up used to be connected. Next, the same is done with the black and grey ones, remembering the adage 'red and black, to the track'.

Now comes the important bit. It is vital that the loco is tested on the low-power programming track before being put anywhere near the main line. This is accomplished by simply checking the loco number (register 1), which, out of the box, is always 3. If, and only if, it



Right: work is just about to start re-flagging the area around the platelayer's store as a DMU departs in the background.

Below right: Hunslet 'Jazz' 0-6-0T *Sir John* exercises its running powers as it arrives in Millfield yard with a short trip freight.

passes this test, you can introduce it to full track power. If not, check the wiring for short circuits and repeat the low power test. Otherwise, you run the risk of blowing up the decoder. Other options such as momentum and inertia can now be set with confidence.

Rolling stock

This is also a mixture of heavily rebuilt RTR or kits, with many of the coaches being scratch-built using Comet sides. Wagons are mainly compensated and range from Parkside and Airfix kits to re-wheeled Airfix and Bachmann RTR. Alex Jackson couplings are used, with delayed remote uncoupling by electromagnet. The droppers are bent under the axle to increase the reliability of uncoupling.

Operation

When at exhibitions, a through train service is run, whilst freight can arrive and be shunted into the goods shed as required. The layout is controlled from the rear at exhibitions, but the control panel moves to the front when at home. Switches were once needed to ensure the trains moved in the correct direction, but with DCC this is not a issue. Also, when at home, the fiddle-yard at the station end is not installed, making a terminus. This makes operation more interesting due to the need to draw coaches off and run round the train.

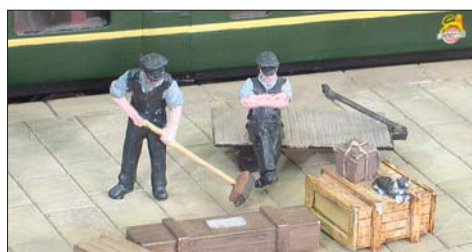
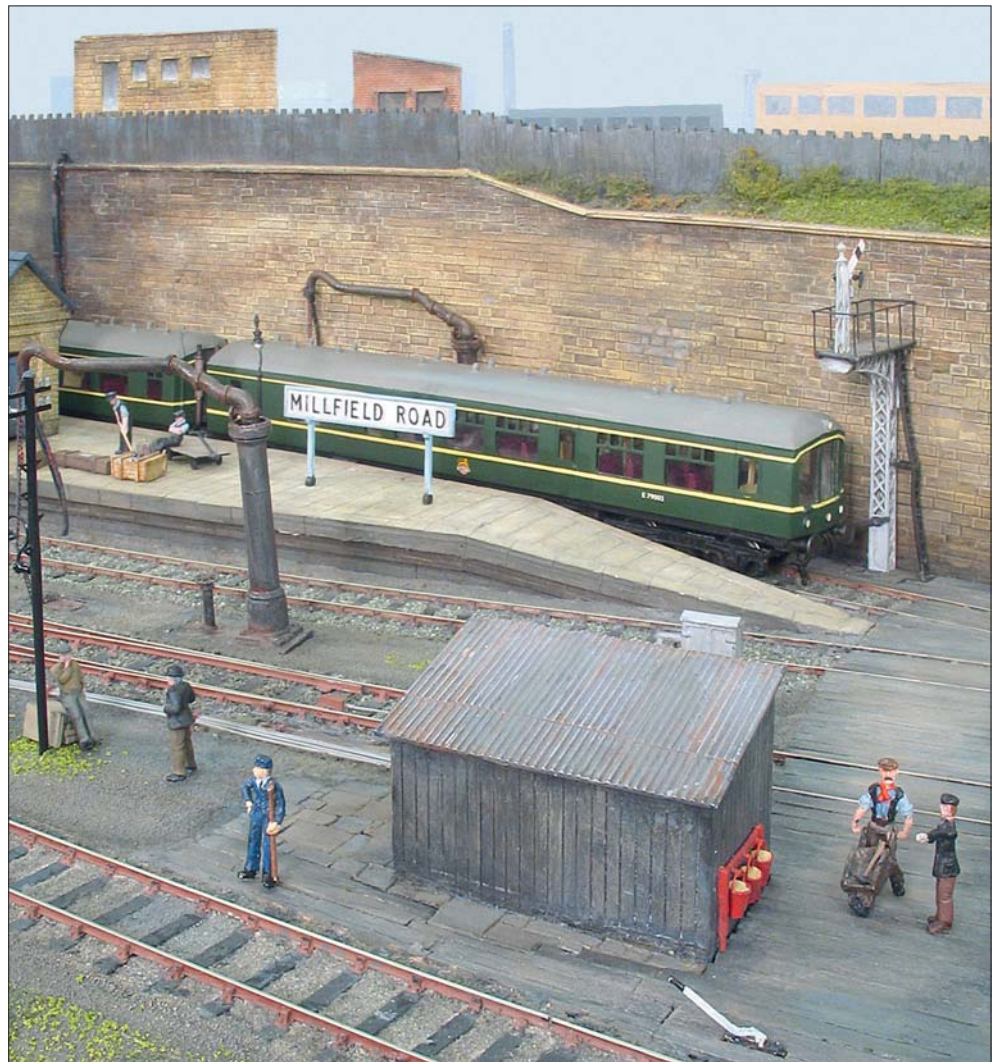
Conclusions

Millfield Road has been a very satisfying layout to build and it has reached or exceeded all my expectations. It has proved a great success and has worked well over the years. I am especially happy with the scenery, in particular the stonework, which looks so realistic in the superb photos by Steve Flint.

I have had no major problems since converting to DCC; in fact, I have noticed how clean the rolling stock's wheels are after a show. Clearly, the high-frequency AC supply has a lot to do with this.

In conclusion, I would like to say thanks to all those who have given me support and inspiration, but particularly to the team of willing helpers who have given me assistance with the transport and operation of the layout.

***Millfield Road* is booked to appear at Scalefour North at Wakefield on 1 and 2 April. Details in Societies & Clubs.**



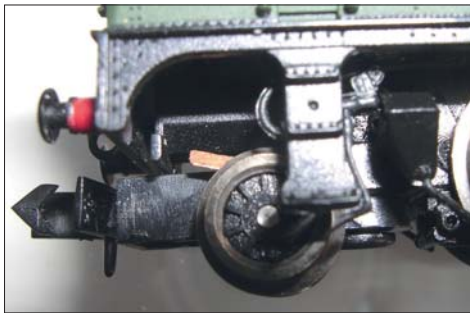
DCC for Dapol 45xx

Fitting a decoder in an N gauge 2-6-2T

After success with the 14xx (March 06), **ROGER MILLER** converted the *Prairie* to digital control.

When Dapol produced the 45xx it provided the modelling community with a superb model, full of character, filling a much-needed slot in the range of British outline locos. Fortunately, there is just enough room to put a DCC chip into it...but only just.

There are some tricky processes involved including soldering directly onto the DCC chip's printed circuit board. However, with the use of the correct soldering equipment and good technique there should be no problem. I use a 15w miniature iron with a 1mm bit. Anything larger will not get in to the small places accurately enough and will probably carry too much solder. Have a damp cleaning sponge at hand to wipe the tip. Cleanliness is paramount when soldering has to be done accurately and quickly.



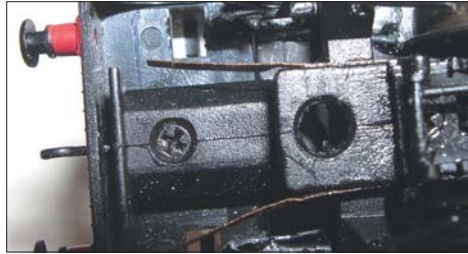
Step 1

Initially the body needs to be separated from the chassis. There is some pipework attached to the rear footstep and this needs to be cut away from the step with a sharp knife. By sliding the knife between the step and the pipework, a clean separation can be made allowing it to be re-fixed at the end of the whole process. Repeat this on both sides.



Step 2

Remove the front and rear pony trucks by inserting a small, thin-bladed screwdriver under the truck and easing out the plastic axis-pin. Take care not to bend the phosphor-bronze pickups used by the rear truck.



Step 3

Removing the pony trucks reveals two small screws, one at each end of the chassis. Remove both.



Step 4

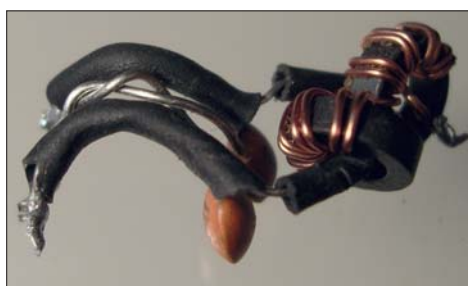
Grip the sides of the cab roof and ease the cab off the main body. The cab roof, front and back are all in one piece. The coal can be removed from the bunker too as this is held in by the cab moulding.

Step 5

The chassis can now be removed from the body shell. I found it easier and safer to initiate the separation by pushing down on the chassis through the access area provided after removal of the cab.

Step 6

Unsolder the capacitors and suppression choke assembly from the motor terminals and the two small black wires coming up from the wheel pickups. The common twisted capacitor wires attached to the motor casing are best clipped off with wire cutters as near to the motor as possible. A small soldering iron would not provide the necessary heat to unsolder it.



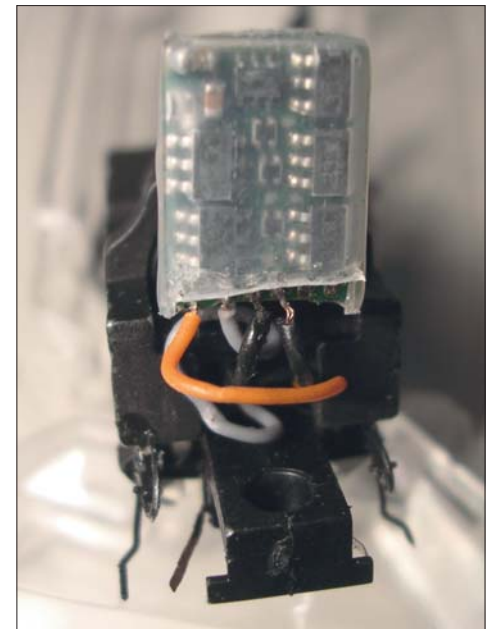
Step 7

The recommended DCC chip is the ZTC217 because this comes with an insulated coating that isolates it from any motor and chassis contact when working in such a small space. However, the chip requires some preparation and for this a 2mm strip of the insulation should be cut away to give access to the six coloured wire joints.

Support the chip in a firm location, like a small vice, with the wire connections uppermost. Remove the yellow and white wires from the chip by putting a little tension on each wire and dabbing the soldering iron on the connection to the chip's circuit board. British outline does not require lights and this is typically what the yellow and white wires operate. The wires only take up valuable space and just get in the way.

Repeat the process and remove the red and black wires remembering that the 'red' wire terminal is next to the grey wire.

Shorten the grey and orange wires to 15-20mm. Strip off 1mm of insulation and tin the ends with solder.



Step 8

Place the chassis in a small vice with the motor terminals uppermost. Locate the black wire coming from the right-side wheel pickup and solder it directly to the point from which the red wire was removed – that is, the one next to the grey wire.

Solder the black wire from the left-side wheel pickup to the next point – that is, the one from which the original black lead was removed from the chip.

Solder the orange wire from the chip to the right-hand motor terminal.

Solder the grey wire to the left motor terminal.

All the soldering is now complete.

Test the chip in programming mode to see if the default address can be read.



Step 9

There is only just enough room to fit the chip into the cab at approximately 45 degrees. In order to assist this, the plastic bar running between the two chassis halves and located right behind the motor should be turned so that the flat surface is at 45 degrees. To do this loosen the two screws on either side of the chassis, turn the bridging piece and retighten the screws.



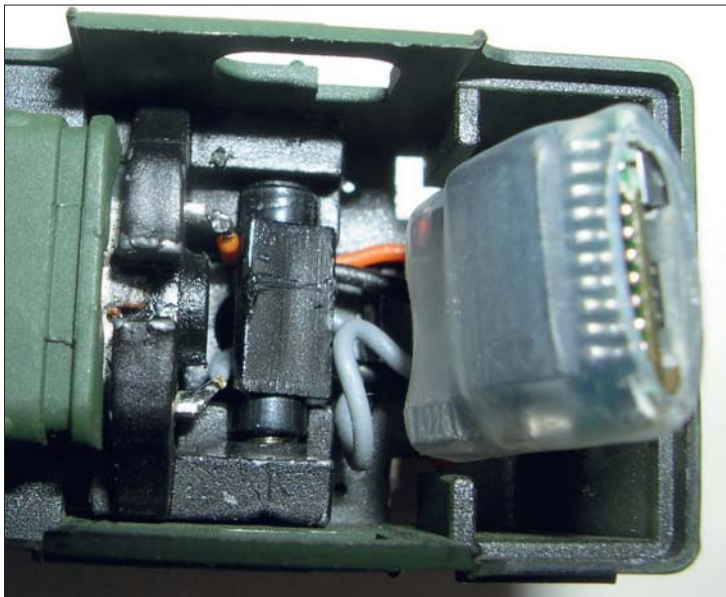
Step 10

Replace the bodyshell with the chip sticking out of the cab.

Make sure that the delicate wires are not trapped by steering them through the cut-away in the cab/bunker floor.

Refit the two screws from the underside.

Refit each of the pony trucks locating the pickup wires on the rear truck carefully behind the wheels



To aid those detailing 45xx Prairies in any scale, here are offside and nearside views of consecutively-numbered machines, 4556 in the scrap lines at Swindon on 16 October 1960, and 4557 at Whitland shed on 29 March 1958. *Photographs: Philip J Kelley.*



Step 11

Now the fun starts!

Position the chip at an angle and re-fit the coal into the bunker. If the chip is not seated low enough, it will try to push the coal moulding out of position when the cab top is fitted.

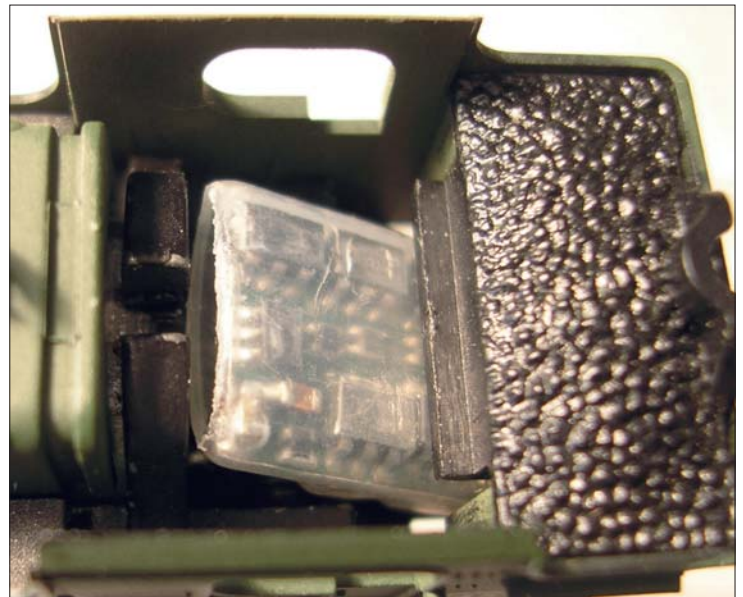
Perseverance and patience are required but it can be done. The downside of using an insulated chip is that although the coating is very thin it still takes up valuable room.

It is tempting to cut away the small step at the front of the coal moulding. Try to resist this because the tab allows the cab moulding to lock the coal moulding in place.

When the cab is re-fitted, all that remains is to re-locate the pipework to the rear footsteps with a little cyano and the job is complete.

Enjoy your digital 45xx.

Photographs by the author.



Hellifield – a postscript

A return to an ex-Midland junction in North Yorkshire

STEPHEN RABONE updates his article (*RM* April and May 2004) on this home-based OO layout.

Hellifield is the result of a long love affair with this railway location, to which I was first introduced by my father as a five-year-old in 1957. Subsequent visits in 1958 and 1963, from our Manchester home, and then frequent excursions after we moved to Keighley (a mere half an hour away by train) only served to strengthen my fascination with this, once busy, railway location. Throughout my teens and then into adulthood I kept boring everybody with how one day I was going to build this 'layout to end all layouts'!

Eventually, after several dispiriting false starts I finally achieved my goal just 45 years after my first visit to Hellifield. The layout certainly isn't of the standard I'd dreamed of all those years ago; I regret I'm not a determined-enough modeller to produce a spectacularly realistic layout. It has, however, brought me tremendous pleasure and allows me to transport myself back in time to those busier and more varied days of the late 1950s and early 1960s.

I'm sometimes asked what influences there have been on my modelling. I must, without any hesitation, reply that the truly inspiring model-makers for me are not the great scenic artists, or those who produce superb renditions of individual items of rolling stock. No, for me, the greats were those who had put their models in the context of an operational railway and attempted to replicate the day to day running of the prototype. Among these were Peter Denny of *Buckingham* fame, Frank Dyer with his *Borchester* layout, but above all David Jenkinson, who shared my love of the railways of North Yorkshire and the Settle & Carlisle. Sadly I only met him once but his influence



through his writing has been profound, in particular his emphasis on correct operation. I'll return to this theme shortly.

In my original articles, I left the future of *Hellifield* hanging in the balance. The layout was largely complete and I had assembled more than enough stock (or so I thought) to operate the railway realistically. However, I was very tempted to move the time period forward a few years into the early diesel years. This was partly because I find the running capabilities of modern diesel-outline models superior to their steam-outline cousins. In addition, the early diesel period was the one with which I have the strongest memories. Journeys over the Settle & Carlisle in the early 1970s, on the 10.25 Leeds-Glasgow behind one of Holbeck's 'Peaks', are among my favourite memories.

Likewise, recollections of train-spotting at Settle Junction on a hot summer's afternoon, or walking through the pouring rain with my wife and young daughters, in the early 1980s, all bring back memories of those green and blue diesels on freight trains diverted off the West Coast Main Line. So, it appeared likely that *Hellifield* would be simplified, some of the steam-era track would be ripped up, new crossovers installed and off I would go into the diesel age.

Below left: a southbound express, with a 'Black 5' 4-6-0 in charge, arrives at Hellifield. Careful deployment of lamps gives the correct headcode for each working.

Below: Fairburn 2-6-4T No.42051 departs the bay with the connecting stopper.



Left: two new sidings have been installed at the north end of the layout, as a result of discovering further information about how that station operated.

Right: the new North Junction, with its revised track layout as depicted in the reworked track plan at the foot of this page. The shed is still home to steam: the dieselisation of the layout will have to wait a while longer...

Photographs by the author.

Research

Then one morning the postman arrived with a letter forwarded by Peco. I'd ended my article by asking if anybody had information about the Blackburn to Hellifield line freight trains more in hope than expectation of anybody replying. I should have known better for several readers were willing to share their knowledge with me. What a lovely group of people we railway enthusiasts are! One of these was a former signalman, Peter Dunford, who had worked at the various signal boxes along the lines north of Skipton. His letter said that in his possession he had some pages from the December 1960 train register for Hellifield South Junction and would I like to see them. Needless to say I picked up the phone that evening and spoke to Peter, for some considerable time, about Hellifield and what I was trying to achieve on my layout.

After a few days some pages from the register arrived. To say it opened up a new, and long forgotten, world is hardly to overstate their effect on me. Every single train movement for 14 December 1960 is recorded. The information contained in the codes used by the signalmen shows quite clearly exactly what happened that day. Bell codes, the time the train was offered by the previous signal box, the times the train actually arrived or departed Hellifield and when that train passed the next signal box are all recorded; all 300-odd movements that day! In addition, because Hellifield was a reporting box to regional control, there is information about the passing times of important passenger and freight trains at locations such as Skipton, Ais Gill and Blackburn. Cryptic comments reveal odd incidents dur-



ing the day such as crew changes and locos taking water. Some trains are clearly identified as to what they were, although many of the trains require detective work using a working timetable. Did I say working timetable? Yes, those RM readers even managed to find me working timetable details for Hellifield for the late 1950s and early 1960s.

However, I've not mentioned the most interesting feature of the train register. The signalmen recorded the numbers of almost every locomotive that passed Hellifield between six in the morning and ten in the evening, as well as a surprising number on the night shift. In other words, using this document, various timetables and the republished Summer 1960 Ian Allan *Locoshed Book* it became possible to build up an almost complete picture of what went on that day in 1960. For the next few weeks active model making took a back seat to piecing together this jigsaw of information. Eventually, with the help of my computer, I drew up a complete record of the day in a tabular form, which was easy to understand. For those interested the full details can be found on my website at:

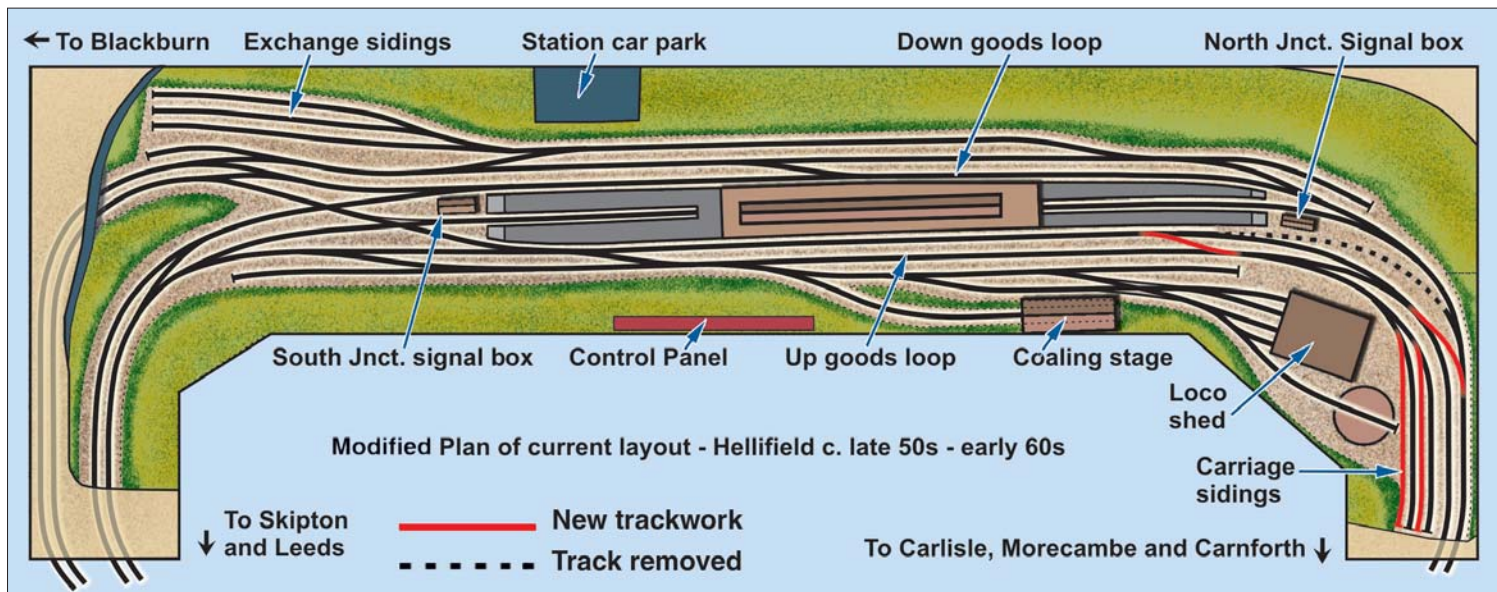
www.geocities.com/hellifielduk

At this stage I discussed with the Editor

whether we should publish this information in RM but came to the conclusion that its place was in one of the specialised historical magazines, and that a more model-orientated article should follow in due course. By this time I'd become so fascinated with the information I had that I decided to write an article in the form of 'A day in the life of Hellifield South Junction Signal Box'. This article was duly published in the January 2005 edition of *Steam Days* magazine.

Changes to the layout

Having carried out all this research it was clear that Hellifield in the late 1950s and early 1960s was an even more fascinating place than I had realised. The register also challenged some of the assumptions I'd made about various aspects of the operation of *Hellifield*. There was no doubt that changes would have to be made in the trackwork at certain locations on the layout. Equally interestingly, I had discovered a great deal about the locomotives working through Hellifield and the precise method of freight train operations at this time. By this stage it was clear that the dieselisation of *Hellifield* was going to have to wait for another year or so!





Left: the research into freight operation has influenced the way the yard at the South Junction is worked.

So what changes did all this information and greater understanding bring about? In no particular order of importance I'll detail the changes, both physical and operational that I've introduced.

The register revealed that there was far more freight traffic at both the High and Low Level yards than I'd imagined. As I haven't been able to include any representation of the Low Level yard, which dealt with traffic bound for the Blackburn line, I've concentrated on amending the operation of the High Level yard opposite the station. I now timetable several trains off the 'Lanky' line to pull into the 'Back Road' loop where some shunting can take place. This has the advantage that some freight train formations will change from one operating session to another. Ideally, I would have been able to include some of the trains that actually terminated at Hellifield, such as one from Blackburn and another from Rochdale. However, this would have caused problems with unbalanced workings, so I've simply used trains such as the Brindle Heath to Carlisle, which called to set down or pick up wagons. In order to simplify coupling arrangements I've dedicated some of my wagons fitted with Bachmann couplings to these workings. Readers may remember that I superglue a piece of paperclip to the coupling hook and then use my magnetic uncoupling stick to uncouple the wagons.

In the opposite direction it became apparent, from the register, that there was a need for some siding accommodation in the north end carriage sidings for freight traffic. This appeared to be used particularly for dealing with wagons off the local trip workings from the Settle & Carlisle or Morecambe lines. I therefore ripped up the entire track in the carriage sidings and succeeded in squeezing in two extra tracks to be used by these workings as well as the engineer's department traffic. It has resulted in some fairly tight curves and I've had to use the small radius points rather than medium radius ones that were there before.

It was also clear from the register that some of the local trains on the Blackburn line departed the carriage sidings and ran directly into the main southbound platform. On the layout as originally built this wasn't possible. I'd also discovered that access to the Up Loop from the Down Main was very difficult with

light engines and empty carriage workings having to make several reversals. So once again some of the track was lifted and two new pairs of crossovers were laid allowing better access to the loop and carriage sidings. It meant sacrificing a little length on the Up Loop line but operation is now much more realistic.

Of course I knew it all along, that despite my train-spotting notes and photographic evidence, I simply didn't have enough of the more mundane locomotives – more 2-6-4 tanks, 4Fs, 8Fs, 'Crab' and Ivatt 2-6-0s, and Class 5s were clearly going to be needed. Fortunately, Hornby and Bachmann have now produced just what I need, although these have required additional weight adding to give sufficient traction on some of the heavier trains I run. Hornby has also done Settle & Carlisle fans a favour by numbering one of its A3s as 60077 *The White Knight*. This loco features numerous times in the register. All that was needed was to remove the deflectors, as it wasn't fitted with them during its time allocated to Holbeck. A DJH kit for a Fairburn 2-6-4 tank was assembled, only for Bachmann to announce its model!

I soon realised from studying the different types of freight trains shown in the register that I needed to reorganise my freight trains into more logical categories. It was clear that there were far more fully-, or at least partially-braked trains than I'd expected. I especially needed more fitted vans and opens to replicate the large number of Class C and D freights that were such a feature of Hellifield, especially during the night hours. This of course meant the construction of more of those delightful Parkside kits!

There was also clearly some shunting of parcels vans at Hellifield, with one example being that vans from Leeds and bound for Carlisle were removed from the afternoon Leeds to Heysham parcels train and attached later to the Bradford to Carlisle local passenger. To replicate this I detach a van or two and leave it in the north end bay platform ready to be collected by the local. At the end of that movement I simply reposition the vans back onto the parcels train in the storage loops.

I felt it was also visually important to have locomotives fitted with appropriate headlamps for the class of train they would usually

work. This, of course, imposes some restrictions on what the locomotives can do, but the visual improvement and character this gives to a train is worth the slight loss of flexibility. Therefore, I've fitted express headcodes to the locomotives likely to work the main expresses, with another group wearing the single lamp for local passenger trains. A further batch of locomotives is fitted with the twin lamps offset to one side of the bufferbeam for the express freights, whilst the remaining freight engines have a variety of headlamps representing the more lowly categories of train. At the opposite end of the train all end vehicles now carry tail-lights, although this does mean that the local trains, which have to reverse, do carry them at both ends. Sometimes compromise is inevitable on a model railway!

One of the problems with having so much information is deciding what trains to run and which ones to leave out. It would be nice to be able to run the overnight sleepers or the *Condor* freight with its Metrovick diesels. Similarly, I'd love to have both a loaded and unloaded pair of Anhydrite wagons; I've already built the loaded rake, but realistically it's only possible to run a representation of what actually appeared at Hellifield on a typical day.

I learnt this the hard way when I started to squeeze in too many storage loops to accommodate more and more train sets. There comes a point when the layout becomes unmanageably complex and the track geometry becomes too tight. Operation of the layout began to feel a bit of a chore. In the end I realised I'd overstretched myself and out came some of those extra loop lines and dreams of sleeping car trains and empty Anhydrite workings were shelved. To make operation of the Blackburn and Settle & Carlisle locals a little easier I dedicated two of the loops in the storage yard to them with carefully-positioned dead sections allowing several trains to be stored there one behind the other.

All this work, has of course, meant that some of the tasks that need doing on the layout, such as weathering all that stock, have not had as much time devoted to them as I'd have liked. Nevertheless the steam-era *Hellifield* does seem to have gained a new lease of life, and the diesel invasion seems some way off, although my 'Peak' and English Electric Type 4 do put in the occasional appearance.

In the meantime I've become increasingly interested in the pre-grouping Midland Railway. My constructional skills having improved, I've now built a series of S scale models as well as a small layout based on an imaginary Halifax Midland station. It's just possible that Hellifield might therefore appear in this larger scale one day but that, of course, is another story. The thought of *Hellifield* with those lovely crimson lake engines and carriages certainly appeals.

Stephen's venture into S will be described fully in these pages in a future issue – Ed.



...an exchange of railway modelling ideas for beginners of all ages

Structure modelling – 8

A platform shelter and hut makeover

Another in the selection of popular building kit conversions by **PAUL A. LUNN**.

Although designed as a platform shelter and hut to be situated on the opposite platform of a more substantial station building, the Peco LK16 in timber lends itself to conversion as a small station building and goods shed, of the sort found on minor or light railways. The conversion can be carried out in two stages, one for each structure.

Platform shelter

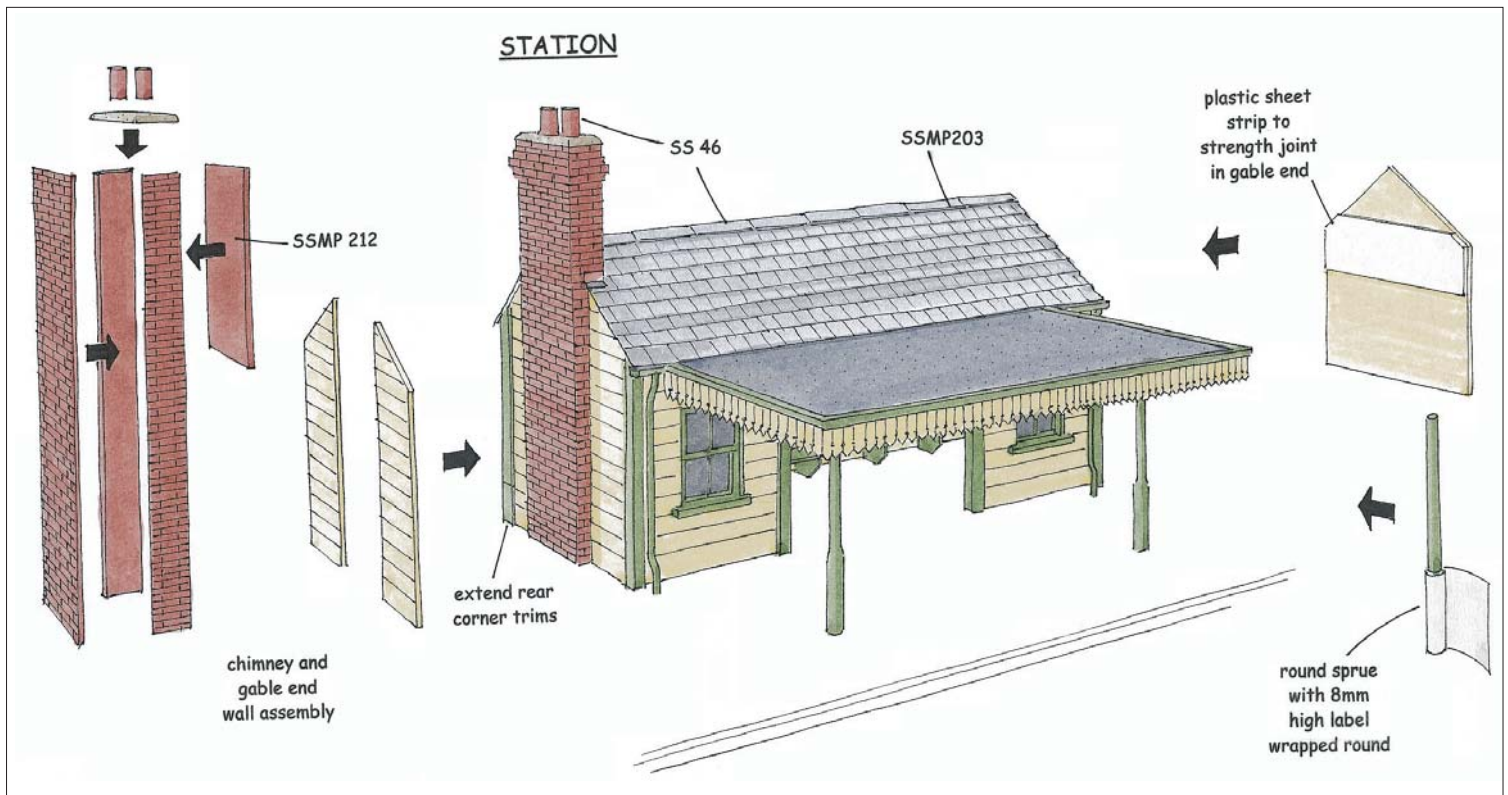
Initial changes are to the rear, ends and internal wall though none to the front. The internal wall is modified as shown in End Elevation X to accommodate a chimney and then to be used as an external end wall. This and the opposite end wall are reshaped as gable ends. The remaining external end wall is modified with a door and booking office window fitted and is now used as the internal wall, End



Elevation Y, gluing it to the lugs shown in the instruction sheet.

The chimney, already mentioned is to be fabricated with mitred internal corner joints from Wills SSMP212 Plain Bond brickwork which matches the chimney stack rim from

the Wills SS46 Building Details Pack A. Chimney pots from the same pack and a scratchbuilt chimney top to Template A are all that is required for completion, and construction is aided by the 3D illustration and Templates F.



Make a new roof using Wills SSMP 203 to Template B. Two templates will be required, one a mirror image of the other, leaving a space at one end to position the chimney. Use ridge tiles from Wills SS46 to finish off the top joint.

The revised structure has a traditional station canopy with columns. The roof is made from the original one but cut as per Template C. Barge/fascia boards and cappings can be used from the kit but will all need cutting to the new dimensions. Two round plastic sprues from the parts moulded in green can be cut for columns, sanding off any rough edges whilst maintaining the round shape. The bottom 8mm can be thickened out using wrapped-round adhesive labels and this is shown in the 3D illustration. The length of the columns is best measured on site from the underside of the canopy to the platform top. I recommend the canopy is glued immediately under the front edge of the new slate roof and then kept fairly level to the platform front. Capping boards numbers 6, 7, 13 and 14 will need to be lengthened because of the increased height of the main building. Use an appropriate L- or flat-section plastic or make your own from plastic sheet: these should be sited at the bottom of each run to indicate wood that had been replaced after the original had rotted away, as would have been the case on the real thing.

The hut

The hut, with a little work, can be interpreted as a small goods shed.

Increase the height of the structure so that the floor of the hut is at the same height as the floor of any passing railway wagon. This needs

to be about 17mm in 00, though obviously it depends on the track used. I have suggested two methods of increasing the height, either on a brick- or a timber-frame platform both with steps. Of the two, the brick version, made from Wills SSMP 226 Flemish Bond or SSMP 212 Plain Bond if you wish to match the station, is simplest to make, though my preference on both looks and method is the timber version. This can be made entirely from flat cream-coloured sprues provided with the kit. Top, bottom and diagonal sections are from single thickness whereas the uprights are made from double, glued together. Use the scale drawings to measure appropriate lengths, though some parts of the sprues provide natural corners, and can be used to speed assembly and increase strength. The edges of the plastic sprues require sanding to remove the sloping edges that facilitated mould release when the kit was produced. The loading bay deck is to be constructed from Wills SSMP 201.

The canopies can be made from spare pieces of the original shelter roof, cut to Templates D and E and fixed just below the slate roof. The one on the roadside can be supported by two L-shaped brackets made from staples, having cut or broken off one small leg to create the L. Canopy fixing for the railside is described further on.

To make any sense, the goods shed must have a door on each side, one for rail, one for road. A new sliding door, scribed from plastic sheet, needs to be fabricated. The sliding door track can be represented from a piece of flat, green-coloured plastic sprue. The door and track is probably the only really complicated part of the construction and as such needs fur-

ther explanation. The sliding door track needs mounting on three thin slivers of plastic, one at each end and one in the middle to hold it slightly away from the building wall. It should then be glued tightly up to the underside of the roof and behind the guttering, in effect, almost out of sight. In reality this would create a gap for the brackets that hold up the canopy, but on the model these would not be seen and can therefore be omitted.

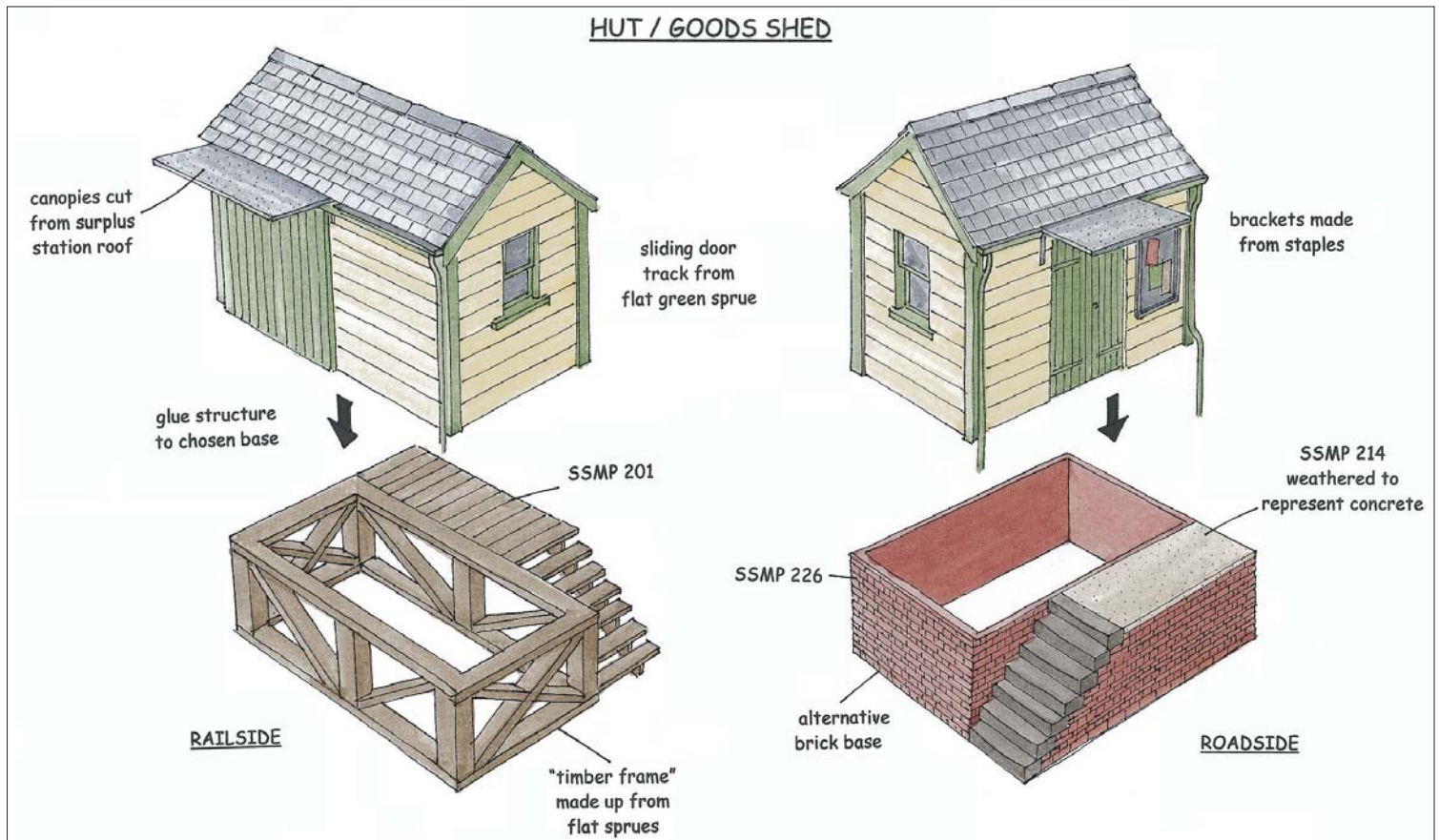
The canopy can then be glued to the underside of the roof and up to the sliding door track (not underneath it); support the roof until the glue sets. For modellers wanting to show the interior cut a hole in the wall where the door would be. The hole should be slightly smaller than the new door that can now be glued in an open or partially-open position. Detail the interior with appropriate loads, sacks, and crates etc. but remember these need to be the old-fashioned type...no pallets. Whatever position you choose for the door, pack it out with slivers of plastic to match the sliding door track.

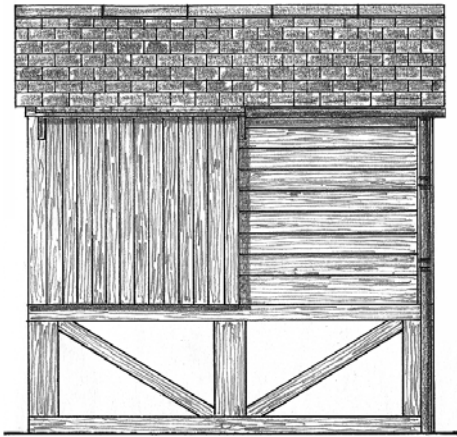
By and large reference to the instructions will be extremely helpful and the station and hut/goods shed can be constructed more or less as described save for my comments above.

A small amount of painting is required to the new door, to the station building wall extensions and cappings but this is largely green and cream. Ask your local model shop to match these, as near as possible, for you.

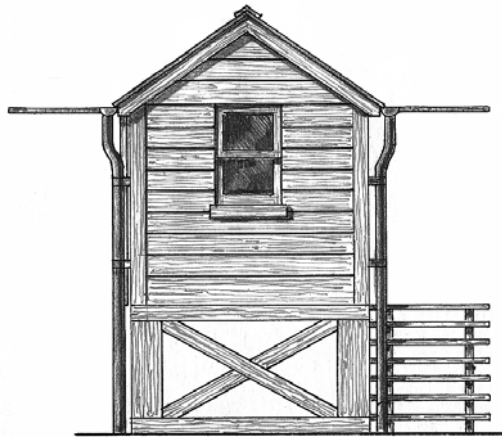
Overall, it is a fairly simple conversion, which due to extensive use of the plastic sprues included in the kit, can turn out to be very cost-effective.

As always, have fun making the changes!

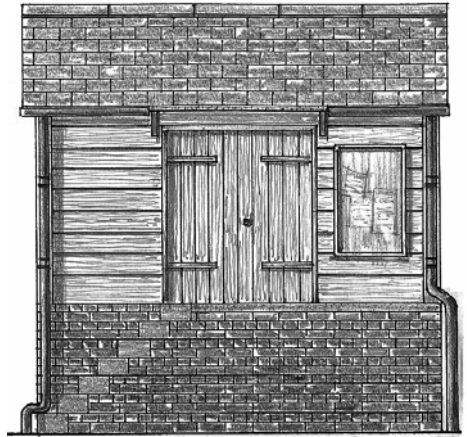




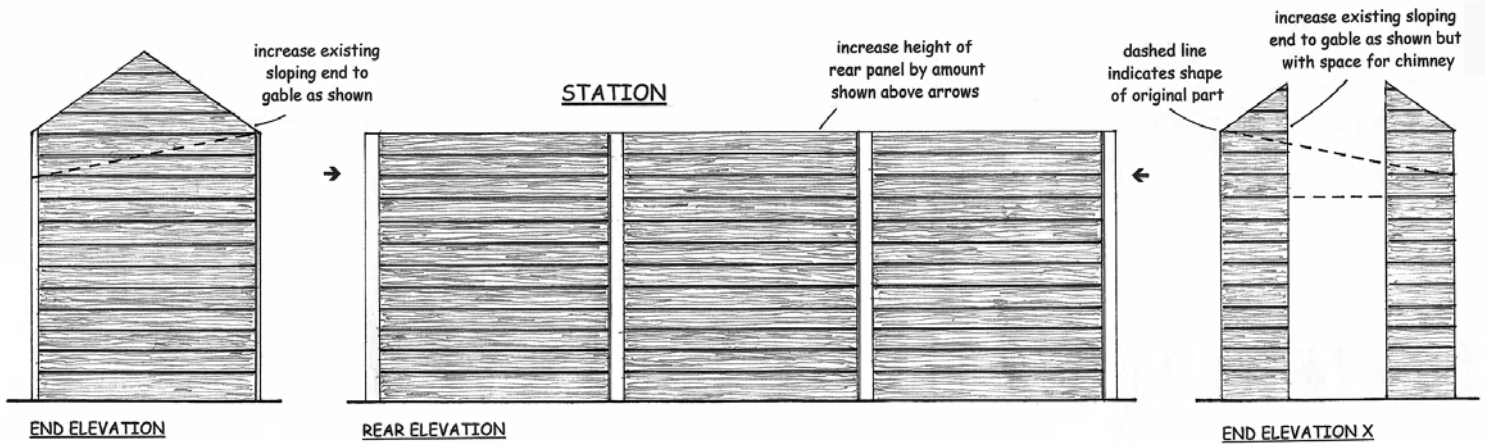
RAILSIDE ELEVATION



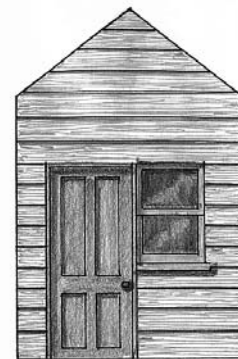
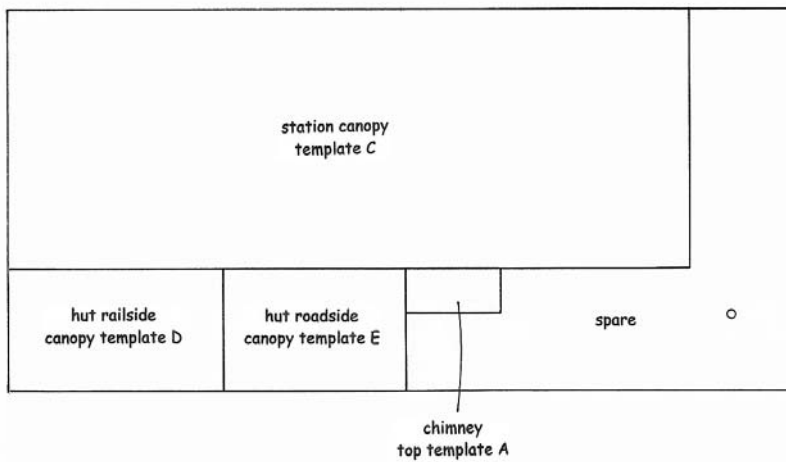
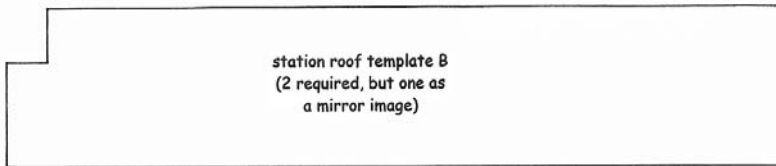
END ELEVATION



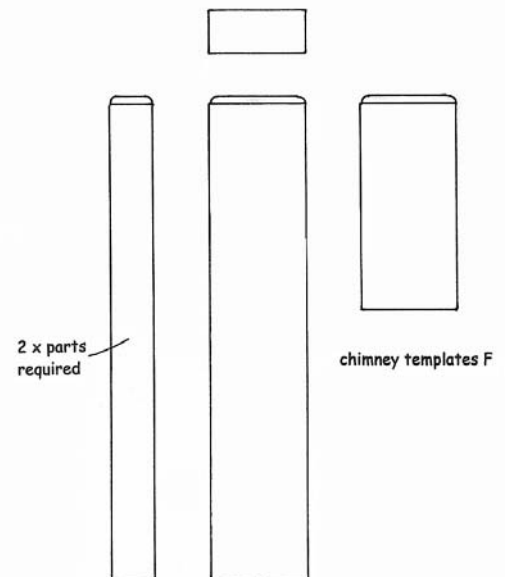
ROADSIDE ELEVATION



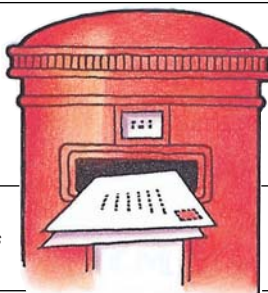
TEMPLATES



END ELEVATION Y



READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

DCC – MORE COMMENT

I was interested to read the opinions of your two correspondents on the subject of DCC in the February issue.

David Kelso 'cannot comprehend how anybody building a layout from scratch today can contemplate using anything but DCC.' How about the cost? This alone could put off young newcomers and the not-so-well-off. Some people are pursuing their hobby on a tight budget.

He should acknowledge also that DCC is not necessarily suitable for every layout in every situation. DCC has much to offer those who want it and they must be allowed to have it, and those who do not want it must not be forced to have it. We must have the choice.

This choice is a matter which concerns me for the future too. I view DCC as an added-value product, which enhances its retail price. So, I just wonder if one day one manufacturer will announce that he will only make DCC products, which will mean, by the forces of the market, that all the others will follow suit.

As for 'the traditional British reluctance to accept change and adopt anything new', why are there 60 million mobile phones in the country and millions of digital cameras, satellite TVs, DVD players and computers?

Railway modelling is a hobby and we must be allowed to pursue it in whatever way we want.

Finally, big improvements in the performance of older loco motors can be had, quite cheaply, by using a feedback controller.

JOHN EDGE

Re. Mr. Andrews' letter (February issue); Julian asks what percentage of average modellers use DCC. Does he really think (if the figures were available) that the 'hype doctors' would want to see them published?

However with the dawn of the pre-fitted chip era looming, the percentage of people not willing to pay for something they don't want will soon become apparent, especially when many, both steam and diesel, loco prices will be propelled beyond the £100 mark. They'll simply not buy, leaving the DCC percentage to shoulder totally the industry's financial wellbeing. Need I say more?

BOB COMPTON

I have just bought the March edition of RAILWAY MODELLER, and refer to the letters pages and the comments therein on the merits or otherwise of DCC. As a modeller of over sixty years' experience I feel I must add a few comments of my own.

Given that the amount of cash available to pursue our hobby is limited, I am amazed at the way other hobbies

have risen and faded but railway modelling goes on. Apparently it is able to survive the onslaughts that occur periodically.

I can think of competitions such as stunt kites, skateboards, chopper and mountain bikes, computer games, slot car racing, remote-control cars as well as the traditional activities such as stamp collecting. Each one is absorbed like a sponge.

However, it is easy to forget that all modellers, maybe most, do not work to the same standards as depicted by the magnificent layouts portrayed in this magazine. A significant number run their railways in a most unrailwaylike manner. Good luck to them; why should they be forced down the DCC route?

It seems to me that manufacturers, with the active encouragement of a vociferous few, are following the path of seeming to be active with a certain amount of desperation. 'We need to be seen to be doing something, this is something, let's do that.' Out goes the bathwater, baby and all!

As a long-time LNER modeller and enthusiast I am delighted to note that Hornby was to introduce a Class A1. Now I have seen the product I could be really excited by it. But I am unwilling to pay for something I will not use, and if they are all DCC-fitted, then I, for one, will not be buying one!

DCC seems to me to be nothing more than a three-dimensional computer game. What a bore!

BOB JOHNSTON

I am a Geordie 62 years young and have never written to any publication in my life, but this publication and some of its contributors have forced me to seek out my 'quill pen' previously lost in the depths of my study.

With reference to the 'Readers Letters' February 2006, (I missed the December 2005 issue so I am unable to comment on David Plume's letter), I totally agree with David Kelso and suspect Julian Andrews continues to reject Digital Media in favour of L.P. records like some modern day King Canute?

Like David, I too cannot comprehend anyone building anything in the 21st Century utilising at least 80-year-old technology, unless they have a fetish for old telephone relays.

Julian makes five points as follows:

1. The number of people using DCC.
2. The worth of DCC on very small layouts.
3. Locomotives not DCC-ready or those 'unable to accommodate a decoder and converting cherished models without considerable cost and effort'.
4. Emperor's new clothes.
5. Costs.

The number of people using DCC in

Britain at the moment is relatively few, however as with all digital technologies in 5-10 years almost all layouts will be DCC just as now even the dogs have mobile phones and MP3s.

The worth on small layouts is many-fold, bringing all the current uses into play, not the least of which is superior control of locos (which always go forwards when instructed), especially at shunting speeds and automatic decoupling at your fingertips. Want to change your layout? No need to scrap your control panel and build a new one with all that entails, simply redraw a new one on the computer screen and reallocate the addresses, in a matter of hours, sitting in a comfortable chair! The uses are only limited by your imagination!

The rapid progress of miniaturisation means that very few locos will not be able to be converted at the moment, and it will not be long for the rest. I suspect Julian is a very accomplished modeller who has invested a lot of money and time building his cherished locos: surely in the overall terms of cost and time, a £10 decoder inserted between the pickup wires and the motor does not equate to 'considerable cost and effort'? A current dodge seems to be to have the decoder in a wagon permanently attached to a small tank engine, especially if you want (expensive at the moment) sound.

Emperor's new clothes? I think computers may be here to stay for a while and everything is backward-compatible. The NMRAs standards are adopted worldwide, unlike Zero 1, and will not go away, but even Zero 1 can be incorporated into a ZTC system. Components will get smaller and cheaper as more people adopt it. There are about 10 players offering new modern systems which are compatible and interchangeable, so there is healthy competition.

Below: a Maunsell slab-sided brake third stands at the head of a Folkestone-bound boat train c.1956 as an unidentified Bulleid 'Battle of Britain' Pacific backs onto the train.

Photograph: the late Les Pickering, courtesy Bob Brown.



Costs for someone like myself, starting from scratch, are not too different from buying a 'sophisticated old technology controller', all the bits and pieces, and then having to spend hours of running miles of wiring and joining it together with 'chocolate block or tag style' components, then making a control panel.

Why buy an obsolete system when the new offerings will offer superior control convenience and be very cost-effective? I am afraid the 19th Century control systems will end up on the same scrapheap as the audio cassette, VHS tapes and cathode ray tube television sets.

In conclusion I have no association with anyone mentioned in my letter, nor do I have any vested interests

GEORGE TODD

Editor's note. We have received a lot of correspondence on this topic, which we believe has been aired sufficiently.

A FRIEND OF FRIDDOEDD

Many thanks for the excellent article in the March RAILWAY MODELLER covering my layout *Friddoedd*. There is just one thing I would like to point out.

Due to a misunderstanding, Mike Turner was described as the person who helped me to build the layout. He actually inspired me to start building pointwork using SMP and copper-clad sleepers.

The person who helped me to build and operate the layout is Mike Rush: I would be grateful if you could publish this, along with my sincere apologies.

WYN PLATT

A CURVATURE CONUNDRUM

In the October issue, the Hornby A4 *Guillemot* is reviewed. The author notes that the package includes cylinder drain pipes and flanged carrying wheels for the Cartazzi trailing axle which the purchaser can fit if he chooses; but he notes that the minimum radius curve needed for satisfactory operation would be 45°.

If this is so, then those of us who are hoping to employ ready-made trackwork are in for a disappointment, for it would appear to rule out (amongst others) even the largest of the Peco range. There are nowadays very practical aids to permit the fumble-fingered to 'build their own' and make a successful job of it, but it gets neither easier nor speedier as one gets older.

Has anyone any suggestion which would countenance the advance of scale modelling whilst avoiding the compromises which have been adopted to allow operation on small ('toy') radii?

May I close by commending the ambition of your contributor Martyn Haley (*Conway, LNWR*, same issue). It would be interesting to hear what his

timetable is for construction – and in due course find out how achievement matches forecast. I am still trying to complete a scheme which has been on my mind since before retirement (and it is strange that in retirement time gets even shorter than when employed!).

DAVID A. DRANE

Editor's notes – the Melcam Tracksetta range includes a 48" curve-setter, to assist in the laying out of flexible track to a radius that a fully-flanged A4 will accept. Additionally, Peco large radius pointwork has a curve radius of 60". Martyn: over to you!

SOUTHERN ROLLING STOCK MATTERS

The latest edition of RAILWAY MODELLER (February) carried the welcome news that Southern modellers are to be rewarded by the re-introduction in 'Chinese' quality of two prewar locomotives in 4mm scale. While the Bullied era, and subsequently, is reasonably well represented, it is a different matter with this earlier age, so this is great news.

However, the dire shortage of suitable ready-to-run rolling stock must detract from the success of these and currently available prewar locomotives. This vacuum is equally apparent with regard to carriages and wagons. None of the common goods brake vans are available ready-to-run, and neither are any of the common open wagons. And as for carriages, one wonders just how much longer a major manufacturer can dare to offer 1970s-style green repaints of their otherwise reasonable GWR Collett coach!

What we need is an accurate model of the contemporary Maunsell stock, which was used (in different widths) across the system. The introduction of these carriages might increase sales of excellent current offerings such as the 'Terrier' and N Class. It might also tempt manufacturers into new favourites, which ran right across the Southern in different liveries, including the preserved T9 and Adams Radial tank – both of which, judging by the number of books and videos, form popular reminders of childhood holiday spotting in the south, where 'summer comes sooner...'

Dr. JAMES A. FORD

WHAT IS A MODEL RAILWAY?

Thank you Tony Retallick for a rare, albeit rueful smile from your letter, RM March, 'Model Railway Layouts' making me wonder if it was tongue (pen?) in cheek (or maybe the Editor's in publishing), hoping to rekindle the age-old debate 'what is a model railway?'

Conventional wisdom is that a true scale model of even a reasonably-compact main line station would test



Above: St. Just, by David Curtis. See it at Carn Brea if, as David notes in his letter, you are quick... Photograph: David Curtis.

Below: the inescapable fact that railways are big things is exemplified by 50 022 Anson at Westbury on 10 April 1985. Now imagine that's a Hornby 50 in 4mm scale, and it soon adds up! Photograph: Frank Hornby.

the spatial facilities of most homes and so the art of railway modelling is in compression, compromise and contrivance, all dependent on a degree of imagination and usually resulting in a representative model of a section or length of railway; termed a model railway or layout as a short-hand convention.

In this way it becomes similar to a stage setting, with our trains coming from and going to the wings, but hey! your preferred style of layout does not matter, as long as you enjoy the fascinating hobby.

Peter Whitworth's creation, exemplified by Tony, looks a delightfully atmospheric layout and fun to run, but hang on; doesn't it actually incorporate several of the devices of which Tony protests?

Surely the reverse loop only leads a train from B back to B again, while containing a holding loop, and one of these, where trains can pause for the illusion of time and distance, is first cousin to a fiddle-yard. Or, from the plan, it is a device whereby the length of run is effectively doubled by trains traversing the same track twice in reaching the exchange yard; not very economic on coal consumption in the real world.

Similarly the spiral in a tunnel, again with passing loop is another contrivance, while as there is only one actual station, where is the A to B for the passenger trains? Could it be that those two little arrows at the bottom right-hand corner of the plan lead to the dreaded fiddle-yard? Possibly the earlier train timetable referred to in the script. Hence the smile that Peter's cunning plan has seemingly deceived, all only in fun but thank you again Tony for brightening the day.

Before our last house move my attic

line ran from fiddle to fiddle with plans for a terminus at each end sometime in the future so that trains would run from A to E, via B, C, & D but at least there were C and D, two stations for trains to serve in its scale 1+ mile length (and five signal boxes to pass); there I could set an old K's 'Terrier' stoically slogging at about a scale 12mph with a short goods and metaphorically have time to pop downstairs for a cup of tea and get back before it reached the other end.

DAVID CURTIS

Curyford (round and round)

PS – The magazine gets better and better, and if this should be published in the April edition and you are quick, you may see my *fiddle yard* (representing the rest of Britain's railways) to *terminus St. Just*, 13'6" x 2'0" 'layout' at the Redruth MRC's exhibition at Carn Brea Leisure Centre in Cornwall on 18-19 March.

I have been buying the RAILWAY MODELLER, since the 1970s, the magazine going from strength to strength.

I have never written to you before, but the letter from Tony Retallick (March 2006) really annoyed me. I am sure that everyone will agree that ours is an extremely diverse hobby, in all its various guises and degrees of competency. Whilst it is true that real railways were built for a variety of purposes, they were, from their inception (and some still are, albeit far too few) part of the landscape through which they passed.

The same is equally applicable to model railways – see Barry Norman's stance on this in his *Landscape Modelling*. Otherwise, in my humble opinion, what purports to be a model railway is no more than a train set: and how many of us have had to put up with the repeated ignorant jibe of 'Playing with your toy train again, then?'

I suspect that many modellers are not in the position, financially, personally, or timewise, to produce models of more than one station surrounded by what Mr. Retallick sarcastically refers to as 'beautifully-modelled scraps of countryside'. No doubt many of us, of all ages, have visited model railway exhibitions up and down the length and breadth of the country – we really are spoilt for choice aren't we? – be it the National at the NEC or excellent local shows such as Kidderminster, Stafford or Wolverhampton, in my own immediate area. Most of the layouts feature beautifully-detailed locomotives and rolling stock, along with appropriate railway buildings, fixtures and fittings – including scenery. You cannot have the one without the other: they are complementary.

On a more positive note, surely one of the best parts of our hobby is the

continued free exchange of ideas between modellers on how to do this, that or the other, irrespective of competency or scale.

In this vein, I was interested to read David Cox's article on making stonework out of DAS modelling clay in the same issue. I have been doing this for several years now. DAS 'takes' on card without the need to employ solvent to make it adhere. An alternative approach to mortaring the brick or stonework is to scribe the DAS, let it dry, sand off any irregularities, and paint the surface to represent whatever medium it is you are trying to represent. Let this dry. Then give the entire surface a coat of *mat* varnish. Let this dry thoroughly too.

Mix up some DIY filler to the consistency of soft cheese. Add in a mixture of watercolours – a touch of grey, brown, white, green – nothing too strident, for weathered mortar. Smear this 'paste' thinly over the entire surface of the elevation of the building concerned. Leave for about ten minutes, then gently wipe off the excess 'mortar' using a damp foam sink scourer. This will need washing out after you complete each elevation, unless the building is very small. You are left with beautifully mortared brick or stonework, the painted surface of which remains intact beneath its (invisible) coat of varnish.

In conclusion, I am sure that all readers would join with me in congratulating Steven Mitchell for his beautifully crafted and compact *Aston Yard* (also March 2006). With 11-year-olds like him about, we need have no fears for the future of our hobby. I hope that one day, I will be able to ask the Editor to consider featuring my own *High Tor Junction: change for Yeo Bridge and Tavistock Road* layout in the RAILWAY MODELLER, though not just yet.

JONATHAN MOOR

The letter from Tony Retallick asking for more 'real' railway layouts (i.e point-to-point) demands an answer. There are literally thousands of modellers who simply have not room for a point-to-point layout. You can have two or more stations in a room 10' x 12', but can you call it a 'real' railway? If you have a point-to-point in the garden, where do you watch it? Like the real railway, you can only watch it at one location at a time.

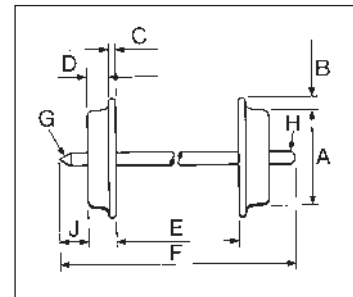
Railway modelling's biggest attraction is the variety of ways in which it can be done. In every case there are compromises, and a suspension of disbelief. For some, an O gauge Pacific pounding along at the head of a long train of coaches, on an elevated garden baseboard with minimal scenery, is all that is required. For others a small shunting yard, with constant slow movement of locos and wagons, is our joy and delight. None of it is 'real' in the exact sense, but it gives pleasure to millions who can appreciate craftsmanship and creativity. Railway modelling is an art form. I, for one, applaud the 'new' RM for its good mix of layout types. From the complex modelling involved in Wyn Platt's *Ffriddoedd* to the elegant simplicity of Ian Futers' *Loch Lochy* (both March RM) – this, for me, is railway modelling at its best. Thank you, RM!

JOHN ALLISON
President, Warley MRC



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BR Type 3 Hymek in 0 gauge, ready to run from Heljan



This ready-to-run 0 gauge locomotive is an effective reminder of the Type 3 diesel hydraulics of Western Region introduced in 1961. They received TOPS Class 35 classification but did not remain in service long enough to carry the numbers, being withdrawn in 1975 after BR unsurprisingly decided that electric transmission was the way forward for diesel powered locomotives. Despite their short fourteen-year lifespans, the Hymeks are a good choice for those requiring a legitimate 'steam age diesel' and one that will look well on a branch or secondary line (e.g. West Somerset, Radstock, Newcastle Emlyn even). Your Hymek will also sit happily in the company of a Prairie, 'Hall', Standard and, on the Southern, 'Merchant Navy' and of course any steam loco that can be justified by a photograph showing the required juxtaposition.

When handling this satisfyingly chunky model, the first surprise is its



considerable weight of 2.9kg. Lifting it is a new experience, as indeed is the whole act of opening a box containing a fully finished ready-to-run diesel loco in this scale.

Detailing and finish are outstanding, with finely moulded grilles and glazed cab with furnished interior. The cab windows have windscreen wipers and the roof carries twin air horns. The bright metal handrails are separately applied and (first time we have seen this on a model) the rear faces of the oval heads of the sprung buffers carry rivet and fixing detail etc.

The two-tone green livery, with off-white cab window surrounds and 'new' BR crest looks well and will awaken many memories. The moulded bodyside captures perfectly the 1960s styling with verticals which slope forward into the direction of travel instead of backwards in the conventional 'streamlined' way. Who had a 1960 Vauxhall Victor?

The bodyside windows and grilles have bright frames and look exactly right as remembered. The Beyer Peacock works plates are legible, as are the numerous 'coolant filler point' labels along the lower bodyside. The plates and cabside numerals should really be in relief, but no doubt these will soon be available in etched form for the fastidious.

There is a selection of twelve train reporting numbers, and illustrated instructions on how to fit them into the headcode boxes, an operation which involves removing the body. The appropriate codes include Cardiff-Portsmouth (10), inter-regional (1M), and freight ones, and some have been printed to reproduce very well the typical out-of-alignment appearance of the real things due to vibration from the locomotive.

The roof features the offset mesh grille for the red/yellow fan which is powered by its own small motor and worm gear. The fan emits an interesting 'whirring' noise when the locomotive is on the move. There are also twenty tiny lifting rings for the various roof panels. Given the weight of the loco, it is doubtful if these rings would survive a 'rollover'.

The unpainted bogie sideframes are well detailed with nicely modelled springs, brake cylinders and axlebox covers. Of course they will benefit from a little weathering if this is to be a 'working' engine.

The model is powered by two five-pole flywheel-fitted motors, each vertically mounted on a bogie and driving both axles via a gear train.



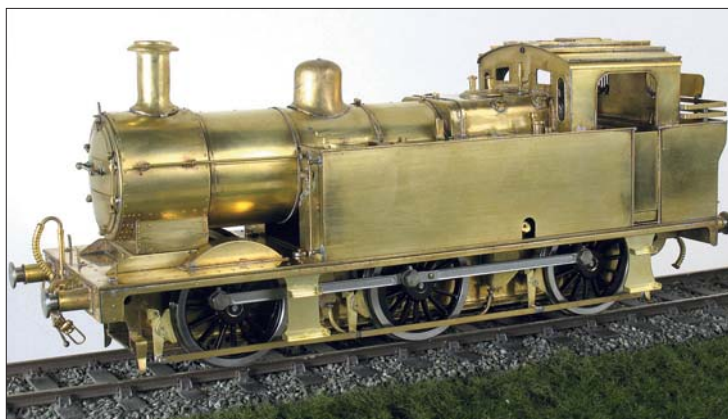
Tower Brass 'Jinty' and Collett coach in 7mm scale

Two new additions to the range of ready-to-run locomotives and rolling stock in the Tower Brass stable are illustrated here.

The popular LMS 3F 'Jinty' represents one of the LMS-built examples, with 'keyhole' cutouts to access the centre coupled wheelset's sand fillers.

The model is powered by a 7-pole Canon motor, which is fitted with a fly-wheel. The model collects current from all wheels via plunger pickups. The chassis is compensated, and the model boasts sprung buffers and screwlink couplings. The model is designed to operate on a minimum radius curve of 4'6".

It is supplied unpainted, but the instructions give advice on loosening the four screws which breaks the model down into convenient sections for painting. A limited number are offered by Tower Models painted and lettered, with number-, shed- and worksplates: a model can be finished to a customer's requirements too. Weathering can also be applied. The price for a fully finished 'Jinty' is £575.00, and with weathering £600.00. Only 150 models have been produced in total.



New to the rolling stock range is a selection of GWR Collett 'large window' stock, comprising Diagram C77 all-third, Diagram D127 brake third, Diagram E159 brake composite, and Diagram E162 corridor composite (illustrated below). The prototypes were the 'yellow disc' stock of 1938, identified thus with a circle at the ends to signify their ability to run over other 'Big Four' companies' routes.

The models include sprung buffers,

screwlink couplings and well-detailed bogies. Corridor and compartment partitions are included, as are lengths of glazing strip. As with the locomotive, dismantling instructions are provided.

Additionally, Tower Models can offer these coaches fully finished to order, from the as-built 'shirtbutton' scheme to the final BR maroon. Fleet numbers and even the colour of the roof can be specified. As this is a custom-order service the time taken to complete

each model is around three months. A fully-finished model is priced £390.00.

In our report from the Gauge 0 Guild Convention in Telford (see RM November 1005) we printed a couple of photographs of these finished items. The brake third in maroon is seen again here, larger, to enable the standard of finish to be appreciated.

To come over the year are GWR railcars (passenger and parcels types), a 14xx and a 'King', and four auto coaches. For 2007 are planned a 'Castle' and 1361 0-6-0ST, and for the Southern a range of 'Terriers'. More items are still on the drawing board: watch these pages for further news.

For 7mm scale

AVAILABLE FROM
Tower Models, 44 Cookson Street,
Blackpool, Lancashire FY1 3ED.

PRICES
Jinty - £399.99 (unpainted)
Collett coach - £215.00 (unpainted)

WHEEL DATA
B. 1mm, C. 1.1mm, D. 2.8mm,
E. 29.1mm.



Heljan Hymek, continued

Brake and steam-heat pipes are fitted on each bufferbeam and the coupling hook is sprung. NEM type coupler pockets are supplied for fitting if required, although this is at the expense of the characteristic airtank under the bufferbeam which must be removed.

Performance on ordinary flexible track was excellent, the solid weight giving good adhesion for pulling large loads. However, there appeared to be some binding of the wheels through pointwork, and on close examination we discovered that the back-to-back

dimension was only 28.4mm, which is apparently correct for NEM and NMRA standards, but is not the preferred dimension for UK consumers, who are working to finer standards. Once the wheels were adjusted to 29mm the Hymek performed perfectly through Peco pointwork. We have consulted with Heljan on this subject, and the firm assures us that all future production, especially for the UK market, will have wheels assembled to 29mm back-to-back.

No provision is made on the circuit board for a digital command control

decoder. Directional lighting is fitted, but when replacing the body onto the chassis make sure none of the tiny wires gets trapped.

With a date of entering service a mere 45 years ago, it seem to us that the Hymek is pretty 'modern image' as far as 0 gauge models go but, as we have noted, it can take its place with the last of the steamers and we can foresee that more than a few new 0 gauge layouts will be 'built around' this compact and stylish diesel.

Also available is D7040 in BR blue with small yellow warning panels.

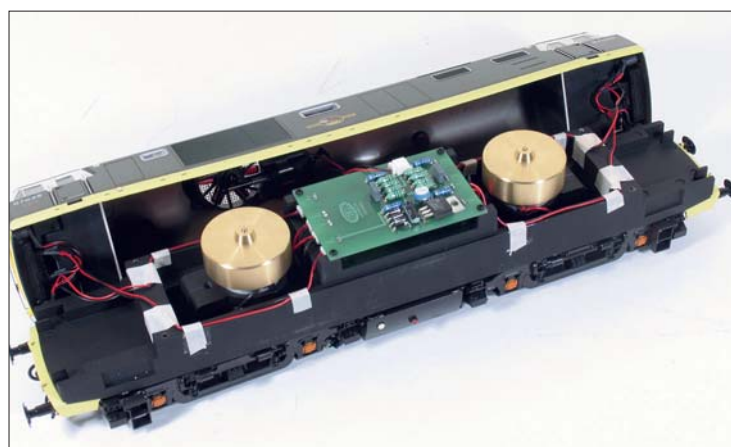
For 0

SAMPLE SUPPLIED BY
Heljan A/S, Rebslargervej 6,
DK-5471 Sønderød, Denmark.

AVAILABLE FROM
Heljan UK, 12 Banbury Road,
Kidlington, Oxon OX5 2BT.

PRICE £475.00

WHEEL DATA
B. 1mm, C. 1.1mm, D. 3mm,
E. 28.4mm.



Mk.I catering vehicles in 00 and N from the Bachmann stable



Two new Mk.I catering vehicles have been added to the Bachmann stable, a Pullman in 00 and a restaurant car in the **Graham Farish** N gauge range.

The highly-regarded Pullmans have been joined by the Kitchen Second (ref.39-300), representing Car No.332, the first of the batch of 15 of this type. As with previous models this example is finished and lined expertly, boasts interior lighting, and fully detailed interior. In place of the orange curtains for first class stock, the seconds had blue material, as modelled.

In concert with the other Pullmans the car has a set of air brake mould-

ings for use with locomotives unable to brake the stock using vacuum.

No.332 has not made it to preservation, static or otherwise, but five of its sisters have.

The N gauge range of Mk.I coaches now has the RU (restaurant unclassified) which, in addition to the InterCity-liveried example illustrated (ref.374-118) is to be available in Western region chocolate & cream, lined maroon, and blue & grey. All except the WR model ride on B4 bogies.

The prototypes seated 33 in loose chairs – one cannot see this being tolerated today – and had no exterior

passenger-operated doors: note the neatly-printed 'door-and-a-bit' in our photograph, which along with two others on the corridor side allowed catering trolleys access to the food preparation area.

In common with several Mk.Is in the recent Graham Farish range, no interior is provided with our sample: it is a pity, but does not detract too much from the model in total.

Couplings on each model are, as usual, slimline tension locks in swivelling NEM pockets on the 00 model, and Rapido-type sprung couplers on the N gauge coach.

For 00 & N

SAMPLES SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICES

Mk.I Kitchen Second – £26.95ea
GWR railcar – £13.00ea

WHEEL DATA

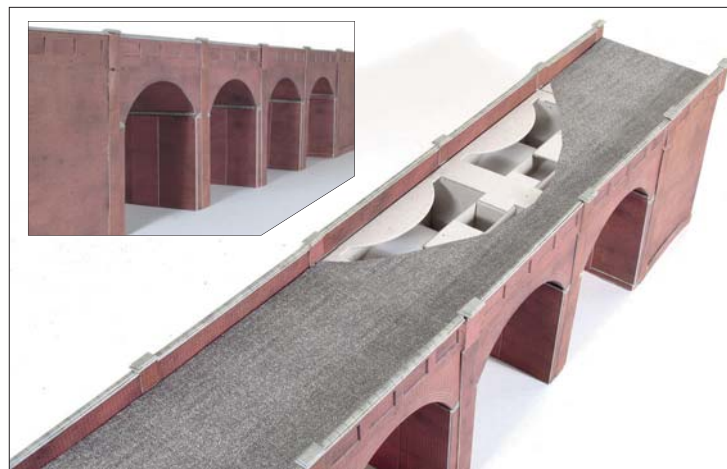
00: B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.
N: B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.

Metcalfe four-arch viaduct kit in 4mm scale

This 4mm scale die-cut card kit for a double-track four-arch viaduct is available in red brick or stone finish. The 100mm width of the trackbed requires a '6' way' of 34mm rail-to-rail. The kit assembles as two x two-arch modules and the overall (four-arch) length of the structure is 735mm including the end wall sections which are intended to be partly buried in the approach embankments.

The viaduct was enjoyable to build, with accurately cut 'press-out' components and well presented sequential assembly diagrams. As with all kits, the 'learning curve' dictates that one would do a better job if assembling a second one, but that is probably an inescapable fact of modelmaking. In this case, of course, extra kits would make a longer viaduct, thanks to the modular design.

First to be made is the very strong grey card inner structure. This is covered in by the brick-effect outer skin



and cannot be seen after completion, which is a pity given its complex and satisfying form. We have omitted part of the trackbed in the photograph to

reveal its structural interest and the 'Did I really build that?' factor.

The parapet walls are panelled and stone capped, reminding us of certain

late Victorian bridges in the Bournemouth area. The assembly of the panelled brickwork takes a little time, but the result is well worth it.

Material is provided in the kit for abutments and buttresses to retain the approach embankments which we have not modelled in this review sample.

Without a doubt, here is another enjoyable and effective card kit from Bell Busk.

The Metcalfe Models range is distributed to the trade by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.

For 4mm scale

SAMPLE SUPPLIED BY
Metcalfe Models & Toys, Bell Busk,
Skipton, N. Yorks BD23 4DU

PRICE
£12.50.

'Traditional' speed limit signs in 4mm scale from Roger Smith

Roger Smith has upgraded his fret of 'traditional' style railway speed restriction signs in 4mm scale, the artwork for which dates from 1978. The signs dated from 1948, and were used by the fledgling BR to replace the motley collection of 'Big Four' and earlier types with a common format of yellow figures and black post. As is always the case on the railways (and elsewhere) time has moved on and these little sentinels have been replaced by modern high-visibility types, which are far easier to read from a moving train.

As seen, the fret incorporates ten posts with restrictions of varying severity, from 70mph to 5mph. Six direction

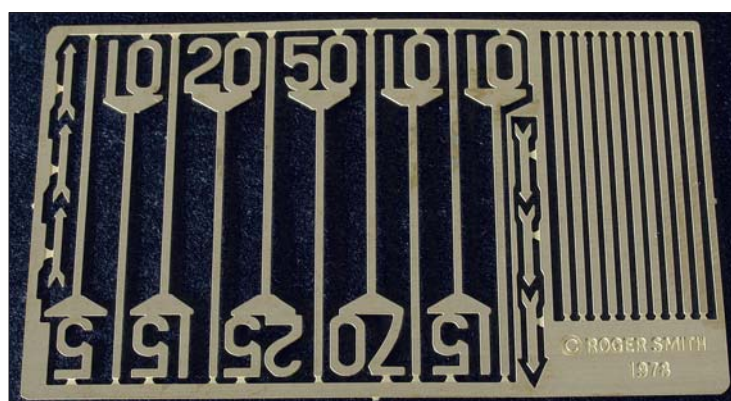
arrows are supplied for use when the line on which the restriction applies needs to be denoted clearly.

The fret also includes ten post supports, to give the fragile details some added strength in the fight against uncaring track-rubbing arms...

For 4mm scale

SAMPLE SUPPLIED BY
Roger Smith, 121 Wellsford Avenue,
Wells Green, Solihull, West Midlands
B92 8HB

PRICE
£2.50.

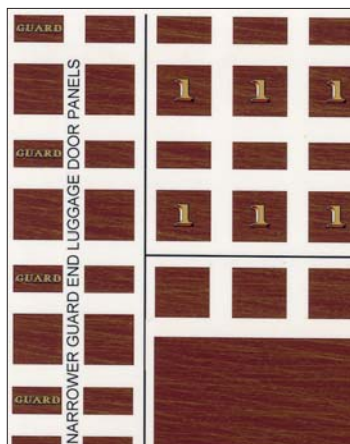


Gresley 'grain' for 00 coaches

Precision Labels has released a pack of self-adhesive 'teak' patches, to correct the Hornby Gresley vehicles with incorrectly-orientated graining on the lower door panels.

The pack (ref.L43T, £5.99) comprises two sheets, each of which contains eight first class door panels, ten third class door panels, seven unclassified door panels, and four narrower panels for guard's doors. Also on each sheet is a panel of 'grained teak' measuring 68mm x 20mm. Only part of one sheet is illustrated here, but note the clarity of the printing, especially the shading around the figures. The brown is a very close match to the Hornby original.

Precision Labels products are available from outlets such as Frizinghall Model Railways of Bradford and the Alton Model Centre, in addition to the Precision Labels website (www.precisionlabels.com). Both shops are regular advertisers in this magazine.



For 4mm scale

AVAILABLE FROM/PRICES
See text.

A1 Models buffers and fencing



The A1 Models range of locomotive and rolling stock components is now handled by M.G. Sharp Models of Sheffield. John Flower of A1 will still be attending exhibitions, but day-to-day sales are dealt with at the address below. M.G. Sharp has kindly sent some new buffers in 4mm scale, and chain link fencing in N, as examples of recent production.

The buffers are supplied four to a pack and are, from left in our photo, ref.A13 round brass buffers, for tank wagons etc (£1.95); ref.A17 12" round freight buffers in brass with shank (£1.95); ref.A18 'clipped' Oleo buffers in brass as fitted to Class 90s and DMUs (£3.50); ref.A19 for Class 91s, two 'clipped' Oleos and two large round heads, in brass (£2.80); ref.A41 Oleo split shank buffers in nickel silver (£2.50); ref.A42 Oleo straight shank buffers in nickel silver (£2.50); and ref.A43 oval straight shank buffers in nickel silver (£2.50). The advantage of

nickel silver over brass is chiefly that burnished heads are easier to recreate, as the metal does not require painting. (They won't get chipped paintwork, either.) M.G. Sharp hopes to change all the range over to nickel silver in due course.

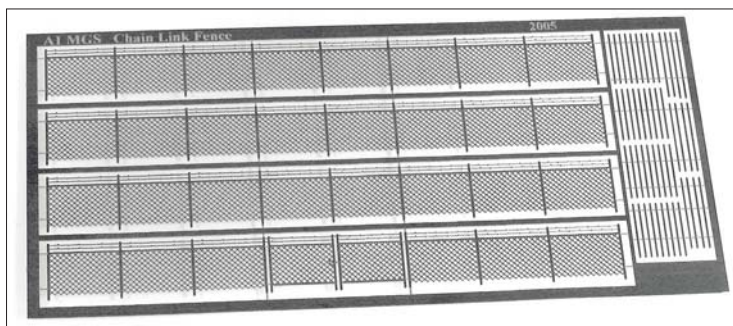
Please note that the 'clipped' buffer packs are subject to limited availability at times: please contact M.G. Sharp for details of stock levels.

The N gauge chain link fencing fret (£9.95) provides for a scale 300' long run, and the panels are a scale 6' high. A set of gates is included, as are separate cross-members and posts.

For 4mm and N scales

AVAILABLE FROM
M.G. Sharp Models, 712 Attercliffe Road, Sheffield S9 3RP

PRICES
In text.



New 00 steamers from Hornby



Two new identities for top link locomotives in the Hornby fleet have been released, one each for the Eastern and Western Region fans.

The 'Britannia' is due for an upgrade in the 2006 programme, but the current standard-bearer is tender-drive 70036 *Boadicea* (ref.R2484, £99.99). The early BR emblem and 32A (Norwich) shedplate set the model during the heyday of the locomotive's short time, on the East Anglian metals along which the class performed so well.

For the Western modeller of the same timeframe – the 1950s – is

engine-drive 'Castle' No.4079 *Penn-dennis Castle* (ref.R2455, £93.50).

Both models are DCC-ready.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood, Margate, Kent CT9 4JX

PRICES in text

WHEEL DATA

B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



More signs from Rue d'Étropol

Simon Dawson has added several new signage sheets to his Rue d'Étropol range. Illustrated is a selection of totems, suitable for 00 and 0, representing typical stations from various parts of the country: Simon is happy to produce sets for a specific station, real or fictional, but long names may be difficult to fit, and only single lines of type are possible with the small 00 signs. These are the subject of continued work, as it is hoped that N gauge signs will be produced in due course.

The other sets are general information signs as would have been seen at most stations – WAY OUT, PRIVATE etc – in

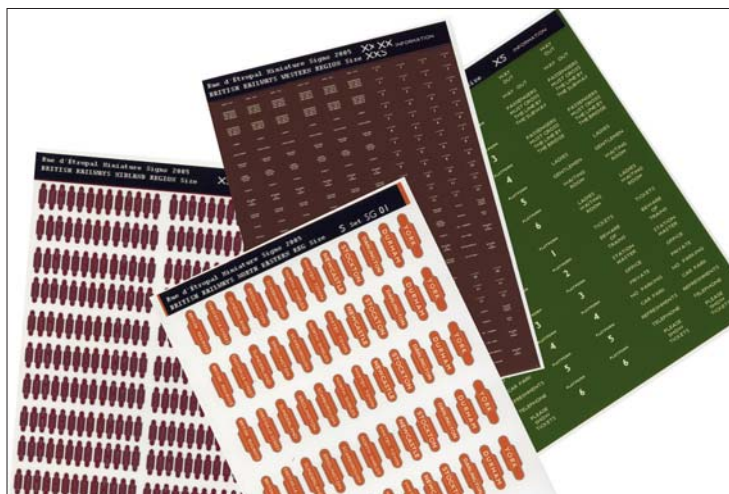
regional colours, the smallest of which will be suitable for N. Trade enquiries for Rue d'Étropol signs are welcome.

For various scales

AVAILABLE FROM
Rue d'Étropol, 21 Ambleside Close, Huncoat, Accrington, Lancashire BB5 6HY

PRICES

£1.50 per sheet. Please add 50p P&P for UK postage (any quantity), £1.00 Europe (any quantity) and £1.70 worldwide (any quantity).



Book Reviews

LSWR Carriages

Volume 3 – Non-Passenger Carriage Stock

G.R. Weddell

Kestrel Railway Books, PO Box 269, Southampton SO30 4XR.
300mm x 210mm 164pp
Hardback £25.00
ISBN 0954485955

This book follows on naturally from its seven predecessors, from various publishers and authors, which cover LSWR locomotives, carriages and wagons.

Vehicles in the Non-Passenger Carriage Stock category are popular with modelmakers because of their variety of wheelbase, length and, particularly, roof height. As they also tended to remain in service longer than the passenger stock, a train of them, or their presence in a passenger train, added a vintage look to an already heterogeneous outline, harking back to that which passenger trains must have resembled, say, fifty years earlier.

Here, the basic chapter and appendix headings are enough to motivate the creative juices and send the modelmaker to his workbench; Passenger Luggage Vans, Post Office Vans, Ambulance Carriages, Horse Boxes and Carriage Trucks. These are described with text, archive photographs and drawings. The appendices provide the information on numbers, dates and rosters.

This is a well researched and presented reference work for all students and modellers of the LSWR.

British Railway Journal

Special NER Edition

divers authors

Wild Swan Publications Ltd,
1-3 Hagbourne Road, Didcot,
Oxon OX11 8DP.

270mm x 210mm 104pp
Softback £15.95
ISBN 1905184026

The seven articles contained herein all cover aspects of the NER, as follows: *The North Eastern Railway 1854-1923* by John Addyman, *Some Reflections on Locomotive Engineers of the North Eastern Railway* by Philip Atkins, *Fish Traffic on the NER* by Claire Williamson, *The North Eastern Railway and*

Automatic Signalling by Patrick Howat, *NER 49ft Low-Roof Stock and the Gould Coupling* by David Williamson, *The Lanchester Valley Branch* by Bill Fawcett, and *Oscillations over the Ouse* by John G. Teasdale.

No editor is named for this Special Edition and it is not clear whether the articles have appeared before in *MRJ* or elsewhere, but they are a good selection of well-illustrated pieces covering a number of NER-related topics.

Usefully, the book concludes with a description of the North Eastern Railway Association and its work, and details of membership.

Rails round Cork and Kerry

An Irish Railway Pictorial

Michael H. C. Baker
Ian Allan Publishing, 4 Watling Drive, Hinckley, Leicestershire LE10 3EY.

280mm x 205mm 80pp
Softback £14.99
ISBN 0711031584

This is a pleasant collection of black-and-white photographs of railways across the years in these two counties in the far south of Ireland. This means a tremendous variety of scenery and railway gauges, the latter being 5'3" (Irish standard gauge), 3'0" (Irish narrow gauge) and, in the case of the Listowel & Ballybunion Lartigue, no gauge at all really. As with all good Irish books, some memorable characters pop up out of the text. There is Frank O'Connor the Cork writer who, alluding to the area around Killarney wrote 'it is remarkable for its scenery when you can see it which, owing to the appalling weather the county enjoys, is very rarely'. Then there is Father Browne, the clergyman-photographer who took a series of photographs while travelling on the *Titanic* (his ticket was a gift) from Southampton and Cherbourg but only as far as Queenstown, thereby capturing what might fairly be described as the scoop of the century!

The railways in County Cork featured in the book include Cork to Cobh and the Youghal line, Albert Street, Albert Quay and West Cork, Capwell to Macroom, Western Road, Glanmire Road, Cork to Mallow, and lines around Mallow.

In Kerry, lines visited are Headford and the Kenmare branch, Killarney, Farranfore and the Valencia branch, Gortalea and the Castleisland branch, Tralee, Tralee & Dingle Railway, Fenit

branch, North Kerry line, and the Listowel & Ballybunion monorail. A clear map of the railways which once served the named and adjoining counties opens the book.

Tramway memories Belfast

Desmond Coakham
Ian Allan Publishing, 4 Watling Drive, Hinckley, Leicestershire LE10 3EY.
280mm x 205mm 80pp
Softback £14.99
ISBN 0711031010

Although this book contains a good selection of captioned photographs, 'album style', its great strength for modellers is that it also has a number of scale tramcar drawings and track-plans of depots. The latter are all the more interesting where they are accompanied by photographs of the prototype. For example the 19-road 'shed fan' at the Sandy Row depot and works occupied the best part of Gaffikin Street and would keep a modeller who enjoyed working in grooved rail single-blade pointwork and stone setts/wood blocks out of mischief for quite some time.

The tramcar drawings include a standard car with top cover, a 'Moffett' 4-wheel enclosed car, a 'Chamberlain' type, and a 1935 'McCreary' car.

This book is highly recommended for the tramway modeller. Oh, and the gauge? That slightly controversial matter is also well described here.

Getting Rolling

Narrow Lines extra Handbook No.5

7mm Narrow Gauge
Association Publications Dept,
94 Cheltenham Road, Bradford
BD2 1QQ.
305mm x 210mm 64pp
Softback £7.50 plus £1.25 P&P
ISBN 0951330098

The fifth in this series of useful handbooks is subtitled: *a Guide to modelling narrow gauge rolling stock in 7mm scale*.

After an introductory chapter on building coaches and wagons from kits by that well-known practitioner of the art Howard Clarke, Richard Slate tackles the fascinating subject of scratchbuilding wagons in plastic, and David Taylor shows how very fine coaches can also be built from this material. Other building materials covered are wood by Peter Page and brass by Adrian Gray. Articles on scratchbuilding in general by Philip Moss, converting Peco kits by Brian Cameron, and building Cleminson-underframed coaches by Rowland W. Binns all contribute to the inspirational and helpful content of this well produced and illustrated handbook.

Left: North Eastern heavy freight 0-8-0 No.63472 (LNER Q7) was designed by Raven as part of a class of 15 T3s, introduced in 1919 and augmented in 1924. The workhorse stands at Tyne Dock shed on 4 September 1960.

Photograph: Frank Hornby.

LNER Wagons

Volume 1 – LNER Southern Area

Peter Tatlow
Wild Swan Publications Ltd,
1-3 Hagbourne Road, Didcot,
Oxon OX11 8DP.
280mm x 220mm 104pp
Hardback £34.95
ISBN 1905184 03 4

This volume is the first of a series from this publisher which will address the wagons from the constituents as well as those introduced by the LNER, and to this end four volumes are envisaged.

This first volume covers the ex-Great Northern, ex-Great Eastern and ex-Great Central wagons absorbed by the LNER.

The Introduction covers general developments in wagon design and there is much information on the important subjects of brakes, wheels and running gear.

The authoritative text is accompanied by archive photographs, both official and 'in service', and excellent scale drawings, many by the author. For modellers, the latter are the 'jewel' of the book, and it seems odd that the publishers have made no mention of them on the jacket.

Appendices list the wagon diagrams of GN, GC, GE, and LNER service vehicles.

British Railway Air Braked Stock

Volume 3

compiled by Tom Smith
Cheona Publications, The
Railway Study Centre, Tal Eithin
Isaf, Llanllyfni, Carnarfon
Gwynedd LL54 6RT.
230mm x 168mm 65pp
Softback £9.95 plus £1 P&P
ISBN 1 900298 31 7

This is No.3 in the *Modern Railways in Profile* series and covers bogie and 4-wheel tank wagons which have been used since the 1960s to convey china clay & calcium carbonate, chemical, carbon dioxide, petroleum and water. The colour photographs are well captioned with dates and locations. They depict working wagons and are therefore a valuable and not-easily-come-by reference for creative weatherers.

Pacifics on the South Western

Tony Molyneux and
Kevin Robertson
Ian Allan Publishing, 4 Watling Drive, Hinckley, Leicestershire LE10 3EY.
190mm x 245mm 80pp
Hardback £14.99
ISBN 0711031290

This new addition to the publisher's collection of landscape format colour albums tracks the fleet of 4-6-2s on the Southern Region, and specifically (but not exclusively) on former LSWR lines.



The Pacifics on show include a couple of Gresley's designs, plus a handful of 'Britannias', but it is of course Bulleid's handsome locomotives – small and large, rebuilt and original – that take centre stage.

The views are mostly action three-quarters, leavened by shed views, scenes at the Ocean terminal at Southampton, and a selection of nameplates, both the 'Merchant Navy' members and the Light 4-6-2s. Some of the shots are 'speed-blurred', leading one to think that the by-definition finite resource of steam photos (in particular those in colour) may be beginning to run low.

Informative captions give place, date, time of service etc., but the copy slips up on page 25: the Bulleid technically 'off-limits' at Henstridge, S&D, is 35028 *Clan Line*, and its feat was not unique (35011 with train and '023 light also managed this 'crime'). The caption itself rules out 35018 *British India Line*, as the loco was at Barry by the time the S&D closed.

These pictorial and textual issues apart, this book will be of much use to the Bulleid Pacific modeller, not least in the light of the Hornby 2006 new items programme...

LMS Locomotive Profiles – 9 Nos.1000 and 10001

David Hunt
Wild Swan Publications Ltd,
1-3 Hagbourne Road, Didcot,
Oxon OX11 8DP.
275mm x 210mm 80pp
Softback £14.95
ISBN 1905184042

This Profile deals with the well-known LMS main line diesel-electric locomotives 10000 and 10001 which, being built in 1948, can be thought of as the very earliest examples of the DE locomotives which are such an everyday part of modern railway life.

Fold-out GA drawings from the national archive (elevation, plan, sections and end view) form the centrepiece of the book in a very real sense and a number of the photographs are also from official railway and manufacturers' sources.

The author opens by discussing the origins and predecessors of the two big diesels, for the LMS already had experience of diesel traction in railcar and shunter form.

An early chapter dealing with construction and modifications contains photographs of the underframe, engine and bogies, and diagrams of the engine cooling and lubrication systems.

Under the heading of *The Locomotives in Service*, the author gives detailed information of the locomotives' performance with distances run, train tonnages, scheduled and actual running times etc. Their unhappy time on the Southern Region during 1953 is also described.

In his summing up, the author concludes that the two locos did show that certain potential advantages identified by Ivatt in 1946, namely improved availability, better scheduling and less smoke and dirt, were definitely attainable given the right environment. But

Right: preserved Hymek D7018 was pictured in a varied lineup at Basingstoke on 29 June 1987.

Photograph: Frank Hornby.

up to the 1950s they were not worth the extra outlay in purely economic terms and the 'dieselization' of British Railways did not happen as soon as many of those involved with the introduction of the two LMS locos had hoped.

But the fact remains that they were the first of their kind, the pioneer British main line diesel-electrics.

The South Wales Main Line 4 – Bridgend (West) to Swansea

John Hodge
Wild Swan Publications Ltd,
1-3 Hagbourne Road, Didcot,
Oxon OX11 8DP.
280mm x 220mm 172pp
Hardback £28.95
ISBN 1 905184 06 9

Here is Part 4 of John Hodge's series on the SWML. It is similar in format and design to its predecessors, with a good selection of captioned photographs supported by concise text and OS map extracts of the relevant areas.

As with the previous volumes in the series, the absence of an index makes the book a little difficult to use, but the stations and locations are taken basically in 'journey order'. The book opens with an introduction and several photographs of Swansea High Street, including a couple of the pre-1939 wooden roofed and platformed station here, with several period shots of surrounding streets, shops, vehicles etc as a bonus.

After this early visit to Swansea, our journey proper starts at Bridgend and proceeds via Stormy Down, Pyle, Margam, Dyffryn Yard mpd, Port Talbot, Briton Ferry, Court Sart Junction, Neath (Court Sart) mpd, Neath General, Skewen East Junction, Llansamlet, Llandore viaduct, station and mpd, Hafod and Loop East junctions, back to Swansea High Street.

The photographs are of very good quality, and most were taken during the late steam period of late 50s, early 60s. For those of a sensitive nature, diesels appear only on page 43 (EE shunter) and pages 168-169 (GW AEC railcars).

GWR Wagons Before 1948

Vol 1 Diagrams A POLLEN to P Ballast Wagons

Compiled by R. Tourret
Cheona Publications, The
Railway Study Centre, Tal Eithin
Isaf, Llanllyfni, Carnarfon
Gwynedd LL54 6RT.
230mm x 168mm 65pp
Softback £9.95 plus £1 P&P
ISBN 1900298295

This booklet is No.15 in the Publisher's *Railways in Profile* series. The description of GWR wagons before 1948 will



be presented in two volumes. This first volume commences with general descriptions of how the GWR wagon system worked, GWR freight diagrams, wheels, axles, journals and axleboxes, brakes, bogies and bogie vehicles of the CROCODILE design types.

The book then proceeds through the wagons in order of diagram numbers, covering Diagrams A POLLEN through to Diagram P Ballast wagons.

The photographs are naturally mainly in monochrome when taken before 1948, and colour from the days of preservation. In either case, observant modellers will be able to glean details of livery styles and weathering characteristics.

The captions are informative. There are no scale drawings. Volume 2 will cover Diagrams Q to FF.

The Power of the Hymeks

John Vaughan
Oxford Publishing Co
4 Watling Drive, Hinckley,
Leicestershire LE10 3EY.
280mm x 210mm 112pp
Hardback £19.99
ISBN 0 86093 599 X

The first of this 101-strong class of diesel hydraulic locomotives was delivered in May 1961 and the last withdrawn by mid-1975. Ordered by BR as replacements for 'Halls' and 'Granges' on the Western Region, their standing with enthusiasts was inevitably poor from the start. They proved to be flexible and relatively successful in service, but being mixed traffic machines their workings lacked glamour and there were no 'Deltic send-offs' for Hymeks in 1974. Fortunately four survive and have now been in preservation for twice as long as they were in service with BR.

The excellent black-and-white photographs by the author and other well-known names are arranged geographically or by route, for example South Wales Expresses, Reading-Taunton, the Weymouth Road, Bristol Temple Meads, West Somerset etc.

On a more prosaic level there is a fleet list and technical specification.

The book is a personal milestone for John Vaughan in that it marks his 40th year in the railway publishing business and 50th as a railway photographer. On congratulating him on this splendid double anniversary, it seems a good opportunity also to thank his contemporary photographers who captured so much on film for us to enjoy.

Video Reviews

The Rise and Fall of Hornby Dublo

Axiom Video Productions,
The Old Onion Loft Studio,
16 The Green, Sandy, Beds.
SG19 1PF. Tel: 01767 691401
DVD £20 plus P&P

This programme gives a condensed history of the Hornby Dublo range and its manufacturer Meccano Ltd, against an almost continuous background of moving images of the product itself, from prewar days to the last 'too late' Super Detail two-rail trains of the early 1960s. The filming of these collectors' trains, running on excellent working layouts, is of the highest quality, with sharp images, good depth of field and not a trace of the 'hesitation and repetition' which so often plague model railway filming.

Much time is spent in Liverpool, with priceless shots of the Binns Road factory (which your reviewer was privileged to visit) and the almost legendary Hattons on Smithdown Road which took on some of the huge Hornby overproduction when the end for Meccano Ltd finally came in 1964.

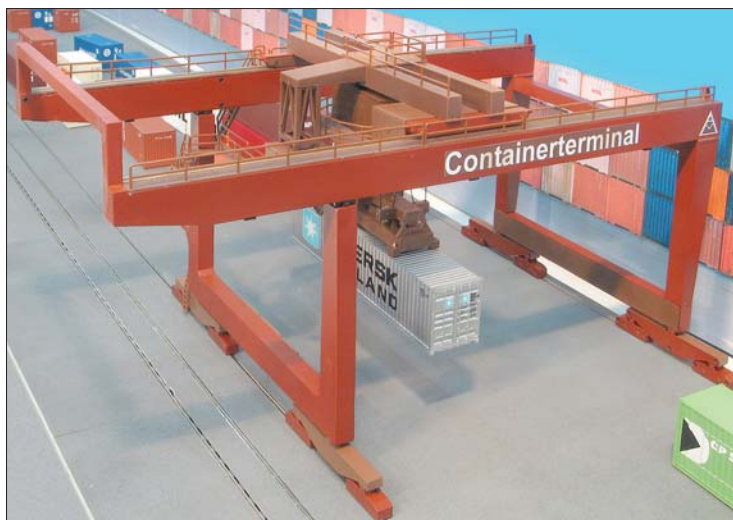
The film is well produced and maintains a high level of interest throughout. Nice touches are the comparisons between certain Dublo models and their prototypes, for example the much praised Standard Class 4 2-6-4T and, in contrast, the difficult to sell Metrovick Co-Bo.

Personalities appearing in the story include author/historian Michael Foster, Cala Hornby, grand-daughter of Frank Hornby, our own Michael Pritchard, whose father Sydney developed and promoted the Hornby/Peco automatic coupling, and several Binns Road employees at all levels.

The demise of Hornby Dublo has been attributed variously to the expensive, not altogether successful and too late anyway adoption of two-rail, competition from Triang and its well-detailed plastic two-rail trains, outdated management and factory, overproduction and all manner of other rightly or wrongly perceived reasons, but for 'Meccano Boys' of your reviewer's generation, who in a sense were actors in the play, the main reason can now be seen simply as changing times.

The film is a highly professional and nostalgic account of a product which is a way of life as much as a toy railway. Our thanks to Axiom for the opportunity of viewing the programme.

New products and programmes from the Nürnberg Toy Fair 2006



This major international trade fair took place this year between 2 and 7 February, and our sister magazine CONTINENTAL MODELLER has covered most of the news in its April issue, which is out now. Because of time constraints, it is impossible to cover all the information in one issue, so this year a fuller report will be available on a special CD-ROM, which should be available by the end of March or early April at the very reasonable price of £1.95 including postage from our Technical Advice Bureau here in Beer. The CD is not just a reprint of the April issue of CONTINENTAL MODELLER, but will include extra pictures, contact addresses and two sections of film footage. There will be a short promotional item from Noch covering the firm's scenic items, and a very interesting piece from Fleischmann, which includes footage of the firm's recently-opened museum. A CD-ROM not to be missed!

Here we present a necessarily selective overview of the major scenic items to have caught our eye: flocks and trees have a wider appeal than the strictly 'continental' models on show,

and thus deserve to have a wider audience. These notes cover both sides of the railway fence, and start with the 'live' side.

Both **Hornby** and **Bachmann** have announced their 2006 programmes in advance of the Nürnberg fair (see February and March issues respectively for full details), so no repetition is needed here.

Heljan had for many the star of the show, certainly from a UK perspective. A fully working sample of its container crane, announced last year, was on show. It is digitally-controlled, and has been developed in co-operation with Lenz. It is to H0 scale, but its size makes it suitable for 00 scenes. It is supplied fully-assembled, and ready to plant into the baseboard. The base (572mm long x 331mm wide x 4mm high) is a sturdy metal construction, to ensure reliability.

The crane (225mm wide, 170mm high) operates on its own rails, and spans 330mm. (The crane can move outboard of its outer leg, thus it can be used on a dockside in conjunction with a ship.) The travelling jib can raise,

lower and rotate containers, and is able to stack them two-high.

The model (left) is operated by its own digital controller, by a joystick or through a PC: the supplied control box (121mm x 90mm x 28mm) can be restricted to the crane's movements themselves, but it can also take command of a separate 'power district' around the model, i.e. an empty rake of flats can arrive in a reception road, and be handed over to the crane operator for final positioning and loading of the wagons. Delivery is anticipated for the second quarter this year, and will be priced at under £400.

Heljan also announced the 4mm scale 00 gauge BRCW 'Baby Sulzers' of Type 2, later Class 26 and 27: they are anticipated for the fourth quarter in the following identities. Class 26 as No.5335 and D5326 in green, and D5331 and D5340 in blue. Class 27 as D5401 in green, and No.5380, 27 034, and 27 105 in blue. Price is listed as £79.00 each. There are several new identities across the existing diesel range in this scale.

For 0 gauge, there are green and blue Class 47s depicted: identities are not specified, but both are shown in the late 1960s-early 1970s guise of green with full yellow end, and blue with four BR double arrow logos. Anticipated price is £525.00.

Also for 0, and destined for the third quarter, are Cargowaggon in the following finishes (two fleet numbers for each): plain silver with blue ends; Blue Circle Cement livery; basic blue & silver; and this latter finish but weathered. Price is quoted as £25.00 each.

There was no sign of the proposed Class 66 in N (1:160 scale) from **Kato** announced last year, and the new items leaflet makes no mention of it.

ETS

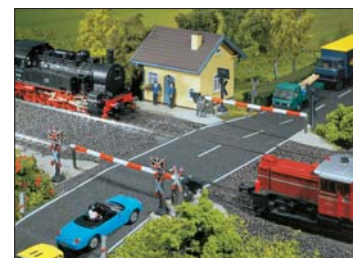
This 0 gauge specialist is listing its overhead electric Bo-Bo in North Eastern colours: the attractive centre-cab (left) makes a good replica of the pair, one of which (BR No.26500) has been preserved in the NRM.

Scenic items

Faller

This well-known German scenics company is celebrating its 60th anniversary this year, by co-incidence spanning the same six decades as our own parent company Peco.

Items in the new items leaflet that would be of interest to UK modellers are a double-track level crossing for 16.5mm gauge track, with lifting barriers and flashing warning lights that are triggered by an approaching train via an optoelectronic sensor. The road crossing is compatible with the Faller



Car System (above). Although of German outline, it could be Anglicised quite effectively. Quarter III delivery.

A fishbelly truss girder bridge is also to be available, in Quarter II. It is 472mm long, includes abutments and is compatible with most makes of 16.5mm gauge track.

A cement plant will join the H0 range in Quarter IV, featuring office accommodation, storage silos and unloading bay for road vehicles. It measures 207mm x 90mm x 225mm.

Scenery features include a watersports lake, with windsurfers, pedalos, inflatables, kayaks and rowing boats; a kindergarten play area (sandpit, slide, swings etc); a beer garden; and modern bicycle rack including 12 cycles. There are also to be a motor cargo vessel (flat-hull) of the industrial inland waterway type, and a similar river cargo vessel with living quarters.

The H0 scale retaining wall sections are increased with concrete blind-arch pieces 370mm long and 125mm tall to coping stones. Also there will be natural stone sections, also 370mm long, with two blind semicircular arches. Wing walls in natural stone will complement these items.

New figure sets include passengers sitting; passengers hurrying; green-keepers; a police speed trap, German style; tradesmen; rail workers; mounted equestrians; and two sets of horse-drawn wagons, a flatbed and a bulk carrier, each with two heavy horses.

In N will come umbrella-type platform canopies, in pairs 182mm long (Quarter I). The fishbelly girder bridge is repeated from the H0 programme, for Quarter I, and so are the retaining wall sections in concrete and natural stone, the latter once again with matching wing walls.

The 'Kolb' factory building is a typical brick industrial building, and has a boiler house and northlight shop floor building to match/extend. All three kits are booked for Quarter II. Also in N will be a three-bladed modern wind turbine fully 415mm high, with motor included: Quarter IV delivery allows the modeller time to persevere with the planning application!

An eye-catcher is the motorised domestic lawn-mowing tractor, which manoeuvres around the garden: a 16v AC motor is included.



N figure sets include painter/decorators; 'guys at the station' (tipsy, predominantly – surely not!); shop assistants; and deer with huntsmen.

For Z there is a factory building in rather ornate style; a set of municipal park furniture and lighting; policemen; and shepherd with sheep.

New trees are planned, for the middle of the year, in packs of four: there will be shrubs c.60mm tall with red flowers, yellow flowers, and with light-green foliage. Also listed are four beeches c.100-130mm; and four poplars at c.90mm.

In the 'Premium' range, Faller intends to release a waterfall scene, such as is found in mountainous areas (300mm tall), and matching plunge pool and rocky surroundings set, included in which is a rustic hiking trail footbridge. Also new are packs of tree stumps – broken-off and sawn through – consisting of 14 in each pack. To match is a pack of driftwood, from natural materials.

'Premium' trees include a fir with foliage to the ground (c.210mm tall); a larch (c.210mm); three firs with foliage to the ground (c.50-70mm); three blue spruces (c.50-70mm); two larches (c.110mm); two firs with ground foliage (c.130mm); two larches (c.150mm); a red beech (c.150mm, *below*); two blue spruces with foliage to the ground (c.130mm); and two ground cover packs depicting meadow flowers in yellow and violet.



The Faller Car System has four new starter packs in H0 scale, consisting of roadway, road details, rechargeable batteries and full instructions: the vehicle in each is different, consisting of three PSVs and a twin-unit lorry. New vehicles are a Porsche Cayenne and caravan; a Mercedes Sprinter van in two guises; and an Iveco cement lorry; two artics have MB Actros tractor units hauling a tanker and a beer trailer; and the MB twin-unit lorry is available as a log carrier. In N there is an artic lettered for DHL, a 'four-legger' for Europe Logistics, and a coach.

Pola

This company, part of the Faller group, has the following new items for G scale. Market stalls in a variety of trades, and statues; figure sets include six seated people; five passengers; four construction workers; two industrial workers in hard hats and yellow overcoats; and a selection of potplants and hanging baskets.

Vollmer

This company is also marking its Diamond Jubilee, with in H0 a kit for brick viaduct arches with businesses within them (September delivery); and packs of flowers representing red tulips, yellow tulips, daffodils and white ox-eyes.

Kibri

New to the H0 list this year is a portal crane; a pontoon bridge set; packs of street furniture such as site fencing; skips; and wheelie bins; and two packs of office furniture.

An office building under construction is listed for month 7/8, and for the end of the year there will be a kit for a lattice-work container crane. There will also be kits for a dockside crane, and a cement storage plant.

For N, a modern three-track loco shed should be out by now, as should be a goods yard portal crane.

Kibri is famed for its heavy plant, and rail-mounted cranes and other engineering items, including a Gottwald crane and a Plasser & Theurer track machine, are listed for both H0 and N. The H0 ranges of plant, agricultural machines and road rollers will also be increased.

Auhagen

The H0 scale range will see a loading gauge and weighbridge kit around September time; a pack of four corrugated metal roofing sheets; decorative rustic wood roofing (H0 and TT); and for TT a pack of two conveyors and small single-axle trailers.

Heki

To accompany a new range of H0 scale card structure kits, under the 'Citiline' brand, Heki will introduce roadway sections. Most are 'continental', in that carriageways are marked out for right-hand driving, but packs with parking bays (including disabled spaces), and plain white-lined roads will have UK uses. Clever cutting and re-arranging of other sheets may also be possible. In similar fashion, there will be sheets of decorative paving, which will have many uses for the modern shopping centre etc.



The 'Super artline' range of trees will be increased by a lime (c.180mm tall); a birch (c.180mm); five pines (*above*, 200mm); nine smaller pines (100mm-160mm) and two ashes (140mm).

Wild grass mats, measuring 240mm x 400mm and supplied in pairs, will cover meadow-green, forest floor and mountain meadow shades.

Noch

For H0, TT and N scales, this company will introduce walling sections (with and without buttresses, and with blind arches and buttresses), single and double track tunnel portals. The wall sections will be offered in 'extra-long' sizes too, which for H0 means 670mm x 125mm instead of 335mm x 125mm.

Amongst the new additions to the Noch figure packs are garage mechanics with tools (H0); roadworkers with tools (H0); surveyors (N); street musicians (H0 and TT); paramedics (TT and N); and a romantic collection for H0 and N comprising a couple greeting each other, a man proposing to his lady (on one knee, of course, with flowers deployed) and a bride being carried across the threshold. G scale figures include a photographer, street musicians, and the bride and groom combination described above.

Scatter materials developed for use with the firm's Gras-Master™ static applicator (see RM November 2005) have been increased by four new field grass shades, light green, mid-green, ochre and golden brown, which can be mixed to achieve the desired shades. Petals (four types) and meadow flora (four shades) are also new. Bulk packs (*below*) of various types in the range are also offered. Flock on webbing, intended for use with trees, is available separately in various shades for use as ground cover.



Bulk packs of trees, in 10s and 25s of deciduous types in light and dark green and of various sizes, will allow a heavily-forested area to be developed economically. Sizes are as small as 35mm-65mm for Z, and as large as 90mm-150mm for H0.

10 new types of tree have been developed in conjunction with Woodland Scenics under the Noch Premium banner. They comprise a walnut (100mm tall); a birch (100mm); sweet gum (100mm); sycamore (100mm); maple (110mm); three junipers (60mm, 75mm & 130mm); an oak (125mm); two spruces (100mm & 125mm); a hickory (125mm); and two pines (100mm & 130mm). Availability is listed as Quarter III.

The Noch DVD, a taster of which is on the CD-ROM mentioned above, includes a 60-minute film showing how the wonderful model landscape on the firm's demonstration layout was made. It covers the construction of the base-board; track bed; and landscape, using the firm's Terra-Form system and featuring tunnels, bridges and walls, arrangement of water features, creation of meadows and woodland and much more.

There is also an interactive product catalogue; practical tips for using many Noch products, in short films; track plans and parts list for the Noch pre-formed layouts as printable PDFs; kit and product instructions as printable PDFs; complete instructions for the above demonstration layout as printable PDFs; a dealer list; and more.

It is listed for September 2006 availability, with system requirements of a DVD player, or a PC with Windows 98™ or later.



Busch

This firm has developed an H0 scale forestry theme for this year. Firs are offered in packs of two 55mm tall; 70mm tall; 90mm & 120mm tall; 170mm & 195mm tall; plus firs with longer trunks in twos 130mm tall; 160mm & 175mm tall; and 185mm & 195mm tall. A forest set comprises a log cabin, waymarkers, watchtower, forest track gate barriers, and other small details. The log cabin is available separately, to be used as a café or similar. Continuing the theme, forest flock scatter material in two shades is also to be produced.

Several new deciduous and fruit trees, in several heights, will appear, as will bulk packs of roses (120), tulips (120) and ox-eyes (also 120). Garden vegetables are also to be available, to allow highly-detailed bulb fields and domestic gardens to be modelled. Also new are wheat fields, poppy fields and thistle fields (*above*): these too can be interchanged as desired.

Themed-packs of items include a camp site; a concrete wall inspired by the Berlin one; an office, complete with computer monitors that can be illuminated; and wheelie bins (16) and recycling containers.

For TT and N there are sunflowers, 96 in all, in kit form, and as in H0 site fencing for these scales.

Listed as new tooling in the H0 range of cars are a 1960s/70s Opel Kadett, a Mercedes-Benz W123 from the same era, 1980s-vintage BMW 3.5CSLs in four finishes, a modern Mercedes-Benz R Class estate, and a Fortschritt ZT300 tractor.

Preiser

New to this high-quality range of figures are several 'universal' sets, including photographers (H0), a 'stop me and buy one' ice cream seller (H0); a British police officer in 'evening all' hands-behind-back pose (H0); youngsters in typical poses (G); and seated passengers (TT, N & Z). Ancillaries such as furniture, bicycle racks etc are also in the new items list.

Sister company **Merten** has a couple of new sets, in H0: beach figures with ice-cream seller and a pack of bathers, seated and lying down.



Return to base, by Barry Freeman



Superb 24" x 16" prints of an original painting by Barry Freeman BA, GRA, FRSA are now available. The painting depicts Bulleid 'Battle of Britain' Class 4-6-2 No.34067 *Tangmere* passing close to the site of Tangmere RAF station near Oving, a few miles from Chichester. It is shown at the head of a rake of Wessex Trains Pullman livery BR Mk.II coaches.

The locomotive was rescued from

the Barry scrapyard in 1981 and recently returned to service after a twenty year restoration to full main line standard. It can now be seen hauling excursions in various parts of the country.

The signed prints of *Return to base* are available for £30.00 from **A.M.Freeman, 27 Harmans Way, Weedon, Northampton NN7 4PB. Telephone 01327 349109.**

Dapol goes for Gresley

During mid 2005, Dapol announced that it would be releasing N gauge Stanier coaches at the 2006 Warley show. Owing to customer comment and demand the firm has now decided to manufacture a series of Gresley coaches instead.

The initial body designs will be 3rd Class, 1st Class, Brake Composite and Buffet, but Sleepers are under review.

They will all have highly detailed interiors and will be produced with alternative running numbers to enable customers to create a prototypical rake. In order to select the initial livery, Dapol has invited customers to get

involved. The company has created a special section within its website www.dapol.co.uk where customers can select from BR Maroon, BR Crimson & Cream or offer their own choice.

For those without internet access, Dapol would welcome written comments. In mid 2006, Dapol will select the most requested livery for production and choose at random a customer to receive one of each of the initial release of Gresley coaches.

Contact: **Dapol Model Railways, Gledrid Industrial Park, Chirk, Wrexham LL14 5DG.**

York Model Railway Show 2006

The forty-fourth annual York Show is approaching. It will be the fifteenth at the Knavesmire Stand at York Racecourse. The dates are Saturday to Monday, April 15-17, from 10.00 until 17.00 each day.

The object of this year's show is to present the widest variety of layouts as possible. The very small, such as *Lower Peak Wharf* from John Bruce, is contrasted by large layouts like John Emerson's *Gifford Street Sidings*. A total of forty-three layouts will appear in many popular and some less familiar scales, depicting scenes from the UK, Continent and America.

Serious scale layouts are exhibited as well as those created simply for fun. A children's modelling area will help to ensure that all are entertained, whatever their age.

At least twenty-two specialist demonstrators will be on hand to share their expertise and show modelling techniques. Ten specialist societies and four preserved railways will also attend. For those who wish to spend money, a minimum of forty-eight trade stands will be there.

Plenty of car parking space will be available. For those travelling by train, a regular 15-minute special bus service will depart from the main entrance of York Station. The first bus will leave at 09.30. Owing to some access restrictions on Saturday, it is suggested that disabled visitors might prefer to visit on Sunday or Monday when they can travel directly to the show entrance in suitable buses. The show is on several levels, accessible by five lifts or short staircases. The special disabled lift reaches the first, second and mezzanine floors. Everyone can use the main lifts to the third floor and the refreshment area.

Admission charges are the same as previously: adults £6.00, children and special concessions £4.00, families (2+2) £16.00. For those who book in advance, special rates apply. Adults £5.50, children/OAPs £3.50 and families £14.50. A special three-day ticket is available, in advance only, for adults at £12.00. A show guide of at least 64 pages will be on sale for £3.00.

Full details of the show will be found in *Societies & Clubs*.

Medway Queen 0 gauge transfers

Up to now, 00 gauge enthusiasts have been able to support the historic steam ship *Medway Queen* by purchasing specially-commissioned Dapol wagons in the fictitious livery of the *New Medway Steam Packet Co. Ltd* (see News pages, December 2004). The ship served in peace and war until withdrawn in 1963. She is noted for her seven trips to the Dunkirk beaches during the 1940 evacuation.

Now 0 gauge modellers can buy a rub-down POW Sides transfer of a *New Medway* wagon. The transfers are printed in white to suit the body colour of your choice and designed to fit

Slater's 7-plank wagon kits. They could also be applied to other similar vehicles.

Each set contains two transfers, sufficient for one wagon, with additional running numbers to avoid duplication when more than one set is purchased.

The transfers are obtainable at shows from **Roxey Mouldings or Medway Queen (Reading Group)** stands or by post from **Richard Halton, 21 Lakeside, Earley, Reading RG6 7PG**. They are £9.50 each. Please make your cheque payable to *R.Halton* and enclose a SAE for return postage.

ACE Trains further releases

The range of 0 gauge, 40cm coaches continues to grow with new releases in GWR, BR Mk.IIs in Western Region, London Midland Region and Southern Region finishes and BR Pullmans.

All the BR coaches are fitted with fully sprung Commonwealth pattern bogies. The company issues an A4

sheet listing all the new and current stock; the list is impressive.

Contact: **ACE Trains, PO Box 2985, London W11 2WP. Telephone 020 7727 1592, www.acetrains.com, or e-mail trainsw11@aol.com. Alternatively contact Leicester branch on 0116 239 2370.**

Twickenham looks to the future

Twickenham and District MRC's policy of attracting young members has been a great success. The Club has gained seven under 19s in the past year.

Their first project, in N scale, was completed in the new year and the Club has rewarded them with a new 00 layout featuring code 75 track, slow motion turnouts and DCC operation. It is not a beginners' layout, but a sophis-

ticated model railway based on a Colonel Stephens-style light railway design. The more experienced members are on hand for guidance, but the vast majority of the work is done by the younger members who will be the experienced modellers of tomorrow.

Further details of the Club are obtainable on **01932 783253** or www.tdmrc.org.uk.

Haywood's twenty continues

Haywood Railway has announced the release of five 7mm scale 0 gauge etched brass wagon kits as part of its 20th anniversary release of twenty such kits. The new kits are all of LMS prototypes:

D.1817 Beer Van	£34.00
D.1664 Goods Van	£34.00
D.1670 Meat Van	£34.00
D.1885 Fish Van	£34.00
D.1672 Insulated Meat Van	£34.00

The first four kits are total redesigns and re-releases of kits originally put on the market in 1987. These kits have

been totally redesigned with ease of assembly paramount. The fifth kit is an entirely new release.

The kits include as standard: wheels, sprung buffers, sprung axle-boxes, preformed roofs and couplings.

Also now ready is a new 7mm carriage kit, a GWR C43 non-corridor Third, priced at £99.99.

Contact: **Haywood Railway, 29 Lichfield Drive, Great Haywood, Staffordshire ST18 0SX. Telephone 01889 881610.** Please add £2.00 per kit towards post & packing costs.

Heavy weather for Bachmann 9F

ModelZone of Croydon has commissioned a Bachmann 9F, No.92240, that has a heavily-weathered effect in which the cab number and crest on the tender have been wiped clean. There are also plenty of lime scale deposits on the boiler side.

No. 92240 was one of the last steam locomotives to be built at Crewe and is

now preserved on the Bluebell Railway.

The model is a limited edition run of 504 units.

Contact: **ModelZone, Unit 31, Centrale Shopping Centre, North End, Croydon Surrey CR0 1TY. Telephone 0208 688 6519** or any ModelZone store in the Group.

DCC course at Oxford too!

Dr. Michael Watts is not only presenting his well-known courses at Pecorama this year, but also at Ewert House in Oxford.

The subject of the Oxford session is DCC for 00/HO locomotives. The course will run from Friday to Saturday June 23-24.

If you would like to know more, details are available now from Michael at:

StarDancer Ltd., 4 Chaundy Road, Tackley, Kidlington OX5 3BJ. Telephone 01869 331181, fax 01869 331182 or e-mail: michael@stardancer.org.uk

SHOP NEWS

OPEN

Castle Trains, Warwick

It is good to see another new family-run shop offering the friendly service we expect from suppliers to the hobby.

Mark, Shona and staff have filled the gap left when the Train Shop in Warwick closed ten years ago.

N, 00 and G gauges are covered, plus an impressive range of scenic items, the latest in DCC

and complementary products from slot-car and die-cast manufacturers.

Car parking is good and very convenient for Warwick Castle. Mail order is another service offered.

Contact: **Castle Trains, 47 Smith Street, Warwick CV34 4JA. Telephone 01926 497905. www.castletrains.com.**

DJB Engineering L&B 2-6-2T in 16mm



If you are considering a high quality, super-detail, coal-fired, narrow gauge steamer, look at the DJB 16mm scale, 32mm gauge Lynton & Barnstaple Manning Wardle 2-6-2 tanks.

Three different cab styles are available to cover early or later locomotives, *Yeo, Exe, Taw* or *Lew*. The livery options are full L&B, late L&B and lined Southern.

For full information and prices contact:

DJB Engineering, 17 Meadow Way, Bracknell, Berkshire RG42 1UE. Telephone 01344 423256.



Scalefour North 2006

Burntisland 1883, Knutsford East Junction and *Tetney* will be amongst the eight Scalefour layouts to be exhibited at Wakefield College, over the weekend of April 1 and 2. Trade stands, demonstrations of modelling techniques, lectures and two visiting societies will also be present.

The layouts were featured in the Society's 18.83 Challenge which encourages individuals and groups to build new Scalefour layouts within an area of 18.83sq.ft. More than fifty new layouts were built, twenty of which were at Scaleforum last September.

Other layouts at the show will include *Enigma Engineering, Farringdon, Glemsford* and *Millfield Road* (see this issue).

The show opening times will be: Saturday 10.00 until 17.00 and Sunday 10.00 until 16.00. Admission is £4.00 for Scalefour Society members and concessions, and £5.00 for non-members.

Partners are admitted free of charge and tickets are valid for both days. There is ample free car parking at Wakefield College, Thornes Park, Wakefield and good catering facilities.

Buildings from BOB

Two new 16mm buildings have emerged from British Outline Buildings: a dressed stone lineside hut (£32.50) and a dressed stone station waiting/porter's room (£32.00), both based on Glyn Valley prototypes.

Both have doors that will work with smaller scale garden scenic scales, and moulded-in details such as

hydrant signs and noticeboards.

They come with full instructions, colour photo to help with painting and all the necessary plastic parts for windows, gutters and drainpipes.

The new kits are released through **J.A.Replicas, 58 Park Lane, Harefield, Uxbridge, Middlesex UB9 6BL. www.railsidemodels.co.uk.**



Invertrain kiosk for 7mm scale

Newspaper kiosks appeared on many station platforms with a variety of occupants. Invertrain has just released an 0 scale resin kit.

It includes two side racks with moulded-in newspapers and a full-width front display shelf with moulded magazines and confectionery. The kit comes with printed graphics to give a selection of names and posters. The price is £19.95.

Also in the pipeline is a pair of terraced brick houses manufactured as three kits: low relief house front, low relief rear with extension and a complete house.

In the foreseeable future there should also be a water-driven corn mill.

Contact **Invertrain, 33 Rose Gardens, Cairneyhill, Dunfermline, Fife KY12 8QS. Telephone 01383 880844.**



NDR Carriage Works

NDR produces both bespoke and more modestly-priced rolling stock in 32 or 45mm gauge. A recently commissioned model was an Isle of Man bogie brake third which is supplied in undercoat for £375.00 or top coat for £425.00. A Darjeeling Trolley, at £38.00, is one of the standard items in the catalogue. NDR specialises in the seemingly unobtainable, so if there is something specific that you need, contact Nicola Ratnett at:

NDR Carriage Works, 2 Dan-yr-epynt, Tirabad, Llangammarch Wells, Powys LD4 4DR. Telephone 01591 610600. nratnett@talk21.com



Midlands steam exhibition



The Large Scale Model Exhibition is at the Warwickshire Exhibition Centre on April 8 and 9. This is two days of large scale and garden railway interest full of live steam. Visitors will enjoy ten very large layouts where steam locomotives can be seen hauling finely detailed scale carriages. Gauges 3, 1, 0, G scale and 16mm plus historic and vintage tinplate models and specialist suppliers will be there.

The Centre is on the Fosse Way, a

few miles from the motorway near Leamington Spa. There is free parking, convenient parking for the disabled and a coach parking area. It is open from 10.00 until 17.00. Advanced ticket admission is: adults £6.00, senior citizens £5.50, children £3.50, family (2+3) £15.50. On-the-door admission: adult £7.00, senior citizen £6.50, children £4.50, family (2+3) £18.50.

Visit:

www.meridienneexhibitions.co.uk

60 years of the S Scale Society

In April 1946, Eric Manning founded the 'Half-One Model Railway Society' with just three members. By September, the number had risen to eleven.

In the early days, the modellers worked to both $\frac{3}{16}$ " and 5mm scales and to a variety of wheel standards. But in 1947, with the membership split evenly between the two, the Society decided the scale would be whichever was used by the next member to join! So $\frac{3}{16}$ " to the foot was adopted in Britain, with a track gauge of $\frac{7}{8}$ ".

In 1952 the 'Half-One' designation was dropped in favour of 'S-Gauge' with a further change to 'S scale' in 1991 to recognise the fact that members modelled in several gauges, albeit at a constant scale.

Whilst being the oldest 'scale' society, in terms of membership the S Scale Model Railway Society is still the smallest. It seems unlikely that there will be any significant commercial development of the scale, so S scale will remain a niche scale for experienced modellers who want the challenge of creating something different.

Congratulations to the Society.

'Giants of Steam'

The National Railway Museum plans to expand its rail operations. For the first time in its thirty year history, the NRM will bring together some of its biggest icons for a new, extended range of rail excursions called Giants of Steam.

In addition to its established season of summer steam excursions between York and Scarborough, the Museum also intends to run trains over the Settle to Carlisle line and from York to London Kings Cross.

With the help of the 5305 Locomotive Association and the Eastleigh Railway Preservation Society, the NRM will run a *Scarborough Spa Express* service with three greats from the National Collection: V2 2-6-2 *Green Arrow*, and Southern 4-6-0s 'King Arthur' *Sir Lamiel* and 'Lord Nelson' *Lord Nelson*.

Five steam excursions are planned with all trains operated by the West Coast Railway Company.

For more details, call the information line on 0870 421 4472 or look at www.nrm.org.uk

Epsom & Ewell MRC show

Last year, the emphasis of the show was on diesel and electric era layouts. This year the format returns to a wide range of top quality layouts representing many eras and gauges.

The exhibition will take place at the regular venue, North East Surrey College of Technology (NESCOT), Reigate Road, Ewell, Surrey on the weekend of April 22-23. Opening times are 10.00 until 18.00 Saturday, and 10.00 until 17.00 Sunday.

Layouts include *Ambergate* (EM), *NORD Motive Power Depot* (0), *Caledonian Goods & Coal Yard* (2mm), *Charlotte Road* (P4), *Mid Suffolk* (0),

Rye Town (EM) and *Kinlet Wharf* (N). Welsh narrow gauge is featured by *That Dam Railway* and *Dinas Ddu*. The Epsom Club will show *Ruxley* (00). New entrants to the hobby will be encouraged by *Hornby Junction*, a starter layout enhanced by additional components kindly donated by Hornby Railways. It shows what can be done with off-the-shelf models.

Continental outline enthusiasts might like to note that there is a visiting layout from Club Ferroviaire de Chantilly.

Further details are in *Societies & Clubs* or at www.eemrc.org.uk.

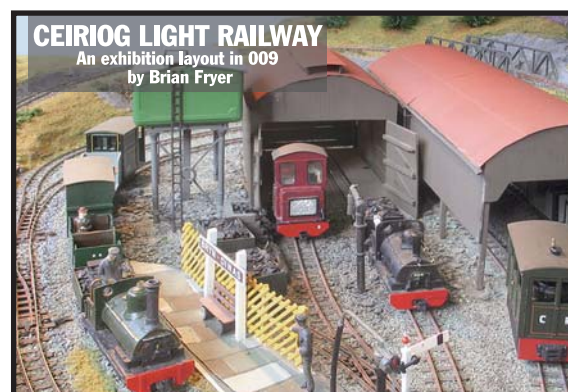
Berkshire N gauge show

Members of the Berkshire Area Group of the N Gauge Society will be holding an Open Day on April 8 at the Sindlesham Baptist Church Hall, Bearwood Road, Sindlesham, Reading, RG41 5BB from 10.00 to 16.00.

The group's modular layout is

booked to be on show, along with other attractions including *70C* by Richard Halton (pictured below), a model of the famous roundhouse shed at Guildford in the last years of steam traction.

See *Societies & Clubs* pages for full details.



COLSTEAD
Ian Simpson presents a tribute to the hobby's pioneers

Coming next month

- L&B 2-6-2T EXE Researched and built in 7mm scale by Chris Hatton
- BR ERA BRAKE VANS N gauge examples presented by Richard Bardsley
- LNWR 'CAULIFLOWER' 0-6-0 Drawn and described by Ian Tattersall

plus all the regular features

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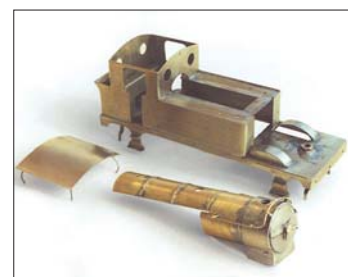
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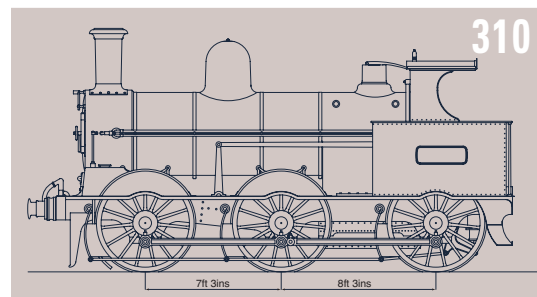


CERIOG Lt. Ry.
Welsh 09 Exhibition Layout



MGWR No.117 MOY
18mm HO Irish Broad Gauge





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 Published on the second Thursday of the preceding month.

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Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

General & Advertisement Manager JOHN KING

Advertisement Assistant SUE DAVIS

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A new arrival!

In this issue we begin the story within our Right Away feature of the new exhibition layout here at Pecorama in Devon.

It is a 00 main and branch line scene complete with long viaduct with the working title of Westbridge-on-Sea. It replaces the life-expired *Grizzly Flats* G scale layout in the 'pre-fabricated garage' setting in the exhibition. Further instalments will appear bi-monthly; see more on pp.323-325.

Peco digital command control weekend and the future

Recent discussion in these pages and elsewhere about Digital Command Control sparked some interesting and controversial thoughts on this topic in our office recently. Chief amongst these topics was the next generation of decoders and their abilities.

A columnist to our contemporary magazine 'across the pond' *Model Railroader*, has postulated that in the future decoders in steam engines would 'know' when the last time the engine was topped up with water (which would be achieved, we assume, by pausing by a crane and informing the chip accordingly). It would then be able to calculate the running time, based on the loading and speed values assigned to it, and thus decide how long the engine would be able to run before replenishment was necessary. This would allow the modeller to experience the variable nature of the steam engine – randomly bad coal, a clinkered fire etc – and succeed (or otherwise) at such skills as mortgaging the boiler, or otherwise attempting to make 'a run for it' to the next goods loop without hampering the timetable or following trains. 'Whatever next', you might say...

Whatever the future holds for DCC, you can keep abreast of the latest developments at our digital weekend. Arrangements are under way for the third such special weekend covering this increasingly popular subject: it will be taking place within the grounds of Pecorama over the weekend of 10/11 June. This year's event will be bigger and better than ever before, with more area devoted to manufacturers and suppliers.

As in the past, the firms present will include ZTC, Bachmann, Fleischmann, Sunningwell Command Control (representing Digitrax), MacKay Models (representing Lenz) and South West Digital with two extras for this year; Gaugemaster with its Prodigy and Homy with its brand new system. Various talks and demonstrations will be given in the Lecture Theatre, suitable for beginners and for the more advanced. A full programme and details will be published next month and also should be available on our website.

Again a weekend not to be missed for those seriously considering DCC or for those who want to know a little more about how to become involved. Entry cost is the price of the normal ticket to Pecorama; £5.75 for adults and £3.80 for children 4-14 years. As before during these special weekends, the site will be open on Saturday afternoons.

Holiday Guide 2006 – next month

Readers will remember that last year we published our Holiday Guide as a CD-ROM in favour of the traditional A5 pocket size booklet. It would be true to say that this new approach was received with mixed feelings, many readers enjoying the extra details that could be included on a CD, as well as movie footage, but others felt that the CD was inconvenient, since it could not easily be kept in the glove pocket of a motor car. However, overall sales of the magazine proved to us that the idea was a successful venture and, therefore, it has not been easy to decide what we should do for this year.

After much deliberation, it has been agreed to offer the booklet again and we are pleased to announce that it will be included, as in years past, free with our June issue, published on Thursday 18 May. We do know this decision will please many readers so it is important that you order your copy from your local newsagent now so as not to be disappointed.

Cover: A set of LT Standard stock pauses at Scrubs Lane before going underground. More on this 4mm scale layout on pp.290-292.

Photograph: Ken Harper.

Middleton-in-Teesdale

The new layout of the DeHavilland MRS, Hatfield

This description of the layout was written by the late **DENNIS MOORE**.

The club's layout *Havil Junction* had grown by an additional 18'6" in overall length to just under 40'0". The thinking had been to enable a branch terminus to be grafted on to the free end of the existing branch hidden section boards; to be fully contained within the main line circuit, to be detachable along with the said existing hidden section boards and to be operated as an independent and portable exhibition layout.

Paradoxically, this extension of *Havil*, which took some years to complete, rendered it too big for economic transportation to exhibitions. However, as *Havil* was based on Midland practice, the North Eastern contingent in the club laid claim to the suggestion that an NER prototype would be appropriate for the new development after the long dominance of Derby! Consequently, our Treasurer, Colin Thirsk, submitted a sketch plan proposal, which incorporated Middleton-in-Teesdale and Prospect Hill on the Whitby line. Within the proposed available space of 18'0" the scheme, whilst attractive in many respects, looked highly compressed and a bit 'set-track' in appearance. Nevertheless, basic drawings were prepared to assess the proposal better, despite the unease that was felt about combining, in the same layout, two well-known and recognisable locations that were in fact geographically miles apart on different lines. How would it be presented? or stocked? or operated? Suppressing these doubts, the sketching and plotting proceeded.

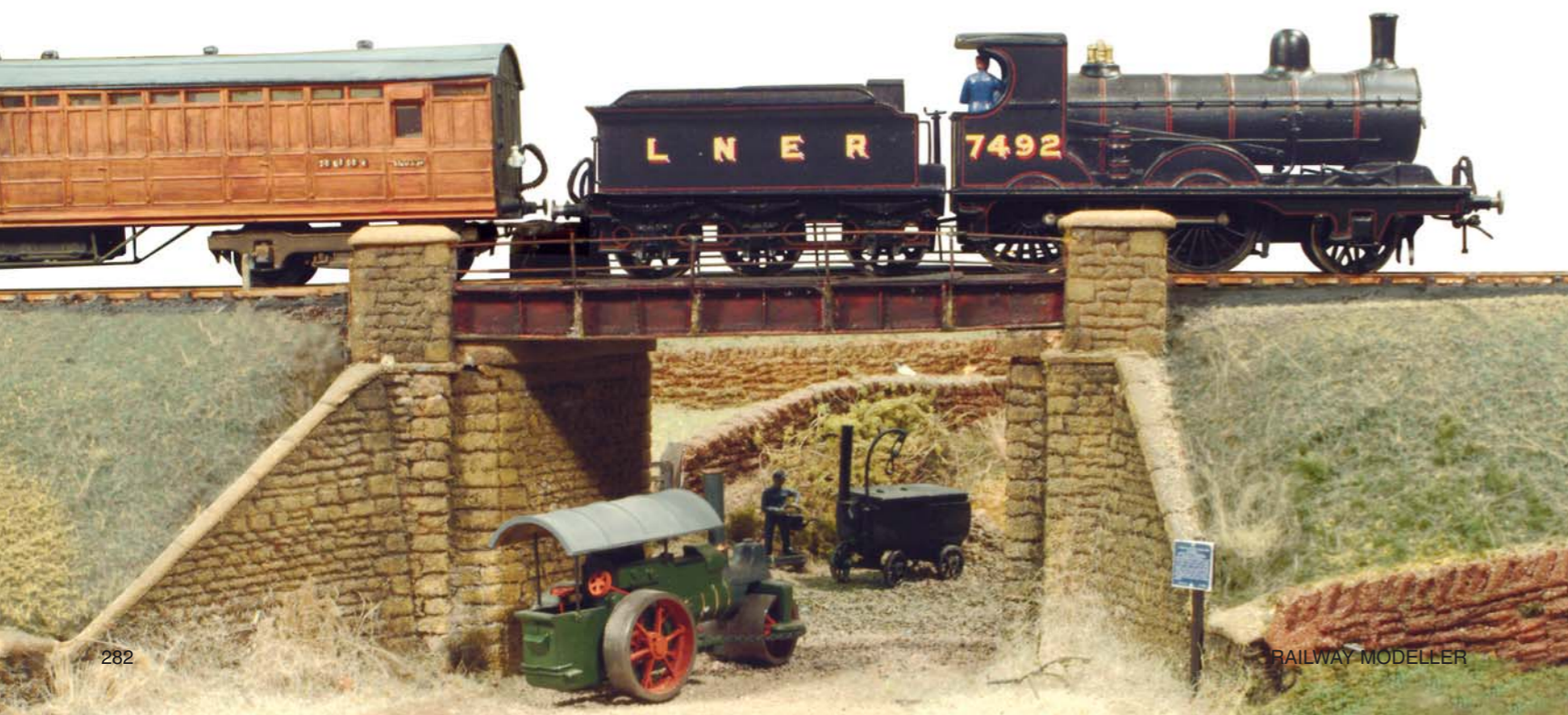
The fact that Prospect Hill was a single line junction with an 'arm' descending quite steeply (to Whitby) prompted the idea of that line descending, via a tunnel mouth, to below baseboard datum level, to be accommodated by a second level hidden section. This concept was, in some measure, prompted by having, in the past, operated the 2mm scale layout *Leefield* of the late Denys Brownlee.



▲ Street scene at Prospect Fell.

View of Middleton looking over the stone traffic reception sidings, the loco depot and the station with Class V1 2-6-2T No.416 having arrived.

Road repairs, with ex-GER Class E4 2-4-0 No.7492 crossing the bridge heading for Middleton.



Here the branch diverted towards the rear of the layout via a tunnel under the landscape to traverse, unseen, the rest of the layout length to the large remotely controlled 'train-turntable' which was a feature of this delightful layout.

It was now only a spot of lateral thinking that suggested a climbing incline at the rear of the baseboards could connect the two levels of hidden section, thus allowing a train, having descended to the lower level, to be propelled, out of sight, back up to the higher level ready to repeat the circuit. A further realisation was that the basic idea, with some elaboration, could be used to control traffic flow in respect of 'full' and 'empties' to traverse the viewing area always in the 'right' direction without physically having to remove or replace wagon loads and/or transpose locos and brake vans. This has become possible because the layout has grown out of the original 18'0" length, making the gradients acceptable. See considerations re. *Middleton* itself later.

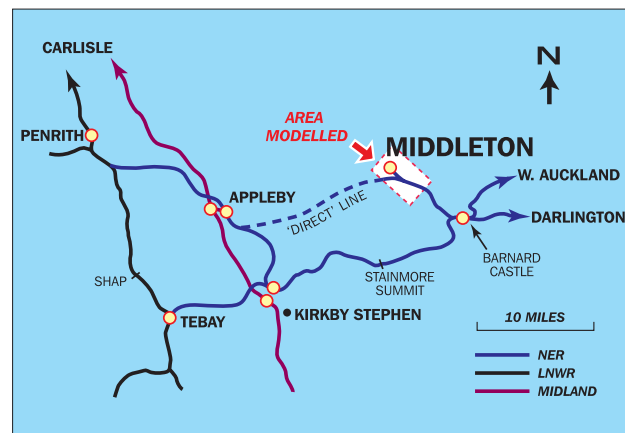
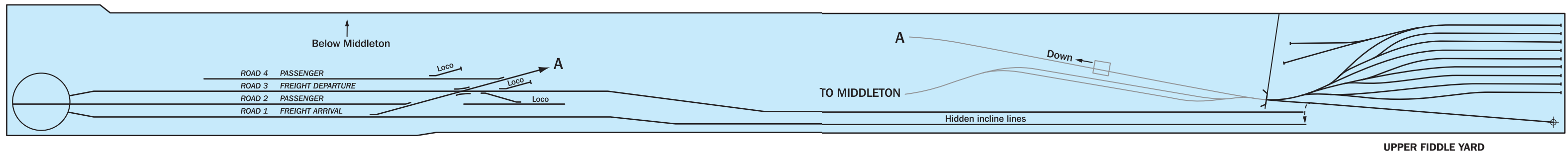
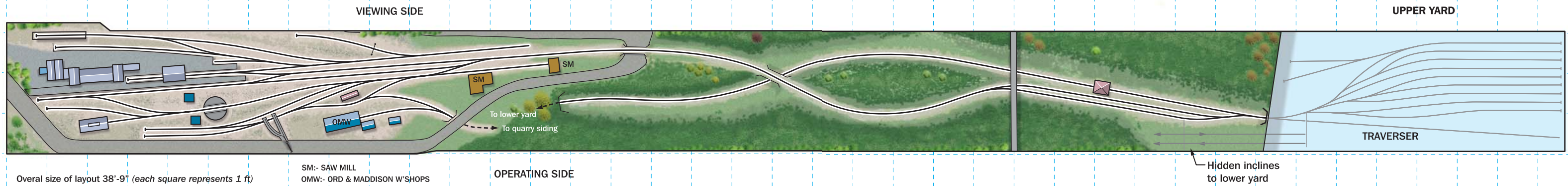
Obviously, with the incline road doubled, both the 'up' and 'down' conditions 'out front' ensued. With suitably placed uncouplers and loco spurs the trains change identity by means of changing motive power. Further, with suitably divided electrical sections, the inclines could be used for the storage of more than one complete train.



▲ The coal drops, with the station frontage and the Station Master's house behind.

Photographs by Len Weal.

MIDDLETON IN TEESDALE



An operating pattern is now emerging. The two inclines and the exit road from the upper hidden section are linked by a full-train-length sector-plate hinged at the extreme inside end corner of the hidden section. Outgoing trains are transferred from the *up* incline to the sector plate that is then lined up with the exit road for departure. In so doing a plunger linkage automatically sets the exit point thus preventing it being set to the 'hole' where the plate should be! Incoming trains are received on to the sector plate and then turned

to line up with the down incline on to which they are now driven and stored. The trains are always in the correct direction, not usually a feature of end-to-end layouts without much fiddling at each end.

The reception roads on the lower hidden sidings converge onto a fully automatic-remotely controlled turntable at the extreme left-hand end of the layout for turning locos, completing the concept. Originally, to keep it simple, a hand driven ply-disc carrying a length of track had been provided. However in practice 'simple' was proved not to be 'the best'. The location was too remote from the lower yard operator's position on the other side of the Middleton operator, thus requiring another operator, with nothing else to do and creating not a little overcrowding.

Dick Turner, our expert in all things electronic/mechanical (guided missiles tend to be complicated!) took things in hand and built an automatic and remotely controlled version. This was shown and demonstrated at the CRMA Modellers' Workshop (1999, in Leicester). It has some very novel features including a self-centring system that prevents the overhang of any part of the locomotive out of the clearance space, limited by the restricted location.

What has been emerging from all this is two layouts in one viz. (i) hidden section to terminus and (ii) hidden section one to hidden section two, the two layouts merging at the Prospect Hill junction providing route selection and run-round facilities at the visual end remote from the terminus, ensuring operating interest at each end. Thus, while shunting takes place at the terminus, the inevitable situation for this type of layout, spectators are able to watch trains running through Prospect Hill on the main line: which reminds me that we have not resolved the underlying anomaly of the geographical locations.

Whilst lazing on the beach somewhere in Lanzarote, Eric Fry – now our Chairman – dreamt up this elegant 'might-have-been' to explain everything, as follows.

The Appleby Direct Line

By the turn of the century the increase in traffic over the Stainmore route between Cumbria and Tees-side of iron-ore eastwards and coke westwards was causing a serious line capacity problem to the NER authorities. The Company introduced its first eight-coupled mineral engine in 1901, but these were prohibited over Stainmore because of the severe weight restriction over the steel viaducts at Belah and Deepdale.

A decision was taken, therefore, to construct an alternative route across the Pennines, using the Middleton-in-Teesdale

branch as part of it since it had been laid with the ability to take heavy locomotives, with the view to it forming part of a possible through route from Tees-side to Carlisle by projecting it to join up with the Alston branch. However direct advancement of the track through Middleton-in-Teesdale was frustrated leading to the need to divert further back down the line to achieve optimum alignment, so a junction had to be inserted to allow the new route to by-pass Middleton. This junction was laid out in a similar

Ex-GER Class E4 2-4-0 No.7492 approaching Middleton with a train from Sunderland.



▲ Automatic turntable in the lower yard. Photo courtesy DHMRS.

▲ Class D20 4-4-0 No.1207 in Middleton Yard.





▲ Cottages near Middleton Station.

fashion to Prospect Hill Junction on the Whitby line. If an existing design would meet the requirements, why spend time and money designing an alternative?

By an even stranger coincidence the new location was named Prospect Fell Junction. Opened in 1909 the new single line route descended on a continuous down grade through a long tunnel under the Pennines to join the old line near Appleby. Mineral traffic continued on to Penrith and then, via the CK&P line as before. A new connection on to the MR Settle & Carlisle line at Appleby allowed NER traffic, by means of running powers, to reach Carlisle from Tees-side without the need to travel via Newcastle.

The line was single track from Prospect Fell through the long bore of Warcop Fell tunnel. On emerging the tracks onward to Appleby were doubled. Similarly the tracks from Tees Valley Junction to Prospect Fell Junction were also doubled to cater for the increase in traffic.

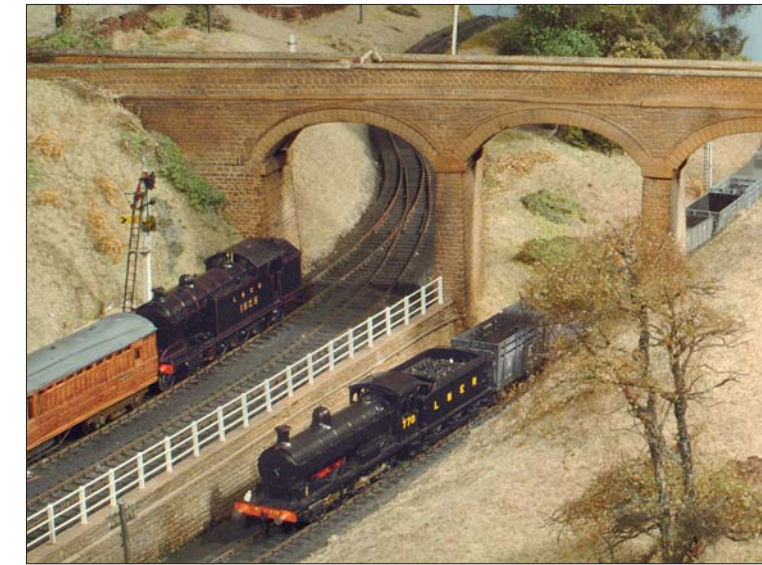
It was appreciated that the single track section, which included the tunnel, would be difficult to operate, but as plans were

The goods yard and cattle dock at Middleton with the loco depot beyond the passenger platform and Class A5 4-6-2T No.1760 taking on water.



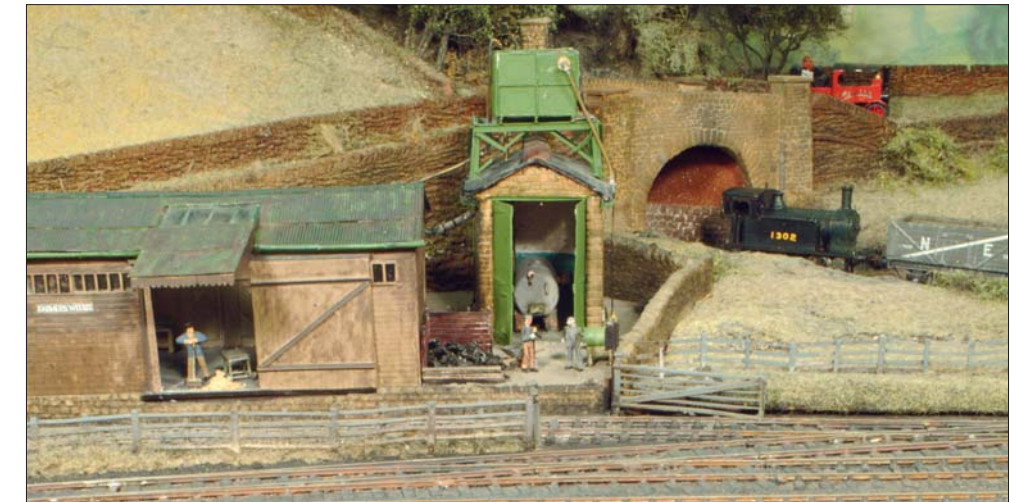
▲ Class J25 0-6-0 No.1967 passes the timber yard with the branch up goods.

▼ Prospect Fell Junction. Class D49 4-4-0 No.297 *The Cottesmore* on a Darlington-Carlisle express.



▲ Class Q5 0-8-0 No.770 climbs the gradient with an empty coke train from Cumbria to West Auckland Yard, whilst Class A8 4-6-2T No.1525 departs for Middleton.

▼ The saw mill and its boiler house with Class Y7 0-4-0T No.1302 shunting Ord & Maddison's sidings.



already in hand to extend the projected Newport-Shildon overhead electrification (opened in 1914) through to Appleby; this was regarded as a temporary situation. However, the outbreak of war, followed by the Grouping in 1923, prevented the fulfilment of this scheme.

So steam continued to provide the motive power to work the line, and banking assistance in rear became the order of the day through the tunnel and as far as Prospect Fell Junction for eastbound iron ore traffic. These trains were always given a clear run through the section. The banker dropped off

as the train breasted the crest of the gradient at Prospect Fell and returned then, or later, through the tunnel as traffic flow permitted.

A passenger service was introduced between Darlington and Carlisle over the new line. Because Middleton was now at the end of a very short branch, trains calling there had to reverse twice with the engine needing to run round at the terminus, and also at Prospect Fell where the loop was laid on the branch, clear of the main line. Tank engines were the usual choice of motive power for these services, but through express trains not stopping at Middleton were more often hauled by tender engines. The existing services from Middleton to Bishop Auckland and on to Durham, Sunderland or Darlington continued as before, which brings this narrative neatly onto Middleton itself. About time too did I hear?

In order to obtain more information of the area than was possible from the track diagrams we already had, an OS map was purchased. 'Map' in the singular is a bit of a misnomer as Middleton-in-Teesdale occupies the adjacent corners of four sheets! An overlay at the appropriate scale to represent 4'0" baseboard modules showed that the station approaches from the outer home signal to the platform would occupy an inordinate length of the proposed layout which had long since exceeded the original plan to occupy 18'0". The four parallel tracks, without pointwork, were obvious candidates for some foreshortening and, with width adjustments to the widening footprint of sidings etc, accommodation was possible on the 2'6" width selected. I was very tempted to specify two wider boards at the station

end, but objections to non standard boards making for difficulties in packing and transporting prevailed.

The quarrymasters Ord & Maddison had a complex of buildings and sidings adjacent to the station and it seemed desirable to reproduce this situation on the model as a traffic generator (which it undoubtedly was) as well as adding to the authentic environs of the station. The remains of the two loading gantries still spanned one siding, though out of use at our chosen period of 1930-39, and nevertheless a very distinctive feature.

Another private siding led to a sawmill while a third served a tarmacadam plant. These private sidings were included in the layout plan, which was now some 39'0" long. So much for cramped and 'set-track' in appearance!

Control & electrics

Conditional Link Control had been designed and developed for the club layout *Havil Junction* and subsequently used by others, notably the North London Group for *Heckmondwike* (see RM April and June 1976, April 1978 and April 1979).

As it was also used by Malcolm Hayward (the originator of the system) on *Buxton*, Denys Brownlee on both *Leefield* and *Burnham-on-Sea* and Leslie Bevis-Smith on his Metropolitan layout, it was natural that we should again think along the same lines.

Section switches are not used. Instead all track feeds are determined by route setting and signals, so operation does not involve 'thinking electrics' at all. At Prospect Fell is a fully interlocked electromechanical lever frame and indicating illuminated panel, which was devised and built by the aforementioned Dick Turner together with Tony Hayward as a joint venture.

A more conventional panel for the terminus area was devised and built by Terry Murphy, another of our electronically-oriented members, using small toggle switches on a 'geographical' panel.



▲ Empty stone traffic wagons have arrived at Middleton. Note the ex-North Eastern 'Birdcage' brake van.

The third area of control, the second level hidden section and the inclines, uses push-pull mechanical linkages to the baseboard edges for Peco point operation. No signals are required of course, but indicator lights are provided on a neat panel devised by Tony Haward. A selector switch at this position activates the automatic turntable. All control positions are linked with send/receive indicators, the operators driving the trains towards themselves.

A practical decision taken was to loom all inter-board electrics into one 'umbilical' cable traversing the whole length of the layout and just plugged into each board as a final operation in the assembly sequence. Hand-held controllers, based on an EM Gauge Society circuit design, were assembled and installed for all control positions.

Track

Non-visible areas (and these are extensive) are laid with Peco code 100 for quickness. Unfortunately the three 3-way points used in the static part of the upper hidden section proved troublesome with some of the finescale-wheeled stock, particularly bogie coaches, and were replaced by the later tandem points, a long, protracted job because of the re-alignment required. Whilst this was being undertaken, the opportunity to provide LED indicators for easy identification of route setting was done. At the time of writing it is not yet known whether all the 'sweat & toil' has paid off.

The visible areas use hand-built points plotted by computer using a program written by the late Les Sanderson. Input of data such as known dimensions and crossing angle produced a print-out of the required point. Timbering is 1mm ply glued in place onto a 1/2mm ply 'base plate' to which the print-out was fixed and drilled for the tubular copper rivets and solder assembled. The 'base plate' ensures that no distortion of the assembly can occur during laying and final fixing.

Whilst the entire track on *Havil* was hand built using jigs and resistance soldering (yes! 35 years ago using our own transformer set-up) we are now a good bit older, less optimistic about 'time spent' and so opted for the commercial fine scale track (C&L and/or SMP).

Point motors

Not the best of decisions here! Switch blades are driven by sprung steel wire droppers picking up with brass tubes carried in a slider mechanism manufactured from curtain rail and driven by solenoid motors. The whole is mounted on a ply sub-base and plug terminating tail for the electrics to facilitate 'rapid' replacement. The motors appear to be Taiwanese copies of Japanese copies of American switch machines, knuckle action and solenoid actuated. The change-over contacts are not all that they should be. Whether slow action motors were available at the time the purchases were made is open to debate, but they are now. These have been substituted at Prospect Fell during the delay mentioned earlier under 'track'.

Unfortunately this would prove very difficult at Middleton due to the crowded area involved and the disparity of motor size making direct replacement impossible. An additional complication is the differing power supply requirements. In some cases

H&M motors have been substituted. Further work is progressing. Oh well!

Signals

The layout is signalled using a mixture of scratch-built and modified D&S components to produce the Central Division prototype equipment appropriate at Middleton, and D&S slotted arm assemblies for Prospect Fell. Slow-action 'bounce' mechanisms are being provided at most locations.

Landscaping

The contours of Prospect Fell cutting are formed from plastic foam sheet formers, overlaid with a close basket weave of cereal packet cardboard strips all fixed with a hot glue gun and then covered with plaster bandage in the classic manner. Polystyrene sheet is used for the flatter areas and the rock outcrops in the main line cutting. Spray adhesive and Heki puffed grass material is mixed thoroughly with the firm's 'Winter grass' colour (a straw shade) to tone down the over-bright green to a 'dry summer' shade. Coarse areas are built up by repeated spraying and puffing. Not the cheapest of many and varied methods but very, very effective!

Trees are by the author using aircraft control cable as described in *Model Railway News* and others.

Ken Hoole's book provided all the drawings for the buildings on the station site and these have been beautifully modelled by Ken Brown, a very keen club member, despite being a voice crying in the wilderness as he is a GWR follower! He bears no grudge however and his buildings are superb.

Colin Thirsk, our Treasurer, paid a visit to Prospect Hill on one of his frequent visits to N.Yorks. and photographed all the buildings that could be included in the model. Drawings were made (the usual counting of bricks & doors & window average sizes used to determine scale). In white card they looked oversize and overwhelming, so they were painted with powder watercolours, the better to judge the finished effect – and then the penny dropped! We were no longer modelling Prospect Hill as such. So it was not appropriate to transpose the actual buildings. So, stone built cottages were modelled instead as more appropriate to the N.Yorkshire area.

There were of course no drawings for the various buildings in the 'private' areas other than their locations on the OS maps. One or two photographs were obtained which showed some of these buildings, one complete with a water wheel, and with the appropriate sizes from the OS map reasonable models were made.

Motive power

Locos, of course, had to suit the chosen period and be appropriate to the location, one aspect of which caused the misgivings in the early consideration of the scheme. Eric Fry already had a few suitable for the job and agreed to aim his future output of construction towards completion of the

required stock. This programme was backed up by the purchase of suitable commercial products, such as D49, J39, V1 & V2.

Initially Eric had models of classes E4, J21, J27, O4 & Y7 and enlarged the list by building A5, C7, D20, G5, J25, N9, O4/7, Q5, Q6 & Q7. These were supplemented by the author's own kit construction of J27 & Q6. The long period taken in the building of the layout (which included almost one year without premises and the club's layout *Havil* in store) allowed Eric to enlarge his fleet without too much pressure on his 'spare' time away from his other love of producing historical books on LNER locos, having edited the RCTS series and now assisting with the Yeadon Registers.

Stock

Slater's NE hopper wagons were made up to form two complete trains, one of empties and one loaded with 'iron ore'. Similarly two trains of various coke wagons. The Hornby version was particularly useful for embellishment as it is based on an NE 'across-end' brake handle prototype. These trains of course were to identify the traffic flows mentioned earlier, viz. iron ore from Cumbria to Teesside (up trains banked in the rear), coke from Bishop Auckland to Carlisle, and the empties in reverse on the main line.

A wide ranging stock of goods vehicles, scratch, kits and commercial has been assembled. These take care of the general goods from Darlington to Carlisle on the main line, and branch goods to/from Barnard Castle and the stone traffic from M-i-T to the rest of the UK via Barnard Castle (photographs of M-i-T reveal wagons of all 'Big Four' companies – a long way for SR and GWR vehicles!). Express passenger trains run through on the main line

Darlington to Carlisle and return (up trains banked in the rear).

Branch passengers travel in either a two-coach or three-coach set of D&S NE clerestory coaches and eventually a new kit for an NE steam railcar from our own tram expert and tram kit manufacturer, Chris Cornell, will augment passenger traffic to/from Middleton and Barnard Castle.

Operation

The layout is run to pre-arranged sequence by means of the 'turn-over card system' and a complete programme should take just over one hour.

The optimum number of operators is five as follows: two at Middleton, one platform traffic and stone yard and one goods yard. A third looks after the lower hidden sidings and inclines. The final two cover the upper hidden sidings, one at the signal lever frame for Prospect Fell and one for inclines and sector plate, and any trains returning to the fiddle area that will be required to make a return trip to Middleton before the end of the programme.

All goods stock using the Middleton branch was originally fitted with modified Sprat & Winkle couplings, but the rather slow, deliberate positioning of stock over the magnets meant that the cumulative time spent on shunting tended to build up. After trials, B&B couplings were substituted as the delay uncoupling occurs 'on the run' over the electro-magnet at the press of a button. This is a great help to the operator who is situated on the opposite side of the layout to the goods yard/coal drops.

Full 'stone' wagons are taken from the single line hidden sidings six at a time and deposited in the stone train assembly siding using the ex-NEY7 belonging to Ord & Maddison. The company actually owned two.

The coal drops, with the station frontage and the Station Master's house behind.



The complete train departs behind an NE loco to the upper hidden sidings. At suitable times in the programme, full wagons are placed in the carrying cradle and taken by hand to a position adjacent to the stone yard siding, from where they repeat the cycle. Empties go back in the cradle to the upper hidden sidings to journey to Middleton with various goods trains and are duly transferred by the Y7 to the stone yard sidings. This is another ploy to keep the traffic flowing in the right direction.

Conclusion

No information is yet to be found re. the Tarmac plant so some more research is called for. The original objectives for the layout appear to have been met. Nevertheless we hope we can look forward to many enjoyable hours of fine tuning the sequence, the while giving all club members the chance to learn the drill required at all operating locations.

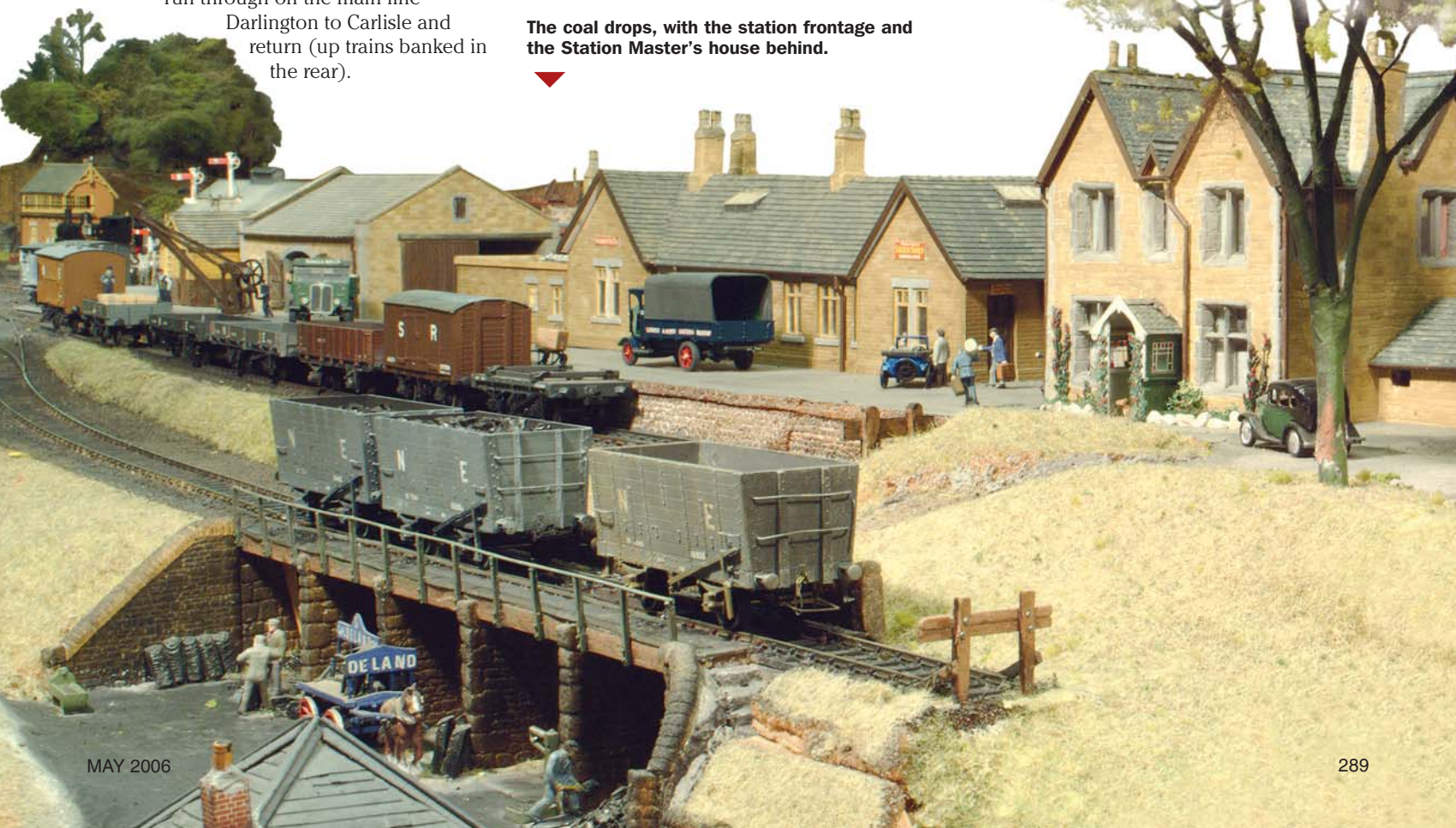
Plenty of running in store – and a truncated *Havil* is still with us to be brought up to operational status. Who would complain?

Acknowledgements

Research for *Middleton-in-Teesdale* made extensive use of Ken Hoole's book on North Eastern Branchline Termini, and other material held by the Ken Hoole Study Centre, Bank Top Station, Darlington.

Our thanks are also due to the North Eastern Railway Association.

The once-again operational *Havil Junction* is due to appear at the DHMRS exhibition at its new clubrooms on 29 April. Details in *Societies & Clubs*.



Scrubs Lane

A London Transport layout in OO

DICK STARLING tells the story, in memory of Ron Curling 1935-2004.

This article has been written in honour of the layout's builder and creator, Ron Curling. The name *Scrubs Lane* came from the road where Ron grew up, near Wormwood Scrubs prison in London: not, as we used to tell visitors, that he built it while he was an inmate there. His first thoughts of a London Transport layout were in the 1960s when there were no kits available and everything had to be scratch-built. Having family connections with LT, he started by collecting bus tickets from emptying the used ticket boxes, then train and bus spotting at the local depots during his younger days. Eventually he became a conductor, then a driver in the late 1950s and early 1960s before moving up to Norfolk with his wife Shirley.

It was several years before a final track plan was designed, with experience gained from his previous layout *Sharraine* (see RM November 1997), in organising stock, handling, transporting and packing. I have a friend with a sign-making business and had the control panel specially engraved, as he owed me a favour, and I gave it to Ron as a Christmas present, so he had no excuse for not building *Scrubs Lane*.

This is a fictitious station on the Metropolitan line. The track has been designed to have four platforms, two running straight through north-south with surface stock, and two running down into the tube system to terminate at the Elephant & Castle tube



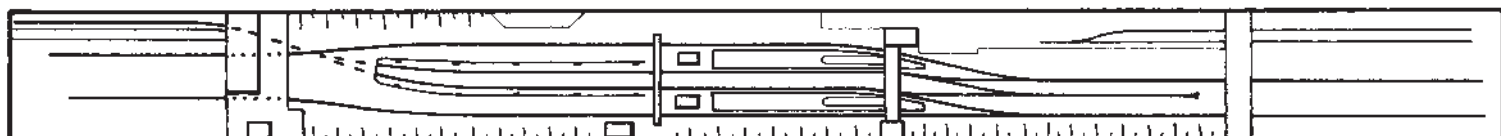
station. There is also a turn-back siding at Scrubs Lane for tube stock to be stored when not in use after the rush hour.

The layout is built to conventional methods with fiddle-yards at both ends with trains running into cassette boxes so that quick stock exchanges can take place, and spectators will not have to wait too long before the next train runs through, therefore keeping everybody interested.

The four main boards are 36" x 21" with the two fiddle boards 6" longer, also there is a small 21" extension on the gradient to the tunnel, which was added because when first built the tube stock had difficulty climbing the incline. The main track is Peco code 75 with N gauge dummy third and fourth rails. Peco points are driven by SEEP motors and a CDU. The layout has all been designed to fit into a small trailer for transportation, with the stock stored in the cassettes in larger storage boxes.

All the buildings are made from card and covered with brick paper and depict the Art Deco style of architecture of the 1930s when some stations were rebuilt. The track layout and buildings are of no particular location, but visitors can recognise some parts of the station and often ask us if it's Wembley Park, Harrow on the Hill or some other location. People are also amazed at the variety of different London Transport vehicles. Some even remember travelling on them when they were younger, bringing back to them all those fond memories which is what Ron wanted to achieve.

The fascination for children is the underground station at one end of the layout. As the tube stock disappears into the tunnel they then look for it to appear in the station and again as it leaves to go up the incline to Scrubs Lane.





Left: Scrubs Lane station with typically LT ticket machines visible in the ticket hall.

Below left: Metropolitan No.5 *John Hampden* approaches the station from the south. Tube tunnels to Elephant & Castle in the centre.

Above left: buses and trams at Scrubs lane.

Above right: view of the station looking north.

Below: the loco-hauled train seen below left arrives at Scrubs Lane.

Operation

In order to operate the layout there are three operators working in unison to a set timetable, with a central signal switch panel and a controller at either end of the layout, so in effect we have a signalman who sets the points and drivers who bring the trains through the sta-

tion. Visitors can see where the next train is going by a simulated destination board set above the station. At the north end trains run in under an aqueduct carrying a canal with a barge crossing over, into Scrubs Lane station before leaving for Liverpool Street or Moorgate, while the tube stock runs down into the tunnel under the south fiddle-yard into the Elephant & Castle underground station at the front of the layout.

Locos running from the south enter under the Wormwood bus depot into the station before leaving for Aylesbury or Amersham with the tube stock running through to Stanmore or terminating in the turn-back siding. Other trains depicted are a departmental battery loco set, Metropolitan Railway Beyer-Peacock 4-4-0T and coal wagons, a 97xx condensing pannier tank with meat vans for

Smithfield market and a London Transport-liveried ex-Great Western pannier tank with wagons for the tip. Trams also run from the north to Scrubs Lane stopping at the memorial just outside the station.



	Stock List
Tube stock	Piccadilly set, Bakerloo set. These are painted with a different livery on each side and so give you in effect four sets instead of two.
Surface stock	Brown T stock three-car set. Silver A stock three-car set. Red F/Q stock three-car set. Red R stock three-car set. No.1 <i>John Lyon</i> and three coaches. No.5 <i>John Hampden</i> and three coaches. Two battery locos.
Freight stock	Beyer-Peacock 4-4-0T. Condensing Pannier tank. LT liveried pannier L99. L1, Feltham
Trams	
Buses	
LT142	1929 AEC Renown with revised blinds.
LT1281	1931 AEC Renown.
LT1100	1930 AEC Renown single-deck 'Scooter'.
ST549	1930 AEC Regent with LGOC body.
ST979	1930 AEC Regent with open staircase.
STL155	1933 AEC 661/series with Chiswick body, 60 seats.
STL205	1933 AEC 661/series LPTB body, 56 seats, pre-selector gearbox.
STL847	1934 AEC 661/series LPTB body with tubular seat frames.
RTW333	1948 Leyland with 8'-0" wide Leyland body.



There is no particular year depicted on the layout as all the stock is based through a time span covering the 1930s/40s/50s with something from every period. All the underground

stock was from The Harrow Model Shop, with an old K's Beyer-Peacock kit and the rest modified Hornby or Bachmann. All the buses are from R-TC Models and are built and painted

with liveries of actual buses that ran in London during the time period. Trams are from Bec models.

Ron would not have been able to operate his layout at exhibitions without help from various members of the Great Yarmouth Model Railway Club and his thanks would go to Big-Mick Goldsmith, who transported it on many occasions, Dick Starling, John Waterfield, who built the programme panel, Ken Harper, Bill Knights, John Gunning and Shane Youngs to name but a few, also to his beloved wife Shirley who gave him support over the years. Now the layout has been sold we all hope that the new owner has as much pleasure with *Scrubs Lane* as all of us have who have operated it over the last few years.

Top left: a works train heads north on the surface lines as a set of standard stock emerges from the tube tunnels.

Top right: the absence of any stock other than the Q stock in the background allows study of the art deco-style architecture of the station.

Above left: the LT bus garage is situated over the tracks at the south end of the layout. Just visible in the right-hand corner of the photo is a train of vans *en route* from Smithfield.

Above: mind the gap!

Left: Metropolitan Beyer Peacock 4-4-0T trundles a train of PO coal wagons through the station.

Photographs by Ken Harper.



Building *Exe*

A Lynton & Barnstaple Railway 2-6-2T for 0-16.5

This 7mm scale *Prairie* tank was constructed by **CHRIS HATTON**.

There is something about the Lynton & Barnstaple Railway's Manning Wardles. It could be that Southern livery, or maybe the fact they were so short-lived, the tales of the disappearance of *Lew* into the South American jungle serving only to deepen the fascination and mystery surrounding their demise. There is indeed something magical about the whole line, having wended its way across Exmoor's landscape for only 37 years before closure in 1935, which has held generations of enthusiasts enthralled, and I am no exception. For as long as I can remember seriously building model railways, I wanted a Lynton & Barnstaple loco in my fleet of engines.

It has taken me three years of on-and-off activity finally to accomplish that dream, and I believe that there must be hundreds of people out there wanting to build one of the class of four. I hope my experiences and the lessons I learned building *Exe* will help them. People who, like me, pass hours in boring meetings thoughts miles away, a hand on the regulator and an eye for stray sheep on the line, hammering up the bank to Woody Bay with the last train to Lynton rolling along behind, and a perfect Exmoor sunset spread out along the skyline behind the train.

Research

Having planned to build the loco for years, I finally got started when Keith Hastie very kindly donated me the wheels and frames he had built a number of years previously. Built to 7mm scale with wheels sliding on axles to either 14mm or 16.5mm gauge, this proved to be the chrysalis of the whole project.

Clearly the first thing I required was a decent set of drawings – for such a well known engine, there are surprisingly few of these around however, and those which are published are often significantly different from each other, which does nothing to vouch for their accuracy. Luckily the makers' drawings are well reproduced in Catchpole's book, and these, when blown up on a photocopier, provide very clear drawings – albeit of the as-built loco. I ran a number of copies off, and enlarged the drawings to about 25mm scale, covering several sheets of A3 stuck together. The detail became, surprisingly, very clear from such a small (A5) original. These drawings and those from Brown's book, which seemed fairly accurate when checked against the maker's drawings, provided all the drawings required to create the model.

There are a large number of photographs available in the many books on the railway, most of which I had – I found Yeomans' book



particularly good for photos, although there are only a few views of the top of the loco or the cab. The Catchpole book also has a couple of useful photos from these angles.

Details of all these reference works are given at the end of the article.

The chassis

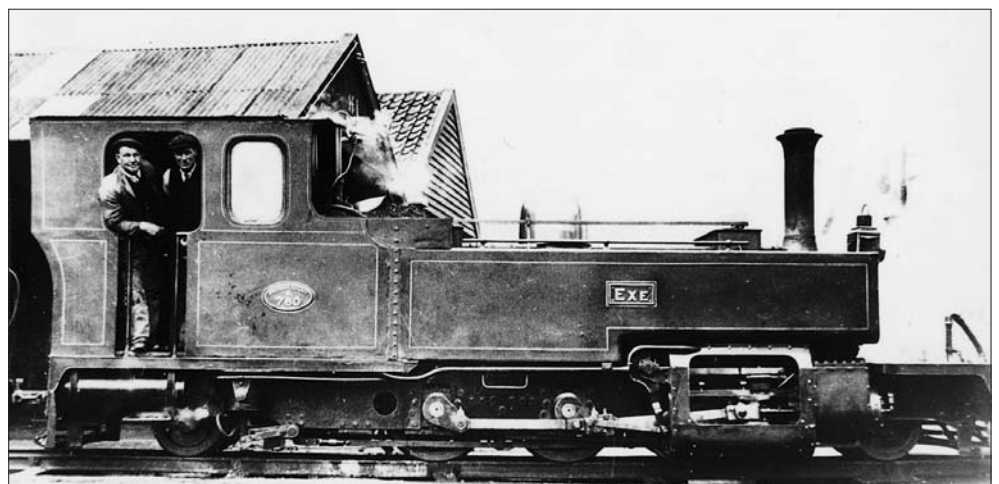
I am a firm believer in compensating locos to ensure that all the wheels touch the rail at once, so the first task I undertook was to change the solid axleboxes to new ones sliding in hornguides. I did this at the same time as making a new set of steel rods jointed in the middle, which of course were also required to set the position of the new axleboxes. I compensated the front two axles, rocking on a central bearer beam, which in turn pivots on an axle between the frames. The motor and gear-box drive the fixed back axle and are from

Branchlines – I find the firm's motors and gear-boxes run very well, especially for the price. Pickup is from the coupled wheels only – I fitted pickups to the pony trucks but this made them too stiff to run correctly, and they derailed at every opportunity.

Above: this is the kind of view which is difficult to find of the locos, showing some of the detail on top of the tanks from above. Virtually all of the structure above the steam heating pipe (along the line of the footplate) is plasticard, which I find much easier to work in than sheet metal. Real coal is glued in the bunkers and Guilplates' excellent nameplates adorn the cab sides.

Below: No.E760 *Exe* on the boil with crew taking an interest in the photographer at Pilton Yard, Barnstaple, on 27 June 1928.

Photograph: the late W.G. Boyden, courtesy Frank Hornby.





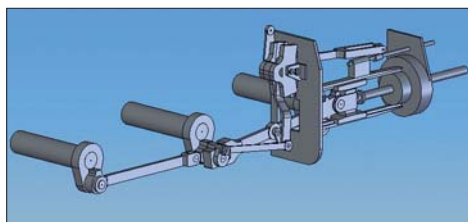
Left: this view, which I think is one of my favourites, shows about as much detail as I could find in any of the books of what was actually in the cab. You can just make out a water gauge-glass and the pressure gauge on the top of the boiler. If I built the locomotive again I would make the cowcatcher a shade higher, there isn't a lot of clearance between it and the rail, and it has been known to catch on track pins standing proud of the railheads, at which point the loco comes to a very abrupt and worrying halt.

A slight problem was encountered with the outside cranks – I stuck them on one end of the axles but the other end was held in with a grub screw against the axle, which didn't really give sufficient purchase, and the cranks on one side tended to move. Filing a flat on the axle under the screw to maintain the quartering of the wheels has now solved this. The cylinders are fabricated from turned end caps and brass sheet for the rest. The loco came to me with one cylinder, so in fact I only had to build one. There are a few more bolts around the end of the end cap etc in real life, but after putting all the studs on the top of the valve chest with brass wire filed back to length I decided life is a bit too short. Were I to build the loco again I would try to find a way to make the motion cover and slidebars removable and separate from the cylinders, as it took a huge amount of heat to solder the small steel slidebars onto the fairly large turnings of the cylinder.

Access to the front axle is also now more or less impossible seeing as it is behind the motion covers, which are soldered on. A couple of bolts through the frames would have been a better idea. All the motion – crossheads, connecting rods etc – are filed out of steel bar, in my opinion nothing looks like steel apart from steel. The locos were provided with a version of Joy valve gear, which, after literally hours spent studying books, I never did

quite understand, so on the model I simplified it slightly, as you will see if you inspect the photos of the model and a photo of the original. The Stephenson link and the rod which drops down from it are all one piece, and pivot at the top on a 10BA nut and bolt. I wish, in a way, that I had got the link to the valve spindle to move too, but at the time I was somewhat keen on getting the chassis finished, and it would take a lot of work to get that to happen.

Since building the model I have spent even longer staring at the drawings, frustrated at not being able to understand them, and finally, after consulting the old but very useful *Building Model Locos*, I managed to understand how it all worked. From my research I have drawn the sketches below, which I hope will serve to explain how the bits all fitted together. I have not made them dimensionally accurate as the precise dimensions of your models will depend on the book from which you are working, such is the variation between the published drawings. The Joy gear works by



rotating the curved slide about the centre. The link off the central crankpin and the connecting rod moves up and down in the slide, in so doing moving the valve spindle, which it is connected to at the top end, up and down. By rotating the curved slide forward, mid and reverse gear are selected. Once you understand this it all becomes annoyingly apparent from the photographs in the books!

The details on the rest of the chassis are not very complicated – Shedmaster's cast brass vacuum brake and steam heating standards, fabricated vacuum brake cylinders and brake gear, lots of cosmetic rivets on the buffer beams and cowcatchers from brass strip, which took a bit of working out. In the end I used a big lump of that staple modelling material, Blu-Tack, to hold it all together while soldering it up.

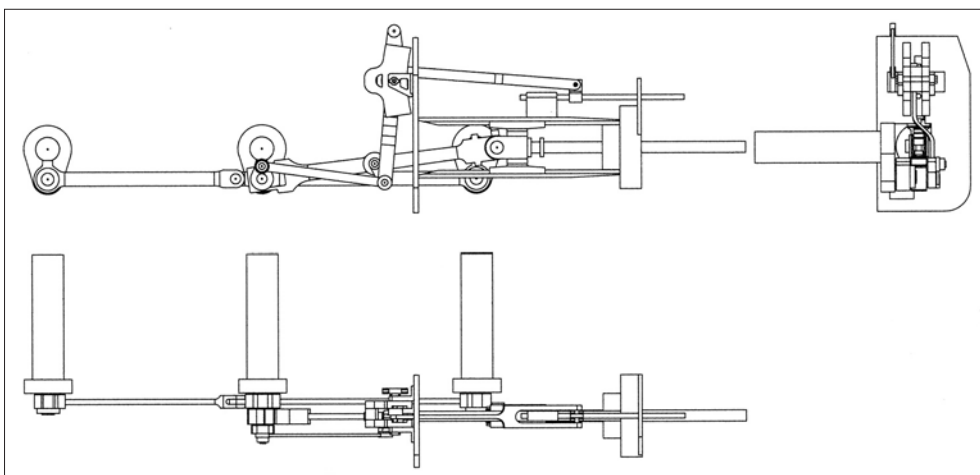
My own couplings pivot in the buffer beam and are returned to the centreline of the loco by a home-made spring of phosphor-bronze wire wrapped around the beginning of the coupling, which worked a lot better than I expected. They are a bit of a hybrid of something which looks like an L&B Norwegian 'chopper' coupling and something which will couple up with 00 tension lock couplings, which I use on some wagons and as a standard to set coupling height on my railway.

The injectors were also a bit of a headache – in fact it took me quite a long time to work out where they were, although I knew they had to be somewhere. The photo on page 28/29 of the Bradford Barton book shows them under the cab next to the footstep and behind the vacuum cylinder, surrounded in the usual bit of pipework. They don't appear on the maker's drawing photocopied out of the Catchpole book, so I have no idea of their precise dimensions, I just fabricated them out of a concoction of bits of wire. The usual bolt down the chimney and a bolt through the cab floor keep the body onto the chassis.

The body

This is mostly built out of plasticard. The boiler is rolled from thin brass sheet, the front and back footplates are nickel silver, and these are all soldered together to provide a solid core through the loco, but the cab side sheets, tanks etc are all cut out of 20thou plasticard. This made the whole fabrication of the body a great deal quicker and easier than it would have been in metal, and due to the solid central unit the loco is perfectly strong.

The details on the body – sandboxes etc – are also all plastic and some of the larger curved units, for example the firebox and the bottoms of the tanks, are made from thicker



Right: most of the detail in the cab is fabricated from off bits of electrical wire and is fairly freelance, through trying to imagine what the engine driver would have wanted to control I have provided, from left to right on top of the boiler, an injector steam valve, the steam heating valve, the other injector and the blower. At this point I still had to persuade Dad to turn the spectacle plates and to fix the nameplates onto the loco, and the side bunkers and reversing lever are yet to come. Figures are from the Phoenix range.

sheets stuck together and filed to shape. I am indebted to Dad for the turnings for the body – things like the sandbox lids, whistle, safety valves etc. The chimney and dome, which I think have captured the feel of the prototype perfectly, were fly-cut on the boiler side as it is such a small diameter boiler. The usual technique of squashing the turnings or castings down over the shape of the boiler barrel to seat them on the boiler would not have worked sufficiently well with a boiler so small. I am informed that they only went into orbit round the room a few times during the fly cutting process.

The rest of the details on the body are built using the usual methods. The handrails are Alan Gibson, the lamp irons Shedmaster and the lamp fabricated from a few turnings, the lens being built up from several layers of the 'Liquid Glass' which is used by aero modellers for glazing windows, it looks like pva and dries perfectly clear.

The links for the sandbox are all made up out of brass strip and sheet. The rivets on the ends of the cranks were a bit tricky. In the end I gave up trying to punch them through as it just distorted the crank too much, and drilled through from behind instead, stopping drilling ever so shortly before the drill broke through, which leaves the rivet-like dome on the top side. Needless to say, quite a pile of rejects with small holes in were made along the way!

The cab

Photos of the cabs of the locos are very hard to come by. The best I could find was the same photo as I used for the injector as above, and that shows very little. Most of the cab fittings are purely freelance, the usual mix of brass wire, small bolts and cast handwheels from Home of 0 Gauge. I tried to imagine what would have been in the cab based on what features I know the engine had, for example two injectors, steam heating and a blower, and think what would be the most logical way to provide the controls for those features.

Figures from Phoenix have been used, and I think the overall effect is adequate – it is, after all, more or less just a case of having something there to fill the space, and you can't see the detail to find fault when it's running.

Painting and finishing touches

The paintwork and lining again leave me indebted to Dad, and again look like a perfect representation of the prototype to me. The transfers are from Fox Transfers, and the lining all by hand with a bow pen. Real coal was glued into the bunkers, and the nameplates are from Guilplates – I was most impressed



Model photographs by G.D. Hatton.

with these; you can clearly read 'Southern Railway' around the top of the maker's plate on the rear of the cab.

I chose *Exe* out of the three West Country rivers after which the original locos were named for the simple reason that, after weeks camping in and walking around the valley, it is the one I know best.

Conclusions

While I couldn't claim that building *Exe* was particularly easy, it was far from impossible and I would urge anyone who has been sitting on the fence for years to get building, as I firmly believe that that is the only way to overcome those planning headaches over which you could agonise for years. I learned a lot during

Below: No.761 Taw and crew pose for posterity at Lynton, on 20 September 1933. The frame of a Howard van is also visible at left.

Photograph: the late W.G. Boyden, courtesy Frank Hornby.



the construction process, and I hope some of those lessons I have been able to pass on, so that other people avoid having to spend the hours it took me looking through photos and poring over drawings.

Thanks are clearly due to both Keith Hastie for the chassis which started the whole project rolling, and to Dad for the turnings, the painting and above all the encouragement and bottomless and raidable 'precision scrap' box. Now, I really must go and shunt a few wagons for the return working to Barnstaple.

References

- The Lynton and Barnstaple Railway*, L.T. Catchpole, The Oakwood Press, 1988.
- The Lynton and Barnstaple Railway*, G.A. Brown, Atlantic Transport Publishers, 1996.
- The Lynton and Barnstaple Railway*, J.R. Yeomans, Bradford Barton, 1979.
- Building Model Locomotives*, F.J. Roche, G.G. Templer, S.W. Stevens-Stratten (Ed.), Ian Allan, 1969.

GWR brake composite

The E26 first/third in 7mm scale, continued from last month

'Armchairs on wheels' in c1900-livery, built by **CHRIS GWILLIAM** from the *Blacksmith Models* kit.

Building the lower roof and clerestory sides

While the lining and varnish is drying you can get back to some more soldering: the clerestory deck has one etching peculiarity to watch out for – the long fold-lines are meant to be opened, not closed, so the panel detail is on the outside. You will also discover that, having added 16 door vents to the body, you now only have six ventilators left to fit into the 12 witness marks on the clerestory sides. Again I was lucky in that having been building professionally for a long time I have a very deep box of left-overs into which I could delve to find some IKB equivalents, but if you don't have matching spares you will have to make up some extras from scribed plasticard.

Both upper and lower roofs arrive pre-rolled; both of mine needed a little gentle finger pressure to obtain an exact match with the end profile. It is always worth squinting along the sides with one eye closed to ensure that there is a straight edge. Frequently roofs which have been formed in rolling bars have a tendency to go banana-shaped, with a tighter radius at the ends than near the middle. These samples needed very little correcting.

Pencil in a centre-line along the top surface of the lower roof to be sure that the clerestory fits symmetrically. Tack-solder two diagonally opposite corners of the folded deck in place and check for squareness, then add further tacks to secure the remaining two corners and the long edges. I did not seam up lengthways for fear the heat might cause distortion. The fold-line, being on the outside, leaves a rather unsightly junction between the roof and the clerestory side, and the relieving slots are horribly visible. I always disguise this joint after soldering is over by super-gluing lengths of 30 thou x 30 thou microstrip (Slater's ref.1009) to form beading; it's not prototypical, but then neither are relieving slots which destroy the illusion of reality immediately – any finished

model which shows evidence of how it was constructed will always be just that, a model, whereas we are attempting to make it look real. The plastic strips do not draw the eye once painted.

The clerestory ends which I had cut off the body ends earlier were now inserted between the clerestory sides; I did not find that I needed to use the inner layer as well. You now need to identify the step end of the clerestory as two 1mm holes need drilling in the roof for the handrails at that end only: the deck is almost but not quite a mirror image about the centre-line. If you measure from the ends of the deck to the edge of the long centre panel you will find that one is 132mm and the other 134mm – it's the latter which goes to the step end of the coach. 0.7mm wire rainstrips are tinned then sweated onto the roof. I used Fluxite solder paste for this job, as it is sticky and helps to hold the wire in place, but be sure to scrub it all off immediately after you've finished or it will quickly induce verdigris, which will wreck your paint job.

Upper roof

The upper roof had been cut somewhat skimpily and was only barely wide enough to cover the top of the clerestory sides. Another 2mm would have made for a better overhang. Again draw the longitudinal centre-line, but this time on the underside then, referring to the drawing in the kit (which is roughly to 4mm scale so you will have to extrapolate) drill 1mm pilot holes for the gas lamps, plus two more in the corners of the step end for a transverse handrail. Then drill the lamp-holes about 1.7mm and finally to 2.5mm; two stages to lessen the risk of tearing the brass. The drawing supplied gives no indication of the position of the lamp over the luggage compartment (all the others are on the centre line of the doors) so I guessed that it would be on the centre-line of the coach.

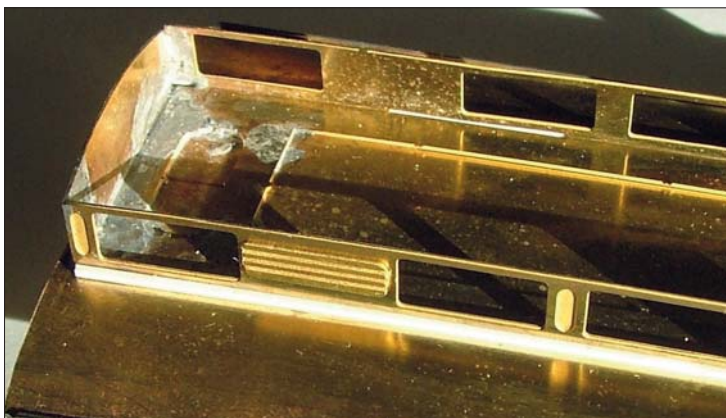
Four of the lamp-top castings supplied were badly moulded with so much flash that they were fused together, so they were ditched in favour of some less misshapen examples from my spares box. As built the E26s had a single pipe to feed gas up the plain end (offset right) then cranked to run along the left side of the roof (viewed from the plain end) to each lamp-top. 0.7mm wire is ideal for this. A second pipe-run was added for a pilot-light after about 1910, which you should add from 0.45mm wire if that is your modelling period, and there is a good photo at fig.135 in J.H. Russell's *Pictorial Record of Great Western Coaches* Vol 1 (OPC) showing the revised arrangements. Leave all this gubbins off for an electrically-lit coach, and just add the rain-strips and a commode handle at the step end of the vehicle.

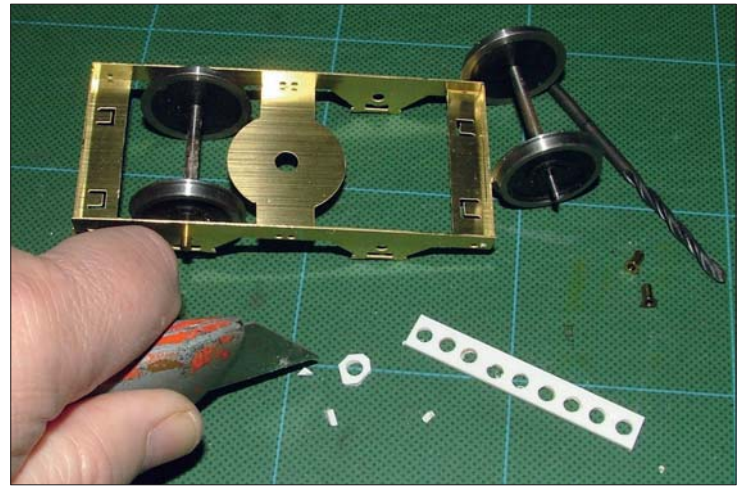
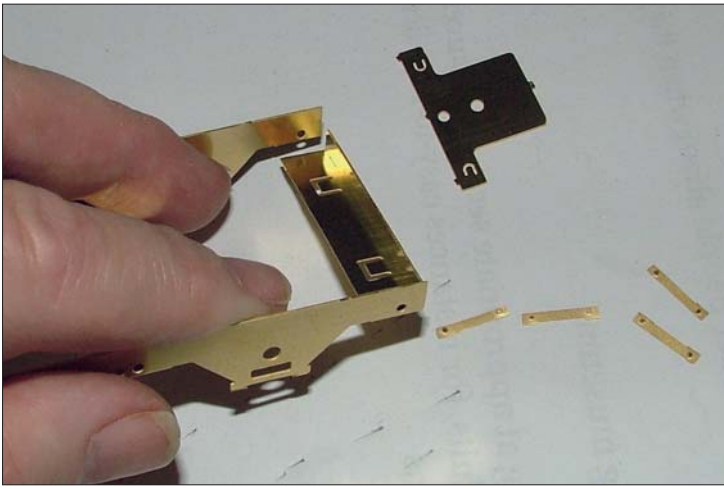
Painting the roof is not the easiest task in the world, especially if the finish is to be ex-works with white above the rainstrips, brown below and on the clerestory sides, with cream panels. A lot of masking is needed, and usually a fair amount of touching-up with a fine brush

Below left: the clerestory end which was previously cropped off the body end is reinstated between the clerestory sides. This is the non-step end, i.e. no hole for a handrail beneath the small panel at the extreme left. The horrid relieving panels at the lower edge of the sides have been disguised with 30 thou x 30 thou microstrip, and rainstrips of 0.7mm brass wire have been sweated on. The ventilators are spares from an IKB model, as this kit does not provide sufficient.

Below: the step end of the upper roof, with a curved commode handle in place at the left, and rainstrips and a gas feed-pipe sweated into position. For the model in c1910 condition onwards, a second and thinner feed-pipe for the pilot-lights needs adding parallel to the existing one but running on the far side of the holes which have been drilled for the lamp-top castings.

Photographs by the author.





Above: bogie modifications are called for. Once the basic framing has been folded up you need to sever the joint on two corners as shown, so you can prise the sideframes apart sufficiently to insert wheels and bearings. The broken joints are then re-soldered and checked to ensure that axles are parallel and all wheels touch the ground. 4mm modellers will recognise a mounting bracket for an old-style Triang/Hornby tension lock coupling. Such things don't exist in 7mm so bin the over-size component; even I, hoarder that I am, have never found a use for it. The U-shaped tabs on the cross-frames are presumably meant to help retain the girder for the volute springs but they do not have half-etched fold-lines so I ignored them and soldered the beam direct to the underside of the stretcher. There is another small change which must be made – if the frames are folded with half-etched lines to the inside as they should be, the half-etched axlebox retaining bars have their rivet detail on the wrong side, so they need to be cropped off and re-soldered, not folded through 180-degrees.

Above right: the bogie stretchers are a little too wide, so standard 7mm axles and bearings have some end slop, which is cured by drilling eight or more 3mm holes in a strip of 40 thou Plastikard and knifing them into packing washers to superglue inside the existing bearing holes. The smaller holes in the brass sideframes enable the whitmetal spring hangers to be soldered from the rear.

where spray has crept under the masks. The cream panels were achieved by holding the side walls horizontally, dropping in thinned cream paint with a fine brush, and letting the paint flood the panel and find its own level. This method is borrowed with thanks from the late, great Jim Whittaker. That is his handiwork photographed on p.72 of J.H. Russell's book and in the instructions. Prop the roof sideways and level while the paint is drying so it doesn't run downhill.

My client wanted the roof to have that elusive 'few days in service' look, so I added a final airbrush coat of matt varnish to which a few drops of a home-brewed 'grime' colour (Humbrol 98 matt chocolate with a tiny amount of black) had been added; it's just enough to tone down the glare of the Simoniz matt white aerosol and give the impression that the coach has been marshalled next to a locomotive which has had to work hard for a living.

Bogies

The bogie frame-etch looks to me as if it is a blow-up from original 4mm Mallard artwork, in fact I'm sure of it – there is a huge fixing bracket for a tension-lock coupling, nearly twice its proper size!

The enlargement of the artwork creates a problem for fitting 7mm scale axles, which unlike their 4mm equivalent do not have pin-point ends, and once the sideframes have been folded up they cannot be prised apart sufficiently to insert the wheelsets without the likelihood of causing permanent distortion. My photos show that I solved the problem. Another consequence of the blow-up is a hole for the bogie pivot-screw which is way too big and needs washing down to accept the 6BA screw provided without excess movement. The packing washer on the mother-etch (provided to give a little extra clearance between the solebars and the top of the bogie frames, thus preventing snagging on uneven track) also has too large a hole and needs replacing with a 6BA-clearance washer. The new washer should be soldered on the upper surface of the centre stretcher.

A decision also has to be made about how to allow for over-scale bogie swing, which has ramifications both for the stanchions and the bogie running boards. On the real thing the stanchions supported the whole weight of the coach on the bogies – i.e. the bogies were attached to the body at their four corners in the case of the 6'4" bogie as fitted to the E26, or between the axleboxes in the case of the 10'0" version. The bolster provided in the kit is essential for a running model but unprototypical, as there was just a small non-load-bearing pivot on the real thing to limit side movement and help guide the bogies into curves. If you use the whitmetal stanchions as supplied the bogies will foul them on all but the most modest of curves. At the very least you will need to crop off the threaded ends and knob to leave a gap between stanchion and the spring hangers, and also I removed the girders' mounting spigots and their outermost brackets and attached them firmly to the underside of the bogies for strength. Thus fettled they can move in synchronisation with the track curves.

An alternative suggested in the instructions is to attach the stanchions to the bogie, and sever them at solebar level, but this leaves

them terribly vulnerable to handling damage as they are fixed at their narrowest and weakest point, as I discovered to my cost on a previous project. One thing is sure – if your model is to sit in a glass case it can be built as per the prototype and perspective drawing in the instructions, but otherwise some detailing bits will have to be hacked off to get clearances for running on any track more bendy than a straight line.

The middle mounting bracket for the step needs to be offset left of the centre-line to clear the spring hangers, and the incorrectly-placed half-etched witness mark on the underside of the step needs filling with solder. For the brackets I used a long strip of brass scrap rather than the short brackets provided, to prevent burnt fingers, and cut the strip to length after fixing. The axleboxes only have a witness mark on the rear and need drilling out 2.5mm to take Slater's bearings. Go gently with a hand-brace, not a power-drill and solder them in place before the steps.

The newly-drawn steps, unlike the original ones you've discarded from the bogie fret, are the correct length for an ex-works coach – i.e. longer than the sideframes with a curved cut-out to clear the scroll-irons, but even on the real thing the operating authorities shortened them after a brief period in service so evidently they created problems (see Russell's *Pictorial Record* Vol 1, figs.81 and 91) and I would suggest you do the same.

Finally add the volute spring/girder castings beneath the ends, to line up with the stanchions on the body. Brake yokes are provided on the sub-etch containing the bolsters, but there are no brake-shoe castings, so consign the yokes to the spares bin. The kit contains eight small dropper castings which are not needed for the 6'4" bogie. Maskol is painted on to the wheel rims before painting with Simoniz satin black aerosol, and wheel centres are brushed with Humbrol red oxide 100 let down with a little black.

The last lap

The interior of the coach can now be glazed. The stuff in the kit was a bit curved and had a ripple finish, so I substituted some 20 thou acrylic, fixed in place with Evo-Stik. Wavy glazing material is another dead give-away that you are looking at a model; illusion destroyed



immediately. There is a plentiful supply of plastic seating, but no arm-rests.

The coach was built too early for its upholstery colours to appear in the table on p.35 of Michael Harris's *Great Western Coaches 1890-95* (David & Charles) so I opted for some old Gloy GWR loco green for first and Humbrol brown 186 for second, these shades being current about 1900, on the assumption that the coach might have had its first refit by then. Internal partitions are also brown 186.

Glazing inside the clerestory was obscured glass, which I replicated by sanding one side of the glazing material with fine wet-and-dry

Above: the completed model of the Blacksmith diagram E26 brake 1st/2nd compo from the step end.

paper. During World War 1 the clerestory glazing, not having blinds, was painted over as an anti-Zeppelin precaution, and remained thus for the rest of its life. An 0.85mm hole was drilled at the apex of each end, matching a hole in a brass tag soldered to the underside of the roof, and a track pin was inserted to hold the lower roof in place. The upper roof was glued on to the clerestory sides with Evo-Stik, and end handrails formed from 0.7mm

coiled wire, secured with superglue at the lower ends only, then painted black. Screw couplings were added, and bogies attached, then the coach trundled off on my test track for its first outing.

Marks out of 10?

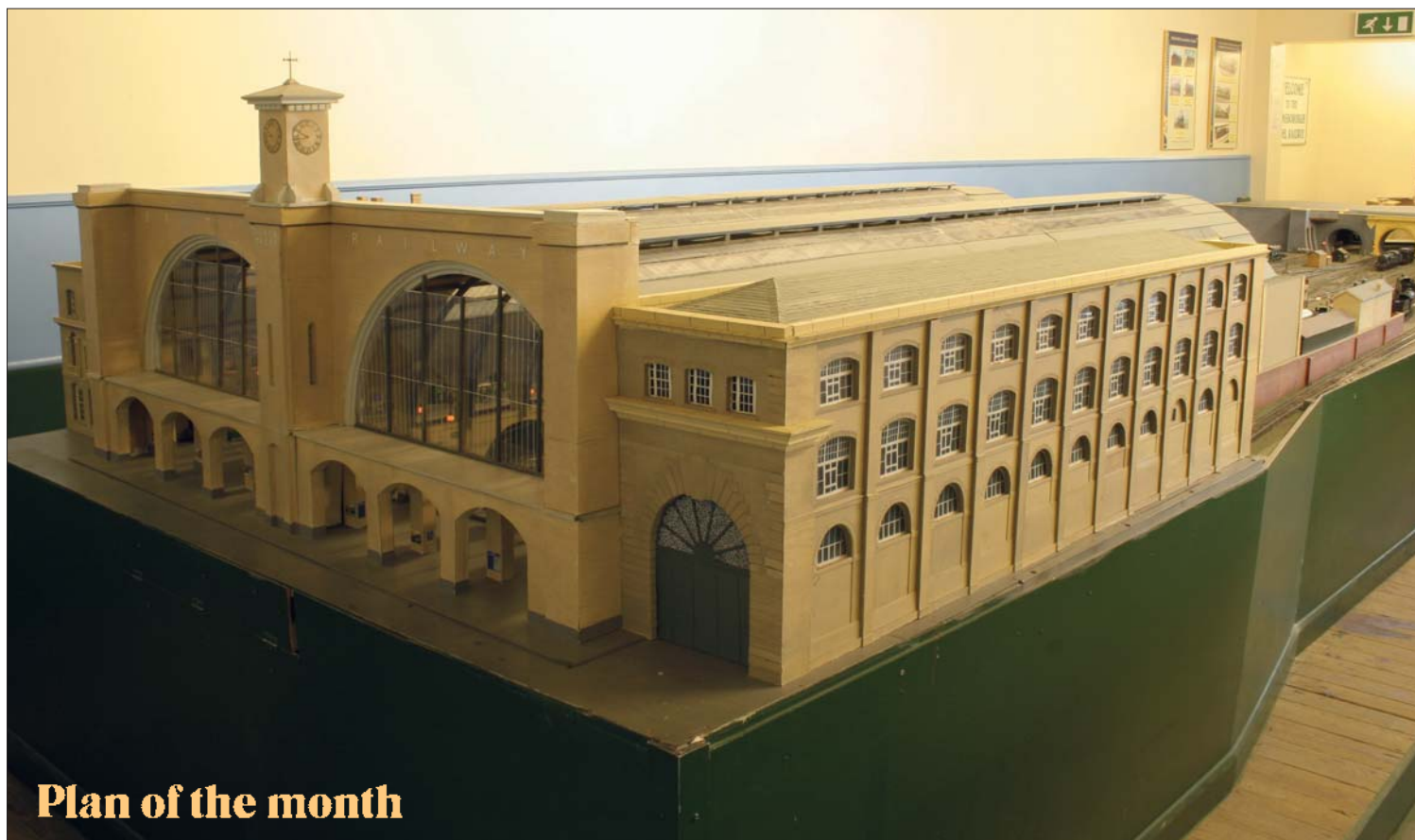
The older kits rated 7.5 out of 10 in my estimation; this new-style product is significantly improved so I'd give it 8.5. If the manufacturer were to issue a supplementary etch with a correct-size guard's look-out, a gas-switch, early pattern lamp brackets and another half-dozen ventilators it would score 9.

With the exception of battling with the look-outs it is an enjoyable project, with most parts an accurate fit and conforming to the prototype, and with the exception of the look-out error, my niggles are very minor. The end result looks like an E26, and you can't ask much more than that, can you?

Useful addresses

Blacksmith Models, 5 The Spinney, Copped Hall, Camberley, Surrey GU15 1HH. (Note new address, since the closure of Cove Models, Blacksmith's retail outlet.)
Slater's Plastikard, Temple Road, Matlock Bath, Matlock, Derbyshire DE4 3PG.
MetalSmith, Enterprise Close, Telford Way Industrial Estate, Kettering, NN16 8NS.





Plan of the month

Gainsborough jubilee

The Gainsborough MRS celebrates sixty years of its famous 0 gauge layout

The story of this extensive East Coast Main Line layout is told by **B.D. HANDLEY.**

Gainsborough is a place which is remembered as the site of the headquarters of the Danish kings, Swegn and Canute 1000 years ago; the site of a battle during the Civil War; the home of Gainsborough Old Hall, which is one of the finest and best-preserved timber-framed medieval manor houses surviving in the country; or merely just a small inland port on the River Trent, set in the flat green Lincolnshire countryside 60 miles from the sea.

Gainsborough is still a place where the nostalgic scene of the heyday of steam railways may be recaptured by the public visiting the railway of the Gainsborough Model Railway Society, which this year is celebrating its Diamond Jubilee. This is a remarkable achievement when one realises that in the whole of its 60 years of existence it has never had more than 30 members.

The railway is now housed in a redundant school building into which the Society moved in 1949 and which it bought in 1963. It was a dilapidated shell when the GMRS became the owners. Since then, members have installed an upstairs workshop, built a toilet block, fitted out a buffet, rewired the property, installed gas fired central heating, fitted suspended ceilings

Above: the model of Kings Cross is the first sight to greet a visitor. It was constructed with the aid of official British Railways plans.

Left: the unmistakable view along the platforms from the concourse. Note the quirky numbering sequence – there were no Platforms 3 or 9 at 'The Cross' in those days.

Photographs by Paul Otter.

throughout, fitted double glazed windows and replaced most of the wooden floors with concrete, all with our own labour. Experts were brought in to replace the roof!

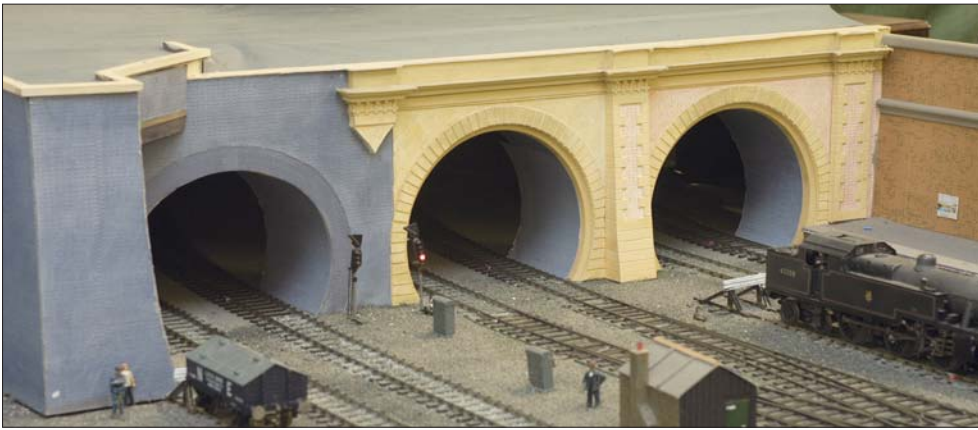
The railway represents the ex-LNER main line from London Kings Cross to Leeds Central in 7mm scale. Track is Peco throughout and all points are hand built on copper-clad sleeper strip.

The period modelled is from the end of the LNER era in the late 1940s to the end of British Railways. Outline is chiefly steam with a few early diesels. Everything running on the layout would once have been seen on the East Coast Main Line apart from one or two preserved locomotives of other regions. All models of locomotives and rolling stock have been built and painted by members, mostly from scratch,

but some wagon kits have been used to save time. Apart from two sets of coaches with aluminium bodies, all coaches are made from laminated card and some have been running for fifty years.

On entering the building the first station to be seen is London Kings Cross, the southern terminus of the railway. The famous twin arched roof and eight main line platforms with their eccentric numbering (there are no platforms 3 or 9) make for instant recognition. This is the largest and one of the busiest stations on the railway, although for reasons of space we have only been able to include a token representation of the suburban station.

Our model of Kings Cross was completely rebuilt in time for the 50th anniversary of the formation of the Society, in 1996. As much authentic detail as possible was included in the new version, but additional detail has been added since, such as platform lighting. The platform spacing is to scale built from a site plan provided by British Railways many years ago and arrangement of the trackwork in the throat of the station between the platform ends and Gasworks tunnels is as satisfactory as possible in the confined space available.



We were fortunate that British Railways' archives was able to find an elevation drawing of the station frontage for us showing the clock tower and the two huge semicircular windows which are such a characteristic feature of Kings Cross. It was built up from HD board covered with embossed brick paper from Howard Scenics and the semi-circular windows are of 1/16" Perspex lined out with a ruling pen.

The train shed walls are 10' long by 8" high and constructed of 1" thick plywood, the two outer walls having an inner layer of MDF board in which windows and doors were cut.

The 40 semi-circular roof trusses were built up from card parts on a jig after which they were given a generous coating of shellac. Each roof truss contains 24 card parts and 10 cast resin detail mouldings, so the 40 trusses needed a total of 960 card parts and 400 resin castings – much patience was needed in their construction!

The lattice footbridge which spans the platforms was built up using a hardboard deck with Slater's Microstrip used for the lattice sides.

At the north end of the platforms are the postal and canteen buildings on platform 1, the signal box with fully detailed interior and York Road station, which is to scale but with shortened platforms due to lack of space.

Gasworks tunnels in steam days were a uniformly filthy grey colour until they were cleaned with the advent of electrification when the three different coloured bricks were revealed, the tunnels having been built at different times. It is in their cleaned state that they appear on our model.

On leaving Kings Cross, trains proceed through Gasworks tunnels towards Hornsey, where, on our left we see the carriage sidings where empty stock for Kings Cross is stabled. To the right is the junction to Ferme Park, the southern freight terminal of the railway. Also on our right we see the modern coaling plant with the redundant manual coaling plant and sand drier buildings just outside the loco shed, alongside which is the breakdown crane siding.

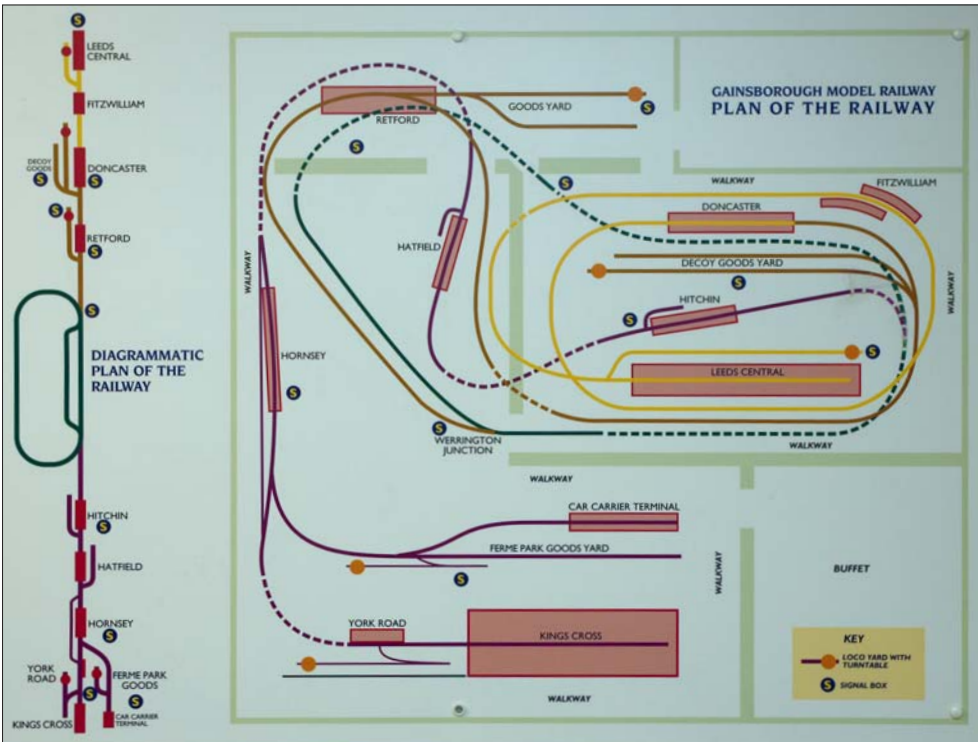
Ferme Park has extensive sidings and long arrival and departure roads together with a loading bay for car carrier services. There is also a short platform used for car carrier passengers and a local service from Hatfield. It also has its own loco yard – mainly freight engines stabled here with a few larger locos for the car carrier, express fish and mail trains.

Top left: Gasworks tunnel portals, modelled in varying colours of brickwork, as was displayed by the prototype structure once it had been cleaned prior to electrification.

Left: Ferme Park goods depot, with a bulk tank train having arrived, and a rake of vans about to depart for the north.

Above right: 'streaks' at Hornsey. 60028 *Walter K. Whigham* with Pullman cars passes 60017 *Silver Fox* under the coaling tower.

Right: Retford, with models of preserved Pacific *Flying Scotsman* and Atlantic No.990.





Hornsey is a very busy box as not only does it have to cope with main line expresses to and from Kings Cross, but also freight traffic from Ferme Park, local trains and empty stock movements for Kings Cross.

After leaving Hornsey, trains pass through a tunnel to emerge at Hatfield which has a small south facing bay platform for the service to Ferme Park mentioned above. They then make their way through another tunnel to Hitchin, situated in the largest of the three rooms.

Hitchin has two platforms and two through roads – the railway has so far been four-tracked from Kings Cross – and a bay platform which is the terminus for the local service from Kings Cross.

Proceeding north from Hitchin, trains join the continuous circuit, useful for timetabling purposes, which they leave at Werrington junction and climb the steep gradient to Retford, passing the village of Ordsall on the way, as in reality.

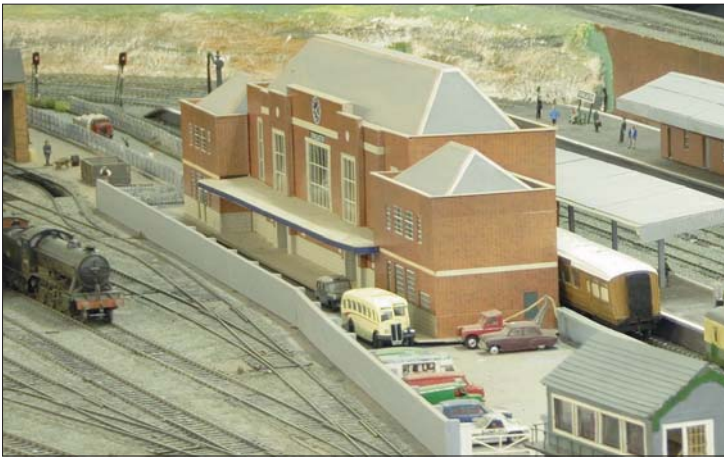
Retford is the midpoint of the railway where a number of trains change engines and from here a local service is operated north to Doncaster and south to King's Cross. A small loco depot caters for these services and a freight yard serves local industrial needs.

The platforms and buildings at Retford station on the Up side still exist, so with photographs and plans we already had and dimensions we were able to take, this side of

the station posed no problems as far as information was concerned. The island platform was a different matter, as it had been swept away to make room for the racetrack to the north, for High Speed Trains and electrics. Here we had to rely on our own plan drawings and photographs.

This was a particularly difficult station to model. The long curving roofs and the peculiar corrugated roofed areas at the north end of the island platform needed plenty of patience, but the layout of the platforms, buildings and trackwork are as accurate as space permits.





From Retford, the railway continues through open countryside before approaching the complex pointwork to the south of Doncaster.

The station has three platform roads and Up and Down through running lines, all signalled for two-way working, and a bay platform at both north and south ends used by local trains to Leeds and Retford respectively. The main station building is a replica of the real thing, having been built from drawings supplied by British Railways. Platform buildings had to be a compromise due to space restrictions, but, nevertheless, follow the format of the prototypes.

Alongside Doncaster station lies Decoy marshalling yard, the northern terminus for freight trains. Decoy has its own loco yard and shed providing motive power for both freight and main line trains at Doncaster station.

After leaving Doncaster, trains continue

Above left: Doncaster station was also constructed following BR plans.

Above right: one of the Derby Lightweight 'Hydro-Mech' DMUs forms a stopping service at Fitzwilliam station.

Below: Leeds Central, end of the line. Note the illuminated signals in the distance.

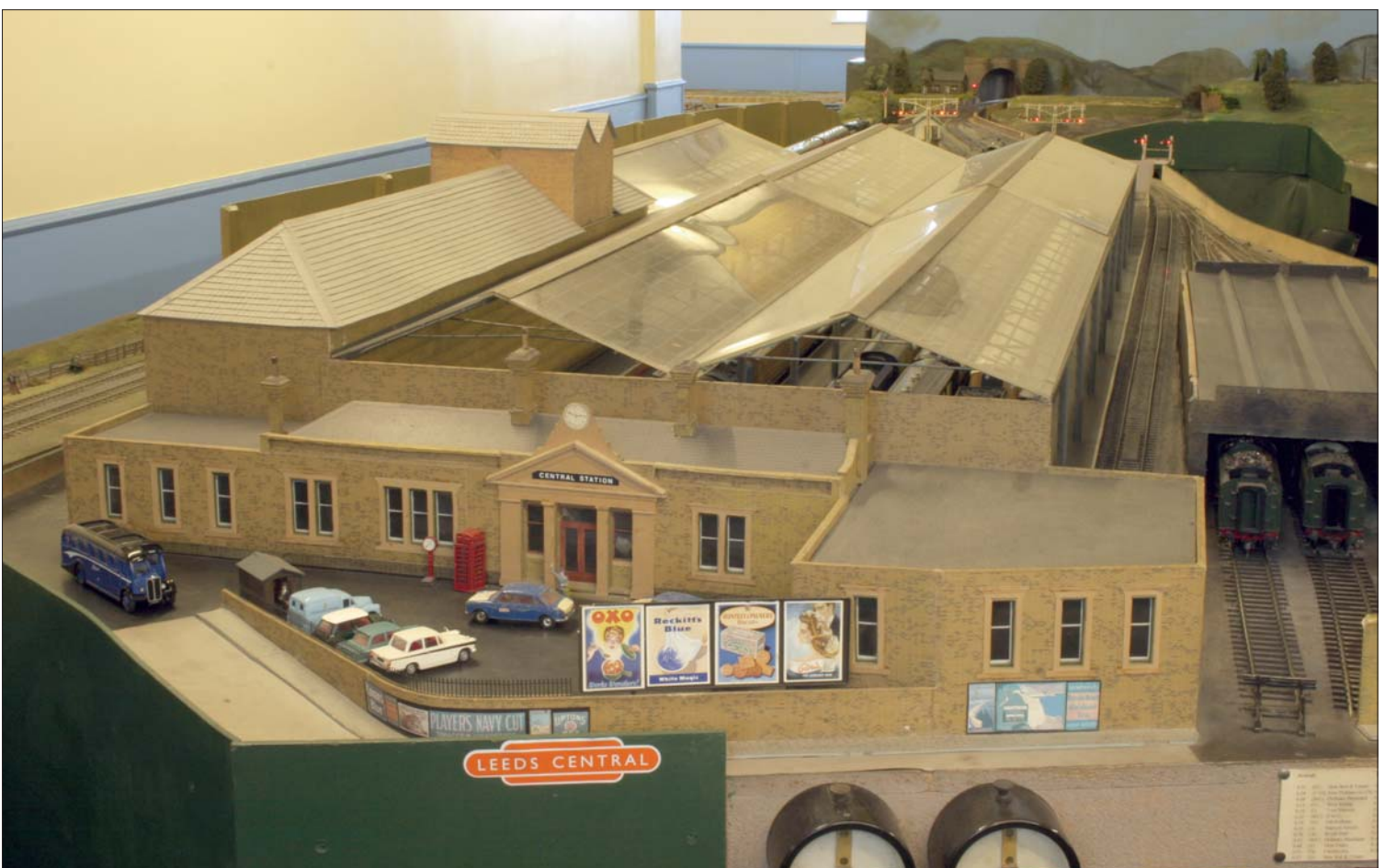
their journey through rural areas before passing over a large girder bridge – again constructed of card – and entering Fitzwilliam station, served by local trains on the Doncaster-Leeds run. We are now on the last stage of our journey and after passing through a short tunnel, arrive at Leeds Central station.

Central station was, for over a century, the Leeds terminus for King's Cross trains until closed in 1967, all services then being transferred to Leeds City station. Little trace of

Central now remains, but with help from British Railways and various other sources, our model is as accurate as possible. The trackwork, platforms and buildings are faithful to the prototype, but the loco depot and coaling plant from Copley Hill a few miles away have had to be transposed to a site adjacent to the station on our model.

In conclusion, the railway is fully signalled throughout, mainly with colour light signals but in Retford station and the Leeds area, semaphores are used. Communication between signal boxes is by BR standard bell codes with telephones available in an emergency. The railway is run to a strict timetable of one or two hours' duration, at the end of which all rolling stock is back where it started.

The Gainsborough Model Railway is at Florence Terrace, Gainsborough, DN21 1BE. www.gainsmodelrailway.ik.com





Car flats in N

Converted from Mk.I stock, as per prototype

GRAHAM SMITH reworked old Lima and Minitrix coaches to form these steam-era car carriers.

Having acquired a number of Lima Mk.I coaches that were not required, I looked for some sort of conversion project for them. When talking to the late Andy Calvert he suggested that they could be used as early BR Car Flats, with a little modellers' license. So work commenced. It seems that the early BR car delivery rolling stock was converted from redundant coaches by discarding the body and adding lateral planks with sections that dropped down over the buffers in order to drive the cars on or off.

Above: Minitrix 9F No.92204 heads south with, appropriately enough, the author's rake of converted Minitrix Mk.I coaches upon which are loaded Fleetline whitemetal Ford Anglias. The Settle & Carlisle was a regular supply route from the Scottish car plants to English distributors. Moorcock Junction, by the late Andy Calvert and now in the care of the author, was featured in RM November 2004.

Photos: Steve Flint, Peco (above) & author.

Should you wish to use Minitrix coaches, the length of plasticard in operation 3 will need to be lengthened to suit the increased length of the coach. Graham Farish coaches cannot be used as the body and floor are one complete moulding.

The conversion

1. Separate the body from the chassis by pushing in the clips you can see in the corridor connection.
2. Using the metal weight as a guide for height, trim the chassis sides over the full length. I then discard the weight.
3. Cut a piece of 2mm planked plasticard 118mm x 17mm (for the Minitrix coach make it 130mm x 17mm).
4. Use liquid poly to fasten the planking to the chassis.
5. Cut four pieces of 2mm planked plasticard 17mm by four planks.
6. Join two of these pieces, planks outwards,

and repeat with the other two pieces.

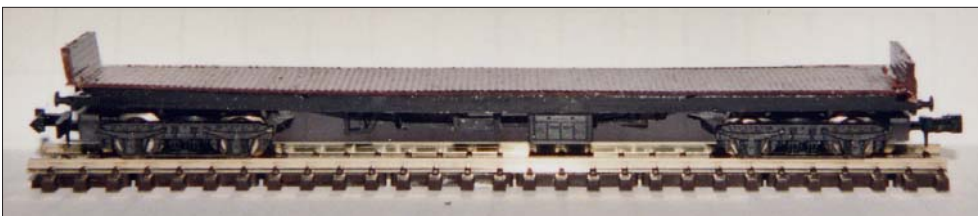
7. Now join these two small sections to the main chassis top at each end, as per the photograph.
8. Now to the paint shop: on mine the chassis is black and the planking dark brown.
9. Add cars of your own selection using Epoxy or instant glue.

You may find it easier to remove the bogies from the coach chassis before starting and replace them after painting: all you have to do is pull the Lima bogies off as they are a clip-in fit. The Minitrix bogies will have to be unscrewed (remember to put the screws where you can find them again).

The conversion is very simple, gives you something different and although it may not suit the rivet-counter, I am satisfied and able to run something different.

I have two Lima sets, one with model Minis from the N Gauge Society as the load and one empty so a returning set can be run in the opposite direction. The Minitrix conversions have Fleetline Ford Anglias on board; being cast whitemetal they are a lot heavier.

From comments, particularly from the younger visitors, when these sets have been seen on either of my exhibition layouts, they certainly create an interest: the importance of this aspect is something I learnt from the late Jack Dugdale back in the 1970s.





The Ceriog Light Railway

Heywood-style narrow gauge in 0-9

BRIAN FRYER took his liking for sub-2' gauge as the basis for this 7mm scale, 9mm gauge line.

One day a very kind fellow member of my model railway club offered me an 0-16.5 narrow gauge layout completely free. Not to look a gift horse in the mouth, I gladly accepted the offer. Hence the seed of the present layout was sown.

After a short period of use and a visit to one or two local exhibitions, a little extra variety was thought necessary. Having a few short lengths of 009 track and with the purchase of a secondhand Minitrains dock tank chassis, a short end-to-end track in 0-9 scale was set up along the front of the layout. The dock tank had a very much modified Dapol Pug body added, minus a cab roof. The tender and a few items of rolling stock were constructed using Peco N gauge wagon chassis and scratchbuilt plasticard bodies.

The problem was, that it was all done on the cheap and it showed in every possible way, from the quality of operation to the finish on the scenics. In fact the entire 0-9 extension

only cost about £30 and £20 of that was for the dock tank chassis! First lesson learnt. Never skimp on quality materials when building your layout. The final straw came when the whole 0-9 extension drooped at such an alarming angle from the horizontal off the front of the layout, that no trains would obey the laws of gravity and stay on the layout, let alone the track.

With that, I had to decide. Was it going to be 0-16.5 or was it going to be 0-9, in the future?

I have always had a fascination for the railways of Sir Arthur Heywood and his belief in 15"-18" gauge railways being able to perform a real passenger function. So, 0-9 it had to be. The original 0-16.5 layout was consigned to the garage roof and the 0-9 extension was subjected to a major refurbishment.

It was just before this stage was reached, that I was lettering an 0-16.5 bogie wagon with what should have read 'Ceiriog Stone Co. Ltd.' only to leave the first 'i' out of Ceiriog. And so

out of a droopy baseboard extension and an erroneously-lettered wagon, the Ceriog Light Railway was born.

The layout was then altered to a 'roundy-roundy' type configuration. However the second lesson was learned when a club member pointed out, in a constructive sort of way, that the rear of the layout was twice the size of the scenic area at the front. Lesson – always welcome constructive criticism. Consequently 6" of extra baseboard width was added at the front of the layout, to correct the imbalance.

Above: Bryn-Dinas station and yard. No.7 is arriving on an up mixed train. Nos.3, 5 and 9 are in the yard.

Above right: branch shuttle tram No.9 and trailer waiting to leave Bryn-Gwynant (Ceriog). The ganger has broken the track by the platform starter. What – no banners and dets!?

Photographs by Steve Flint, Peco Studio.



Still too little was going on to hold the attention of people at exhibitions. In order to increase interest a branch was added to a fiddle-yard at the left hand end (as viewed).

Being the sole operator, normally, at exhibitions, this proved too much to deal with on my own, so alternative improvements were sought. Instead of the branch fiddle-yard, an entirely new board was added to enable me to do four things. Firstly, to construct a high level branch. Secondly, to provide a passing loop at the front of the layout, as well as a loco shed and sidings to enable me to display more stock. Thirdly, to convert part of the old circuit to automatic operation, in order to keep something running all the time. Fourthly, to provide more storage loops in the fiddle-yard.

All this extra construction was basically a bolt-on to the original layout. This was making the layout very heavy and unwieldy for setting up and taking down at exhibitions. I therefore concluded that further extensions would not be a wise move.

Baseboards

These are of 6mm chipboard screwed and glued to a framework of 2" x 1". Boards are located by pattern makers dowels and bolted together with No.8 bolts, washers and wing nuts. The whole layout, which measures 11'6" x 2', rests on four supports bolted to the underside and again made of 2" x 1" and stiffened with horizontal wooden battens.

Track

Track and pointwork in the scenic area is Peco 009 flexible track painted track colour and rust. Behind the scenes, track is mostly N gauge flexible track with some Setrack. Points in the scenic areas are controlled by push-rods either on top of or underneath the baseboards, and made of plastic rod or straightened out coathangers.

Electrics

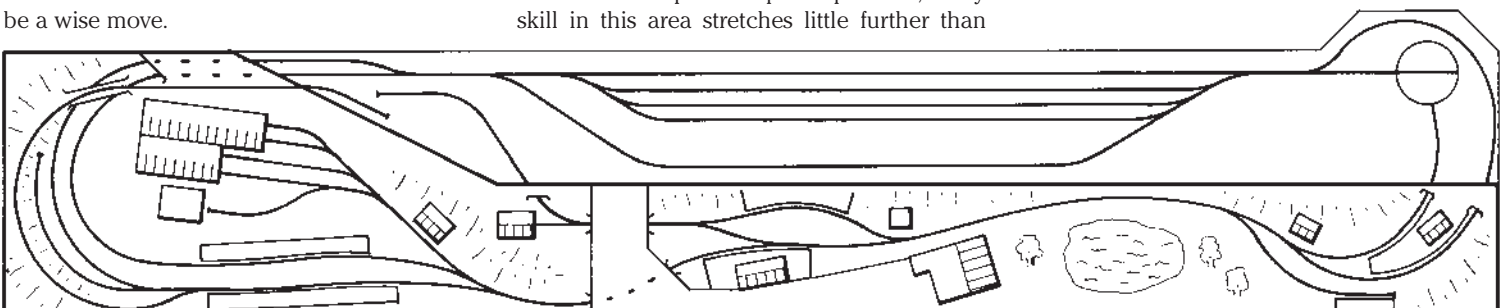
Electrics are kept as simple as possible, as my skill in this area stretches little further than

wiring up a 3-pin plug. In fact it is more a case of 'stick this wire here and see what it does', if anything! It is small wonder I have not done myself harm before now! Controllers are Gaugemaster walkabouts with 8' leads, needing care not to trip over, thereby bringing the whole layout down on top of me! A Gaugemaster high-frequency track cleaner helps with the general smooth running and electrical detection.

The Tram shuttle runs from a separate ex Hornby controller/transformer, working through the shuttle unit. This controller also powers the lighting in the buildings.

Buildings

These are a mixture of kit and scratchbuilt models. The joy of this scale is in the fact that 'what looks right is right'. Quite a large number of 4mm and even 2mm scale items can be adapted for 0-9.





The signals are 4mm scale Ratio lower quadrants, and are operated by the conventional spring and string method as supplied with the kits. The bridge on the high level branch carrying it over the main line is a 2mm scale Knightwing kit.

The loco and carriage sheds are Ratio 4mm scale kits, slightly modified. The water tower by the loco shed is the familiar 4mm scale Dapol kit. The garage is a Classic Commercials 7mm scale card kit, cut back slightly to fit the space. Classic Commercials accessory kits provide the garage details.

The signalbox at Hendy Junction was constructed with balsawood overlaid with Slater's embossed stone plastic sheet, the gaps being filled in with Milliput. Internal detail is provided by a Springside detailing kit. The road bridge at Bryn-Gwynant (Ceriog) is a balsawood structure overlaid with DAS modelling clay, scored and painted.

Other buildings include the signalbox at Bryn-Dinas. This is a Port Wynnstay kit with added internal detail. The tram loco shed at Bryn-Gwynant (Ceriog) and the station building at Hendy Jn. are both Bramble Line kits, but are unfortunately no longer available. The station building at Bryn-Gwynant (Ceriog) is scratchbuilt, also with added internal detail.

Scenery

Scenery is mostly constructed using poly-foam packing glued down and cut to shape with a Stanley knife. This is then covered with a mixture of DIY filler and poster paint.

Trees are a mixture, some being from 4D Models and are superb if a little expensive. Various materials from Green Scene, Woodland Scenics and Javis add foliage detail.

I have used a lot of real stone on the layout. This is green slate collected from waste laying around near the slate quarry at Honister Pass in the Lake District. Nothing seems to replace the effect that real stone can create on a layout provided it is used in moderation, as the weight of the layout could be increased significantly, if overdone. Fencing on most of the layout is from Slater's.



Ceriog Light Railway locomotive roster

<i>Locomotive</i>	<i>Details</i>
0-4-0STT No.1 <i>Wren/Robin</i>	Springside Horwich Works body kit, Arnold chassis
0-4-0STT No.2 (Porter Type)	Scratchbuilt body, Bachmann chassis
0-6-0STT No.3	Dapol Pug body (modified), Minitrains Dock Tank chassis
0-4-0WTT No.4 <i>Dot</i>	Springside Horwich Works body kit, Fleischmann chassis
0-6-0DE No.5 <i>Shelagh</i>	Scratchbuilt body, Graham Farish chassis
0-4-0DE No.6	Bramble Line body kit, Graham Farish HST power bogie chassis
0-6-0STT No.7	Dapol Pug kit (modified), Lifelike chassis
0-6-0 (Tram) No.8 <i>Ursula</i>	Avalon body kit, Graham Farish chassis
0-4-0 (Tram) No.9	Avalon body kit, Halling chassis
Bogie Railcar No.10	Avalon body kit, Bachmann Brill chassis
0-4-0ST No.11	Springside Horwich Works body kit (unfinished)
4W Tram Car No.14	Gnomy body (modified), Kato chassis

Left: railcar No.10 and trailer pass the back of the sheds at Bryn-Dinas. No.6 and brake van cross the high level branch bridge.

Lower left: railcar No.10 and trailer passing Hendy Jn. GF. Looks as if the attention of the building department is required to repair that guttering. Straw in the sheep pen is from sisal string and the reeds are brush bristles.

Right: the branch shuttle tram No.8 and trailer departing Bryn-Gwynant (Ceriog). The poster board in the right distance reads, *Fast and Frequent services to the Ceriog Valley.*

Below: 0-4-0WTT No.4 *Dot* on a down stone train passing Hendy Jn. This is what sustains the line in financial stability.

Rolling stock

Coaches, vans and wagons, which now number well over forty items, initially had scratch-built bodies on Peco wagon chassis, until body kits started appearing on the market.

However it is nice to scratchbuild sometimes, in order to have something a little different. The trailer car that runs with the tram is a case in point. This has a scratchbuilt body and runs on a second-hand boxcar chassis.

Locomotives

As with stock the locos run on proprietary chassis and have either scratchbuilt or kitbuilt bodies as detailed in the table.

The future

Finishing the full signalling of the layout is quite high on the list of priorities, together with improvement in the quality of the trees. Somewhere to run my 0-16.5 stock is an aspiration, but will have to be thought about very carefully, as the capacity of the garage and the car is very nearly exhausted. Extra detailing is always a possibility, but if overdone, then the narrow gauge, rural character of the layout could easily be lost.

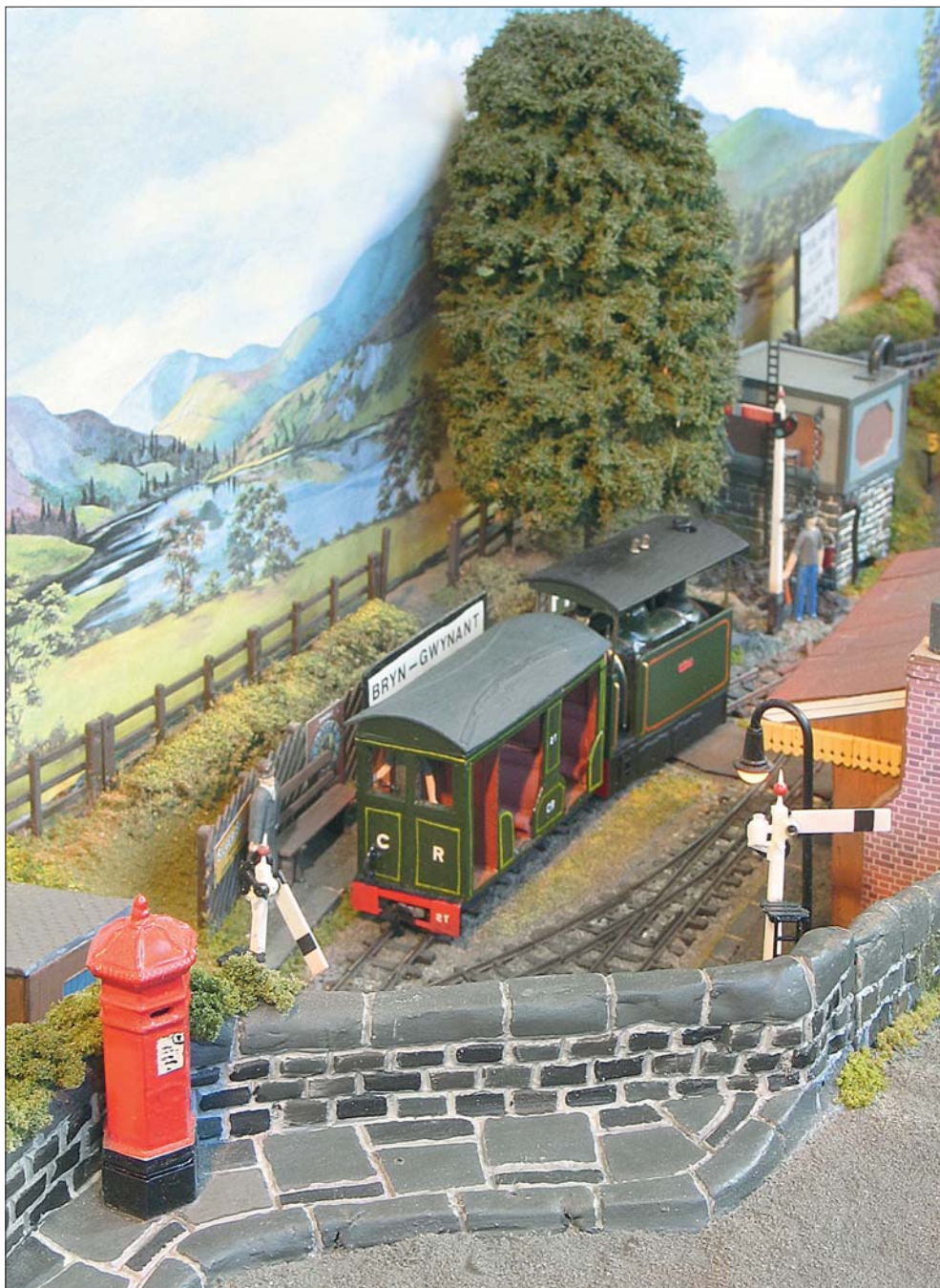
I am a firm believer in leaving some detailing of layouts to the imagination. The brain can fill in lots of gaps left by lack of detail, just like an impressionist painting. The layout can then become what we want it to be in the eye of the beholder. Everyone will see things differently. Too much detail leaves little for the imagination to work on. This leaves little food for thought for the potential layouts of others. All that sounds a little deep doesn't it? Maybe it's a cop-out on my part to save a bit of work!

Acknowledgments

As ever there is a string of people who deserve recognition. First is my wife Wendy, for all the support and encouragement that has got the development of the layout to its present state.

Secondly, to the Market Deeping Model Railway Club members past and present, for all the advice and assistance they have given to a person like me with strange tendencies towards narrow gauge, over the years. If you are not a member of a club, I can strongly recommend it.

The Ceriog Light Railway is booked to appear at the Cleethorpes show on 6 & 7 May. Details in *Societies & Clubs*.



MGWR No.117 *Moy*

A broad gauge excursion in H0 scale

DAVID BARBER combined 3.5mm scale and EM gauge to represent the Irish 5'3" standard.

The Moy is a renowned salmon fishing river in the west of Ireland. In 1894, its name was given to an attractive little tank engine. The MGWR (Midland Great Western Railway) was the third largest railway in Ireland, and a major constituent of the Great Southern Railways (GSR) which was created by amalgamation in 1925. Coming under government control in 1945, the Great Southern became Coras Iompair Eireann (CIE). Nationalisation followed in 1952 and today, the remaining parts of the Midland (as the MGWR was known in Ireland) are embraced by Iarnrod Eireann (IE). *Moy* alas is no longer with us but it survived for 69 years, through the GSR era, to CIE and the end of steam in Ireland.

It was the last of the twelve Class E 0-6-0 branch line tanks, designed by Martin Atcock and built by Kitson (nine) and Sharp Stewart between 1891 and 1894. A Kitson-built engine, MGWR No.117 *Moy*, along with the other Class E engines, became a J26 in GSR days. They had their nameplates removed and were given new numbers; *Moy* became plain No.562. Withdrawals started with No.551 (ex-No.106 *Lark*) in 1954, and No.562 with No.560 (ex-No.115 *Achill*) were the last to go, of the three that made it into 1963.

My introduction to the J26s was through one of Tim Cramer's Irish Miscellany articles entitled *Small but Sturdy* (Model Railways October 1976). The 7mm scale drawings, photos and a short description were enough. I fell for their looks and an excursion into the Irish broad gauge was very tempting. I remember telling myself that a small 0-6-0 tank engine, only moderately detailed wouldn't take too long to build. I was right, only three months, but it took nearly 30 years to get started.



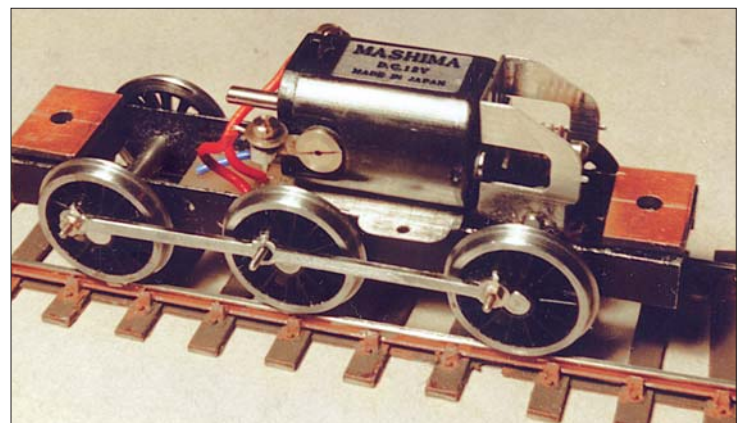
Irish broad gauge in H0-18

One of the reasons I went EM was to get away from the 'narrow-ish gauged' appearance of 4mm scale stock on 00 track. With the 5'3" Irish broad gauge it would be the same, unless I went to the correct 21mm for 4mm scale. New track then, not that seemed like too much work. The idea lay dormant until I saw a photo of another Class E when new: it showed the numbers on the sandbox and the nameplate, all in brass. My interest was rekindled so I looked out Tim Cramer's drawing again, and then it hit me! Build the engine to 3.5mm scale to run on EM track, or 'H0-18'.

Simple, I decided: for track and wheels, use the existing EMGS standards for EM, but build the engine to 3.5mm scale. Divide 18.2 by 3.5, the answer is 5.2, which is almost perfect for the Irish broad gauge, and is nearer in fact than EM is to the British standard gauge.

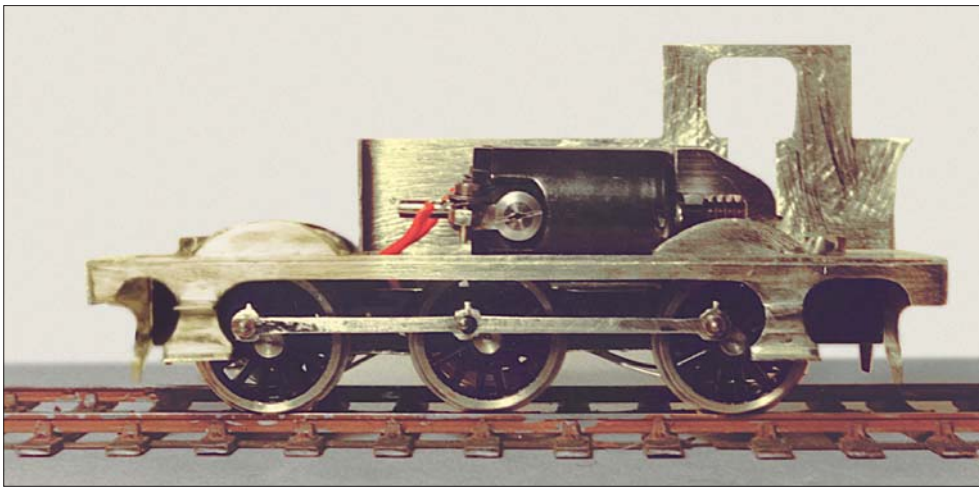
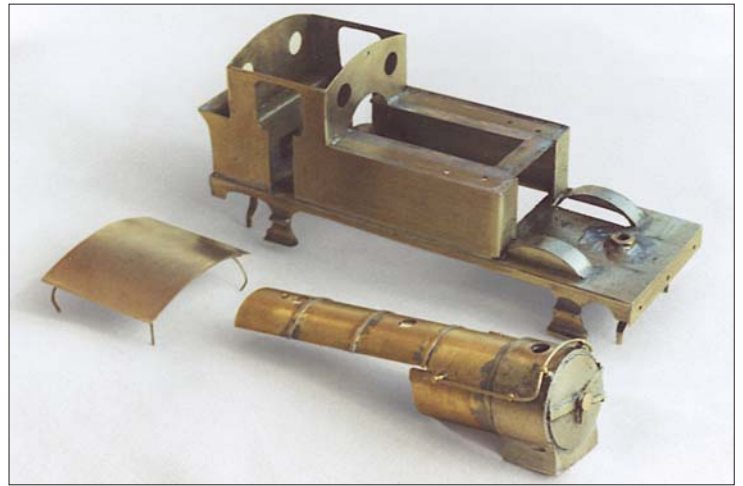
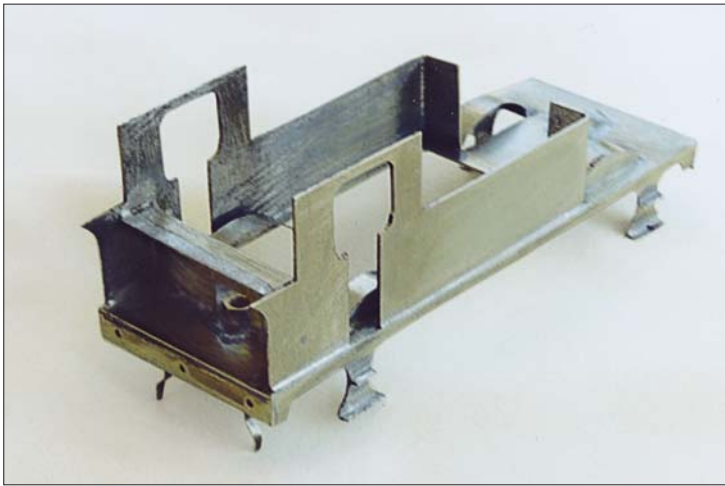
H0-18 it must be; no more excuses, plenty of small motors are available, and the Sharman Millimetre Range wheels are ideal. My existing EM test track with its Y point and 2'10" radius reverse curve would be fine.

The long wait over, I got on with it and between April and June 2004 had *Moy* completed, in H0-18.



Above: the model is driven by a Mashima can motor.

Left: one of the several Class E tanks to be drafted to the Waterford & Tramore line brews up at Waterford in the early 1950s. Note the style of steps and enlarged bunker on these locomotives. Photo: Alan Pike.



Clockwise from left: the completed chassis was checked for clearance by the tank sides. The bunker and sides were constructed first. The superstructure in its three main sections.

Model photographs by the author; heading photo by Steve Flint, Peco Studio.

Getting started

Nothing complicated I had decided, just a simple 0-6-0 tank engine, but not another old black engine. I wanted *Moy* to be young and smart in MGWR green livery, lined with brass numbers and its name shining from the centre of the side tanks. It must be 80 years since the nameplates went and it became yet another plain black engine.

So what was the shade of emerald green? A painting by Hamilton Ellis in his book *The Trains We Loved* shows the MGWR 2-4-0 *Sylph*, on the Clifden line. So that was the colour to try and match. It was in Jonathan Beaumont's book *Rails to Achill* that the photo of another Class E engine, No.110 *Bat*, appeared. So with drawings, photos and the painting, I had enough to finalise the model's specification and at long last make a start.

Building *Moy*

First, the shopping list for the chassis. The motor would be a Mashima, as I have used them successfully in other engines. The gearbox; probably a High Level because of their compact design and multi-stage reduction. I already had 1/8" axle bushes, but would need the Sharman wheels and axles.

To check how all this could be fitted inside the small body, I made a 3.5mm scale side elevation drawing of the engine on graph paper. A Mashima 14mm x 20mm flat can motor could be mounted on its side, to drive the rear axle through a High Level Road Runner Plus gearbox. The motor and gearbox would fit

totally within the outline of the side tanks and be almost invisible inside the cab. Dimensions and specifications of the motor and gearbox were found in the EMGS Manual, which I also used to decide which of the three gear ratios offered would be most suitable. I chose the 54:1 option which, with the motor developing its maximum power at 9000rpm, would give a scale speed of about 26mph. The wheels were the 15mm diameter Sharman M321, a little small for 4'6" but the nearest available.

At the start, *Moy* was intended as an excursion into the Irish broad gauge but the model became an experiment into H0-18. Basically, it meant fitting an EM gauge mechanism into the bodywork of a small 3.5mm scale engine. I stayed with the plan to keep it simple; nothing too serious like split-axle pickup and a sprung or compensated chassis. The centre axle was however located 0.010" higher than the outer axles. This technique, on an 0-6-0, reduces the tendency of the engine to see-saw on its centre axle on uneven track; a cause of poor pick-up and jerky running.

It did not take long to get the mechanism together: that is, the bushed frames and spacers assembled and the axles, wheels, coupling rods, gearbox and motor in place. With the motor mounted on its side, it was easy to remove it from the High Level gearbox. This permitted the worm gear engagement to be set after all the mechanical parts had been checked for free running.

Mechanically fine; next electrical. I fitted pick-ups to all six wheels, set to rub lightly on

the wheel rims; just enough to maintain contact, but not become brakes. Two wires from the pickup mountings to the motor terminals completed the electrical work. I placed the new mechanism on the test track, turned the controller and my luck was in: it went in the same direction as my other engines. I did not have to change over the wires.

Mechanically and electrically fine; now for the final stage, cosmetic. In other words, to make this motor on wheels look like the young *Moy* might have done 100 years ago. The only purchased items for the body were handrail knobs and boiler bands (Alan Gibson), and the buffer heads (C&L). The rest is mainly nickel silver sheet, 0.020" for the footplate and valances, 0.010" elsewhere, and a piece of 17/32" brass tube for the boiler; all from Eileen's Emporium. Odd bits of round brass bar were turned up for the buffer shanks and boiler fittings. The body construction was just the same as any other 4mm scale engines I had built, only 7/8 size.

Amongst the interesting bits were the engine's numbers: as mentioned, the MGWR had them in brass fitted on the sandboxes. Luckily, the numbers 1 and 7 have no curly bits and were shaped with the piercing saw and needle files.

The painting was entrusted to a friend, well skilled in the arts of airbrushing and making transfers for lining. Finally, 247 Developments nameplates were added to the tanksides.

What next?

Building *Moy* has been an interesting journey and now; well, with four modified Brassmasters Cleminson 6-wheel chassis kits awaiting their bodies, who knows? A few goods wagons, maybe a Class K 2-4-0 with its fly-away cab, then perhaps a layout based on the Clifden Branch, to 1:87 scale of course, in EM gauge.

For more about the MGWR, see The Midland Great Western Railway by Ernie Shepherd (Midland Publishing, ISBN 1857800087) – Ed.



Scale drawings

LNWR 18" Express Goods 0-6-0

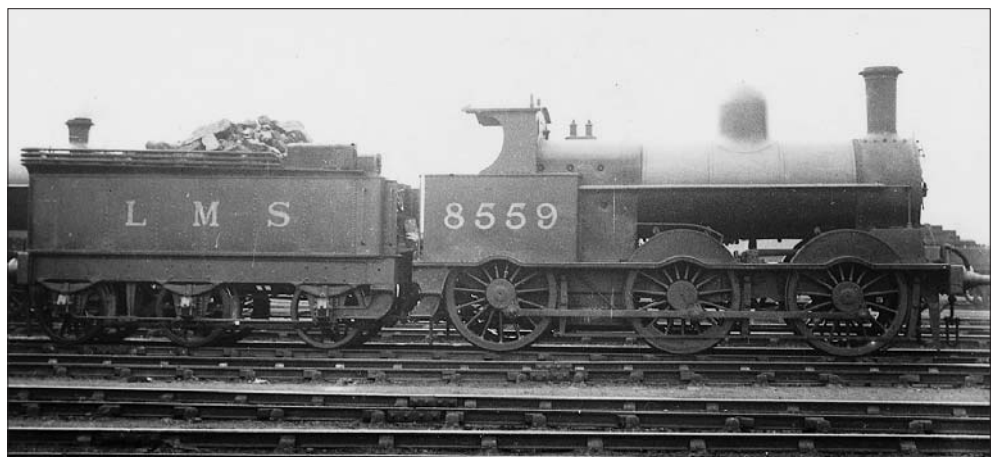
The 'Cauliflowers', drawn and described

IAN TATTERSALL presents plans and a history of the Webb 'Crested Goods' locomotives.

Francis William Webb became CME, or Locomotive Superintendent as it was then known, of the London & North Western Railway in 1871 in succession to John Ramsbottom. Although derided in some quarters for his adoption of compounding and the supposed failings of his compound engines, he was a very capable engineer who turned out a number of very simple and successful locomotive designs.

One such was the 18" express goods 0-6-0 commonly known as 'Crested Goods' or 'Cauliflowers'. The nickname(s) arose because of the company crests on the centre splashers of the coupled wheels, which were said to resemble a cauliflower. Designed, as the name implies, to handle express goods traffic, they were found to be very useful mixed traffic engines and were frequently found on passenger trains.

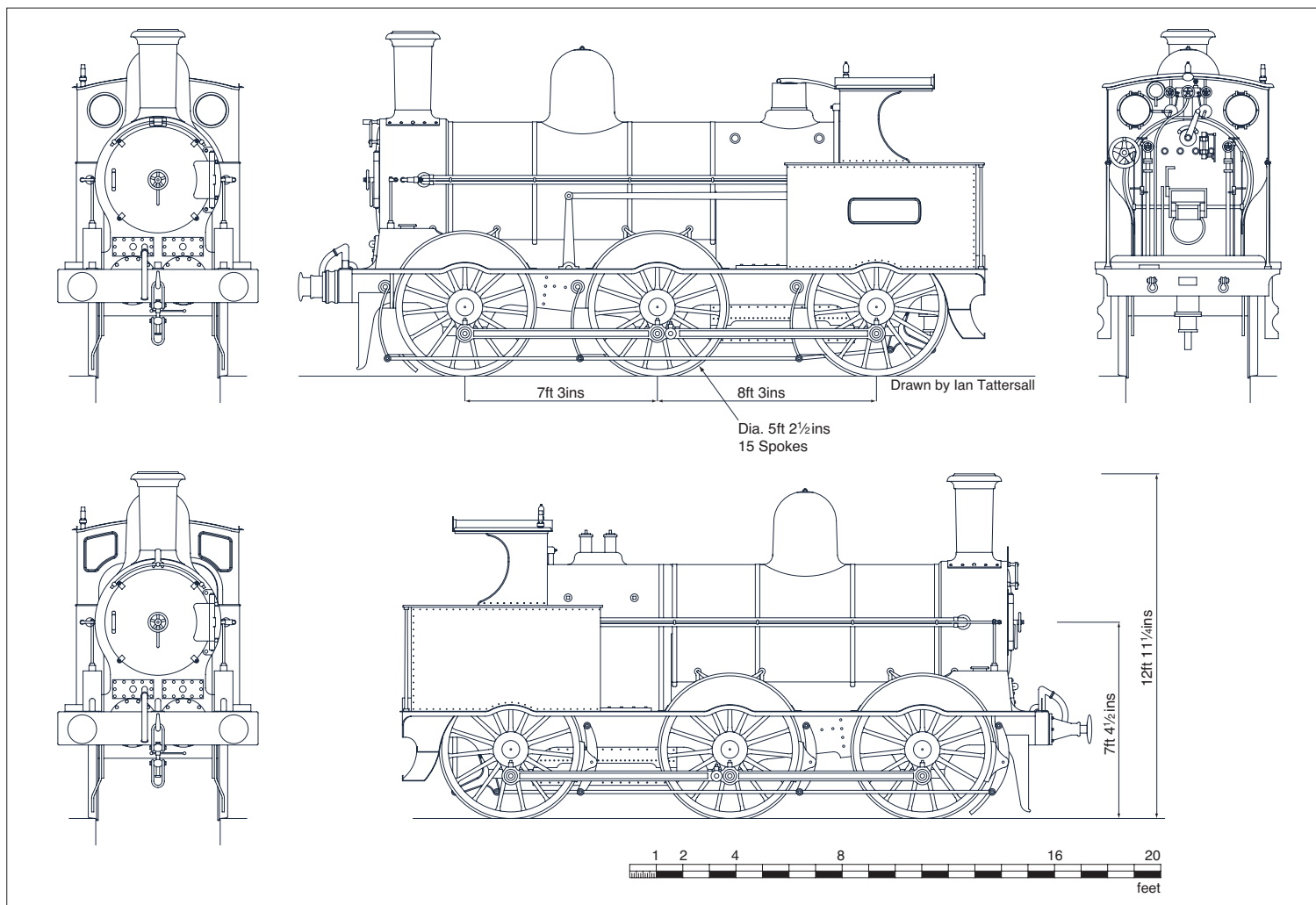
Introduced in June 1880, 310 'Cauliflowers' were built, the last in 1902. 308 were passed on to the LMS in 1923 and 69 survived to the British Railways period, the class becoming extinct in 1955. The design featured 18" x 24"



cylinders (which accounted for the official title), boilers of the type fitted to the 'Precedent' Class 2-4-0s and 5'2½" coupled wheels (officially 5'0" as the LNWR quoted coupled wheel diameter to the nearest 3" below).

The prototype, numbered 2365, featured a lagged smokebox, a water-bottom firebox in

place of a foundation ring, a boiler centreline of 6'10⅛", a horizontally-hinged smokebox door, a wooden bufferbeam, cast-iron coupled wheel centres with H-section spokes, and – as was then the practice with goods engines on the LNWR – no brakes on the engine. It was the first locomotive on the LNWR to have Joy's valve gear.



Heading: a fine front three-quarter view of LMS No.8451 (built as No.1491 in March 1893), taken at Rugby shed on 12 May 1934.

Left: a broadside view of No.8559 (vintage November 1900, as No.458) on Aston shed on 29 September 1932.

Photographs: the late W.G. Boyden, courtesy Frank Hornby.

After trials with 2365 a further nine engines were built in 1882. Photographic evidence is lacking but these engines also had cast-iron coupled wheel centres and it is thought, horizontally-hinged smokebox doors but not lagged smokeboxes or water bottom fireboxes. There was one significant change from the prototype engine: the boiler centreline was raised to 7'4 1/4", to allow easier access to the valve gear.

The next batch, built in 1887, differed in having conventional spoked coupled wheels with steel centres, and circular smokebox doors. No further 'Cauliflowers' were built with cast-iron coupled wheel centres. The wheelsets were interchangeable and long-lasting, however, and at least one 'Cauliflower', No.28458, had cast-iron coupled wheel centres as late as 1948 (see Essery & Jenkinson vol.2 plate 224). The 'Cauliflowers' with the cast-iron wheels were known as duck-footed 'Cauliflowers' or simply 'duckfoots'. This batch and all the succeeding 'Cauliflowers' were fitted with brakes from new, the brake blocks being wooden. The engines were steam-braked but were provided

with vacuum for working vacuum-fitted stock. The simple vacuum brake had been adopted by the LNWR in 1883, and was replaced by the automatic vacuum brake from 1887.

The fourth batch of 10 engines, completed in 1892, was built with 17" diameter cylinders. After the completion of this batch, a slight change was made to the shape of the frames between the leading axles. On all later engines the frames were slightly deepened and shaped where the motion plate was attached to them.

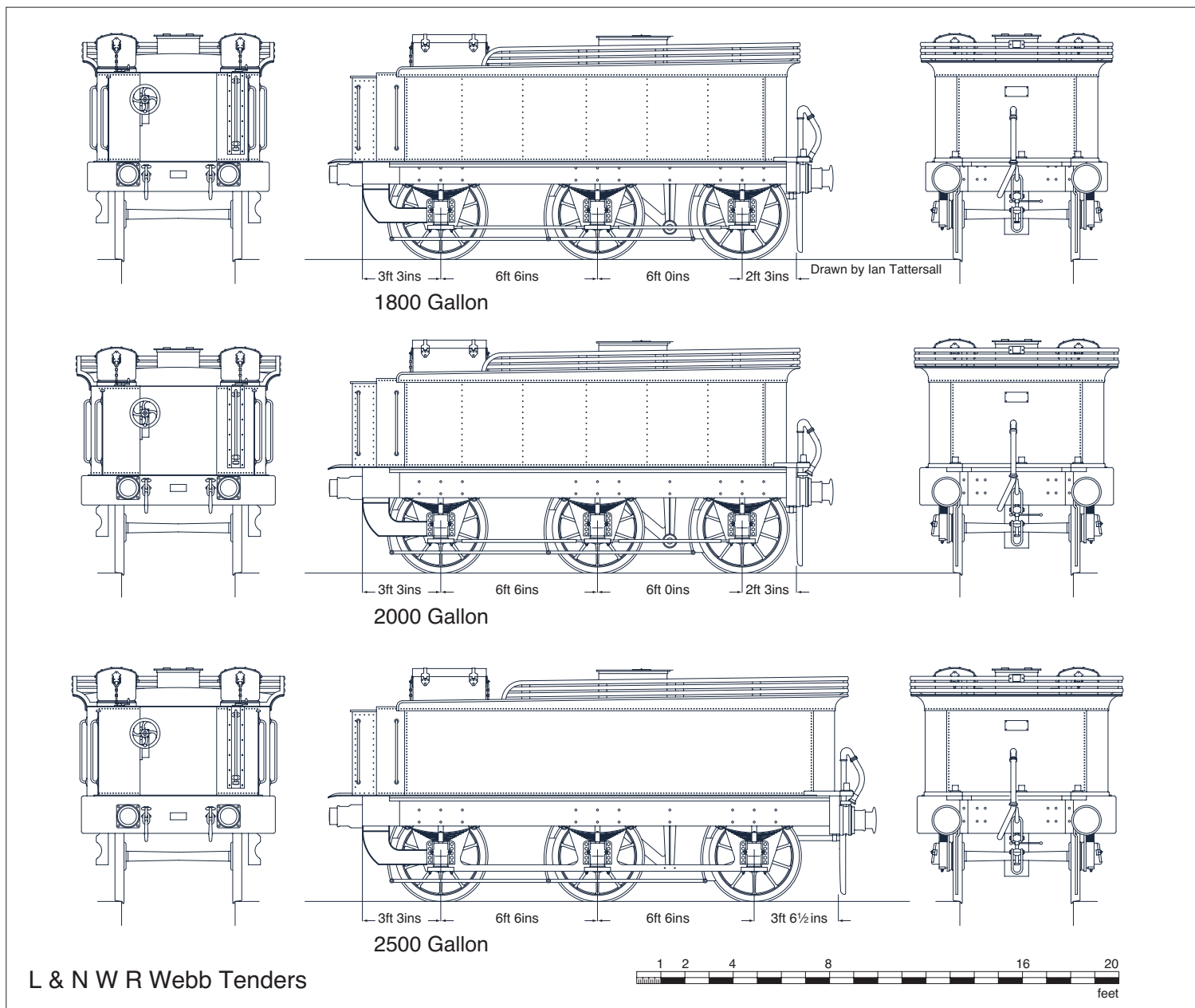
The last batch of thirty engines was originally planned to be 18" ('Watford') tank engines and was built with piston valves rather than the slide valves fitted to the other 'Cauliflowers'. The piston valves were later replaced with slide valves. This batch also had frames which were slightly deepened, as on the 'Watford' tanks, to accommodate the brackets supporting the side tanks.

As mentioned above, the last 'Cauliflower' to be built appeared in 1902, and after that date the LNWR did not build any more 0-6-0s, concentrating instead on the production of eight-coupled engines for goods traffic. Many LNWR enthusiasts consider this to be evidence that the company was superior to other railways. Whilst I myself am one, I have to point out that 0-6-0s of Midland and L&Y design had to be imported into former LNWR areas by the LMS to make up for the shortage of 0-6-0s created by the withdrawal of elderly indigenous engines of that wheel arrangement.

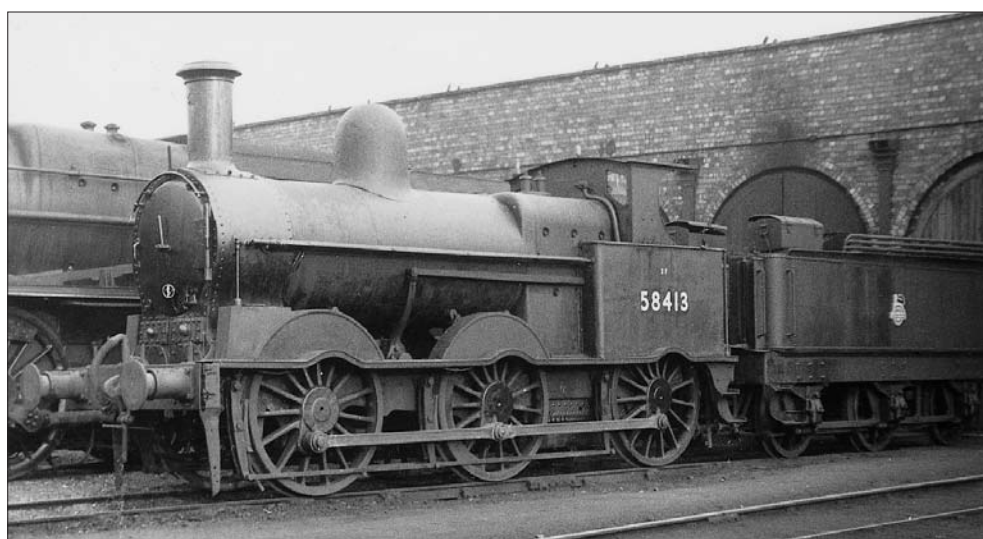
With a class of locomotives which had such

a long history, several but surprisingly few modifications were made, if for no other reason than the replacement of worn-out parts with more up-to-date ones. Brake blocks were gradually changed from wooden to steel, and the Webb buffers were replaced by Whale and Bowen-Cooke types. Until 1898, 'Cauliflowers' had been built with plain-section coupling rods. The batch built in late 1898 had introduced fluted coupling rods to the class and the earlier plain-section rods were gradually replaced.

The most noticeable changes occurred during the LMS period. These were the introduction of a Belpaire firebox and Ross pop safety valves in place of the original Ramsbottom pattern. Whilst the change of safety valves was universal and permanent, the change to Belpaire firebox was not and engines were known to change from round-top to Belpaire and back again on successive works visits. Additionally, it was not unknown to find an engine fitted with a Belpaire firebox whilst retaining wooden brake blocks. Several had their cylinders lined up to 17" diameter before grouping, these engines were regarded as power class 1F by the LMS and numbered 8315-8327. The engines with 18" cylinders, numbered 8330-8624, were regarded as power class 2F. In time some of the former engines reverted to 18" cylinders so the distinction in numbering became meaningless. The running numbers during LNWR days was, as always, haphazard.



Below: end of the line for BR No.58413 (ex-28555, *néé* LNWR No.451 of November 1900) photographed outside the paintshop at Crewe works after withdrawal on 21 January 1954. The other locos seen in this article lasted until January 1954 (No.8451) and November 1953. Photograph: Frank Hornby.



In 1940, the LMS placed the surviving members of the class on the duplicate list and altered their numbers by the addition of 20,000 e.g. No.28458. This was the result of the 84xx numbers being reused for the large numbers of Stanier 8F 2-8-0s being built from this

date. Under British Railways, the 69 surviving engines were allocated Nos.58362-58430 but many did not actually receive them.

On building and during the LNWR period, these engines were paired with Webb 1800 gallon tenders. Webb had designed larger tenders, firstly of 2000-gallon and later 2500-gallon capacity. The 2000-gallon type was built for the A Class 0-8-0s, and the 2500-gallon type in 1902, initially for the 'Alfred the Great' Class and also for the B Class 0-8-0s. During LMS days, the withdrawal of the passenger engines fitted with Whale and Bowen-Cooke 3000-gallon tenders allowed their tenders to be attached to the 0-8-0s and the Webb 2500-gallon tenders to be cascaded down to the 0-6-0s, allowing many of the 1800-gallon tenders to be scrapped.

Notes on the drawings

The upper drawing illustrates a 'Cauliflower' in LNWR days. It is fitted with wooden brake blocks and the original Webb buffers. The lower edge of the frame between the coupled axles is straight, denoting that it was built no later than 1892. It has received replacement

Weydon Road details

A buffer stop and coal staithes in 7mm scale

ROBIN BAKER produced some small but necessary items for the Farnham MRC's new layout.

We needed two buffer stops in the goods yard of *Weydon Road*, so I volunteered to build them. From our track-building exercise we had the odd packet or so of sleepers left over; the material was available so I started. I guessed that in order to produce a prototypical sleeper-built buffer stop the vertical sleepers were half-buried in the ground, which would produce an object that was difficult to move (but not impossible, as seen in many a photograph). The dimensions are easy; to be the width of the track, and roughly square.

So out came the pack of sleepers and I glued together sufficient to be track width with a crossbeam front and back, so that completed the face of the stop. I realised that if I repeated the exercise for the back I would be able to cut the sleepers in half to get two sets, one for each buffer stop. I then produced the sides: one set of sleepers glued together and then cut diagonally would give both sides. I cut the side sleepers in a step pattern then glued the four sides together in a box form.

Once the adhesive had hardened the buffer stop was glued to the baseboard at the end of the track using PVA adhesive. Although this

material is excellent I wanted to make sure the stop acted as a stop and did not get moved by careless shunting. A large woodscrew was screwed into the baseboard within the 'footprint' of the stop and below its sides. The box was then filled with a runny mix of filler. The combination of woodscrew, internal crossbeams, and filler means that considerable effort would be required to move the buffer stop with a train!

Once everything had dried out the sleepers were painted 'dirty black' with the bufferbeam white. I have seen many colour schemes for such items, so 'you pays yer money and takes yer choice'. The inside of the box was topped up with ballast and fixed with the usual diluted PVA mix. Various pieces of scenic material may be added to suit your taste, and lo – a sleeper-built buffer stop!

Coal staithes

As part of the scenery, and to justify the coal wagons, a coal yard was required for the layout. I volunteered (idiot!) to build a set of coal staithes, again from sleepers left over from the track-building. I glued several sleepers (using

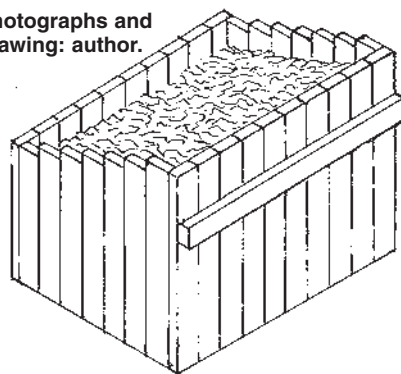
Mek-Pak) together horizontally to make up the back of the staithes, using sufficient to provide the height so that when a wagon door was opened it would rest on the top of the sleepers; the coal then being shovelled into the staithe. When one examines the construction of the old coal wagons the releasing of a drop-down door of a fully-loaded 10-ton wagon must have been exciting...

I joined three sets of horizontal sleepers together with vertical sleepers at the joins which in reality would have had about half their length buried in the ground, similar to a larger type of compost heap. The ends and dividers were constructed in a similar manner and glued to the back.

Once the adhesive had set the assembly was painted 'dirty black' and when dry planted onto the layout using neat PVA adhesive, the staithes being placed so that empty coal wagons could be moved up to the end of the siding. Once the adhesive had set suitable coal was piled into the staithes and secured with diluted PVA adhesive, as was used in securing the track ballast. All that is wanted now is the coalman, lorry, sacks and scales.



Photographs and drawing: author.



'Cauliflowers', concluded

fluted coupling rods in place of the original plain-section rods. The front and rear views also show 'Cauliflowers' in typical LNWR condition.

The lower drawing shows front and side views of a 'Cauliflower' in typical LMS/BR condition. It is fitted with a Belpaire firebox, Ross pop safety valves and has been fitted with replacement Whale type buffers. In addition, the brake blocks have been changed from wood to steel.

A third version, not drawn, would be as per the lower views but retaining the round-top firebox and spectacle plate of the upper view.

Finally, notice how the sand pipe, which acted only on the leading coupled wheelset, is mainly hidden by the brakes.

Bibliography

The following publications have been consulted in preparing this article:

An Illustrated History of LNWR Engines by Edward Talbot, published by OPC. ISBN 0860932095.

LNWR Portrayed by Jack Nelson, published by Peco Publications and Publicity Ltd. SBN 900586451.

An Illustrated History of LMS Locomotives, vol-

ume two, by Bob Essery and David Jenkinson, published by OPC. ISBN 0860932648.

The Bill Finch Portfolio (a collection of locomotive details collected by Bill Finch to assist with the construction of an award-winning 5" gauge 'Precedent' 2-4-0), published by the London & North Western Railway Society. ISBN 0951549081.

[Editor's note. See also *A Compendium of LNWR Locomotives 1912-1964, part two, goods tender engines*, by Willie B. Yeadon, published by Challenger Publications. ISBN 1899624147.]

Anyone interested in LNWR locomotives should become a member of the L&NWR Society (if not already); details from Simon Fountain, Membership Secretary, 'Seasons', 4 Ferrers Way, Darley Abbey DE22 2AA.

Colstead

In memory of the West Midland Railway

IAN SIMPSON of the BRMA built this OO gauge tribute to one of the hobby's pioneers.

For those not familiar with the subtitle it refers to the magnificent system created by the late Reverend Edward Beal in the late 1920s through to post-1945, who along with others such as John Ahern, E.F. Carter, P.R. Wickham, George E. Mellor, R.G. Vacy-Ash to name just a few, contributed so much to the art of railway modelling back in the pioneering days of the hobby, particularly in OO gauge. My interest in the hobby goes back well over fifty years and in those days in Tasmania there was not the plethora of products on the market as there is today which make working in the hobby so much easier and quicker.

There were a few kits on the market to get one started, outside the resident Hornby Dublo, Tri-ang, Märklin etc., but if one wished to create one's own scenario one had to resort to building mainly from scratch. My first encounter, in 1948, in seeking out information in this regard was with the Edward Beal series of books and booklets, such as *Railway Modelling In Miniature, West Midland* etc., later followed by John Ahern's excellent volumes.

These fine books (which were all published by Percival Marshall) told and showed you how to do it and the materials to use – in some cases everyday items found around the home, plus good quality card, balsa wood, and thin plywood obtained separately. Biltzezi sheets and Modelcraft building papers were also in evidence but of course no plasticard.



Resulting from all this, many Edward Beal-designed buildings adorned my various layouts built over the years.

Having now reached the twilight of my railway modelling years I felt moved to create something in memory of Edward Beal and remind people of how much he and others contributed to the development of the model railway hobby.

In being associated with module projects as

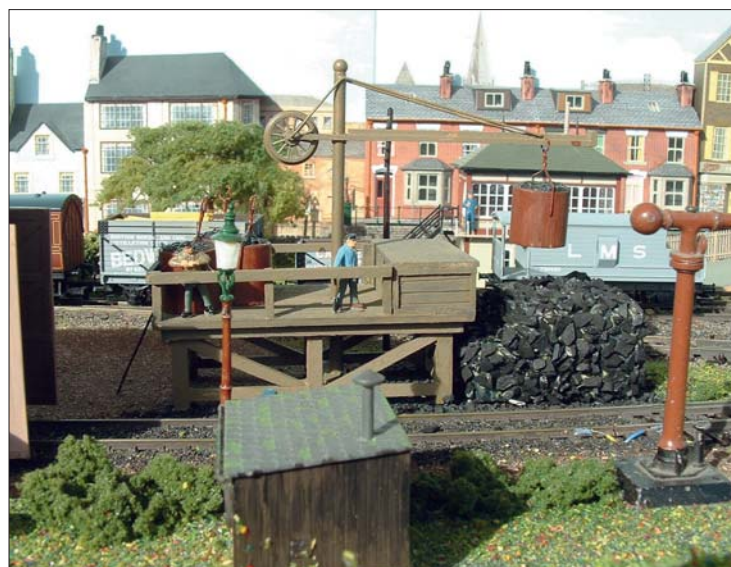
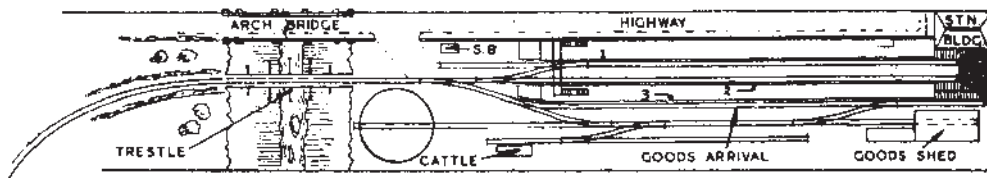
a BRMA (British Railway Modellers of Australia Inc) member in Tasmania I selected Colstead, which was a branch terminus from Greenelms on Edward's *West Midland Railway*. The track plan (reproduced below) is illustrated on page 53 of the book *West Midland* accompanied by plans of the station building.

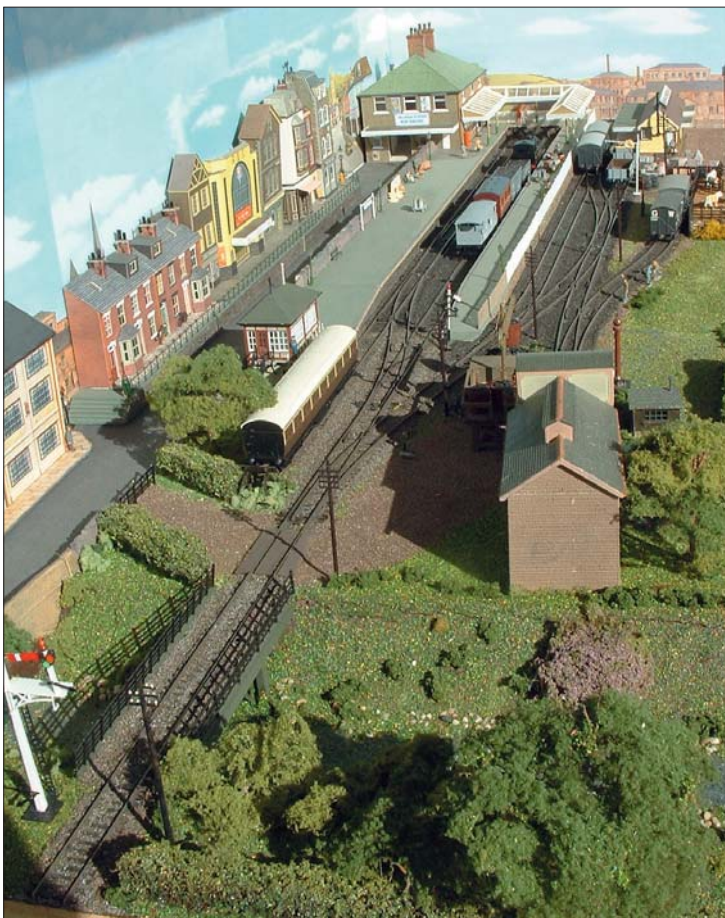
My version is a slight modification in that an engine shed replaces the turntable and the goods shed is based on a design from John

Above: an arriving goods train crossing the trestle bridge behind 'Jinty' No.7524.

Below: goods train leaving for Green Elms.

Below right: the locomotive facilities with coaling stage to an Edward Beal design.





Ahern's *Madderport*. An additional crossover has been installed at the station to release the locomotive on arrival. The remainder is basically as originally set out. The station building is faithful to figure 36 in the book and the coaling stage is based on figure 86.

A pivoting sector-plate provides access at the entry end of the terminal to enable arrival of either a branch passenger or a branch goods train. The yard area is sectioned off to allow shunting to take place whilst a passenger train arrives or departs. Traffic consists firstly of a passenger service of one or two coaches, for example a B-set or autocoach, and secondly a goods service to supply local merchants, coal, livestock and general goods.

Motive power is restricted to tank locomotives and light tender locomotives with a mix comprising pannier tanks, 'Jinties', Collett 22xx, Dean Goods, LMS 4F etc. An occasional main line special may arrive much to the dis-

Above left: overall view of the track layout at Colstead showing engine shed and facilities in lieu of the turntable and variation to the cattle dock siding.

Above right: looking up the street towards the terminus building.

Below left: Colstead goods shed as constructed from a John Ahern drawing.

Below right: left-hand end of Colstead.

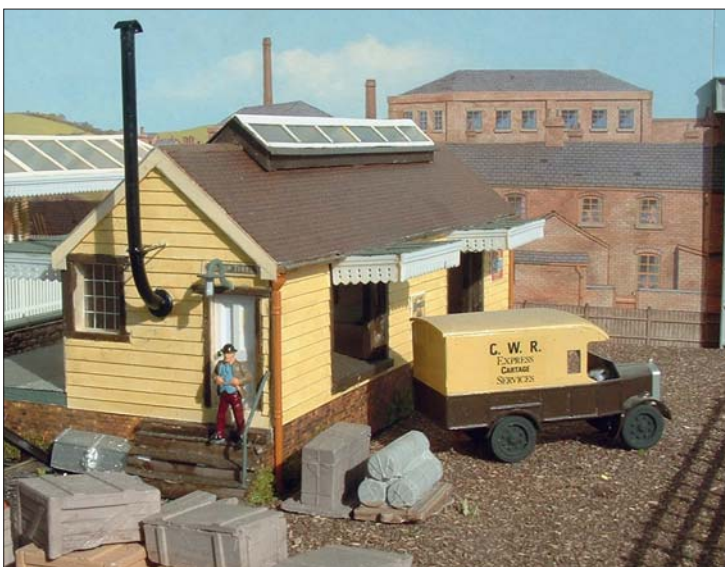
Photographs by the author.

may of the station staff stuck with the task of sorting it out!

Control is quite simple: two controllers may be used if desired to operate the arrival and departure lines as well as shunting in the yard, thus using two operators.

As this is a component of the BRMA module system developed here, backscenes have been added along with a removable front section supporting up and down main lines commensurate with adjacent modules connected either side.

Having completed my latest modelling effort (*Cornish china clay* – see RM July 2004) I have found that creating modules is a good way to keep the hobby alive and always interesting.



Brake vans for the BR era

'Bringing up the rear' in N gauge

RICHARD BARDSLEY comments on and constructs a variety of models in 1:148 scale.

Whether it be the photographers of old or the modern day enthusiast watching a train on an exhibition layout, there is a tendency to concentrate on the locomotive hauling a freight train, with interest having moved on to something else by the time the rear goes by. Yet the brake van was as much a definitive statement about a railway company as that locomotive on the front.

Even after nationalisation, the brake van would define the British Railways region before the eventual onslaught of standardisation. There was a time when every freight train had a brake van so there were literally thousands of them, until the spread of the continuous brake eventually made them redundant. Now, brake vans are just as 'old-fashioned' as the steam engines that pull them up and down preserved railways giving brake van rides.

I had accumulated a few brake vans already, but in one of those strange moments of setting yourself a challenge, I wondered how many different types I could model in N gauge that would be suitable for a British Railways era layout. I am very much the 'average modeller' that was this magazine's by-line a few years ago, so what is presented here is a selection of models that range from the very simple to the ones that almost defeated me (well, perhaps a score-draw!). Some are kits, some are conversions, some are just ready-to-run (rtr) with a few simple embellishments, but whatever your modelling level, I hope there's something here at which you'll be inspired to have a go.

Things in common

It would get rather repetitive if I described what I did to every brake van in detail, as a lot of the jobs were common to most or all of the models.

First of all, something in common with the real thing – weight. One of the main jobs of the guard was to keep the couplings taught on a freight train to prevent snatching of the couplings which might snap them. He did this by applications of the brake, and a great help in this was weight. Most brake vans carried a bit of ballast, as otherwise they were effectively great big empty vans full of fresh air. Most of the models in this article came with the standard manufacturer's ballast weight, which I retained, but I also added another ballast weight inside the cabin, usually a Peco weight from the firm's 10' chassis kits (bent in half in order to fit) or whatever came to hand from the scrapbox.

All the models with open verandas such as the British Railways standard brake van featured a rail across each of the four exits from the veranda – stops the guard falling out!



These are prototypical, and while I am sure the health and safety-minded people of the day would have recommended them to be used when the train was in motion, most of the photographs I used for reference (admittedly, of static vehicles) show these rails in the open position. Therefore, on all but one of the models, I cut them off with a sharp knife and glued thin plastic rod to the frame to represent them in the 'down' position.

Veranda ends usually have windows, and most of the rtr models and all the kits have empty windows, so I glued some clear plastic behind these for glazing, though to be honest, in this scale, it's hard to tell under the darkness created by the veranda roof. Also, material has to be removed from the underside of the roof mouldings where there are slots to locate it, in order to clear the glazing material that's been added.

All the brake vans feature handrails in abundance. The rtr models have them moulded on and painted white, but most of the white was lost when they were repainted. Painting handrails white is a tedious job, and I have used fine brushes, paint pens, and sharpened watercolour pencils with varying degrees of success, but the method I return to most is simply a cocktail stick – dip it into a tin of white paint, touch it on to a piece of paper to remove the excess, and then draw it along the

Top: very much in need of some paint (and new footboards), ex-GWR Toad W17448 sits in the sidings at Bury on 12 June 2004.

Above: two apparently identical ex-GWR Toads, though the one on the left is unfitted, unlike the one on the right. From a model point of view, the only difference is the livery.

Photographs by the author.

handrail, repeating as many times as necessary. Be prepared, though, to have to do some retouching when the hand slips as mine did once or twice.

Some of the kit-built models and conversions required handrails to be added. Years ago I used to add these from thin brass wire until I stumbled across a much simpler alternative, namely, 15thou (0.4mm) plastic rod; much simpler because, being plastic, it's already white! I glued it on with a thin smear of Araldite as this gives a few minutes to adjust the position finely. Weathering tones down the brightness of the white and that's all it needs.

Each model was painted, including those bought rtr. I used Phoenix Precision Paints 'freight grey' for the unfitted vans and 'early bauxite' for the vacuum/through-brake ones. Solebars were painted black and then weathered by a quick wash of 'rail rust'. The footboards were also painted black, and then washed over with 'sleeper grime'. All the trans-

fers are from the ModelMaster N scale range, which is available exclusively to members of the N Gauge Society (just one of many good reasons for joining the Society). Once they were applied, everything was sealed in with a coat of matt varnish, to which was added a touch of dark weathering powder from Carrs as most of my brake vans are intended to look well used.

There's a wealth of reference material available in books and I have listed those I used at the end of the article. So here, in no particular order, is my collection of British Railways brake vans.

GWR Toads

These two vans, made by Graham Farish, were picked up for a few pounds from the N Gauge Society Shop at the AGM a few years ago. Of course, as soon as I had finished them, Bachmann re-introduced the Graham Farish Toad in exactly the liveries I had chosen (we've all had this happen to us at some time!). The GWR 'improved goods brake van' was introduced from 1912. It was 24' over headstocks with a 16' wheelbase and a 8'6" veranda. Soon after, steel sheeting was introduced to cover the veranda sides before being extended along the whole body.

Therefore, the Graham Farish model represents the later, larger, GWR brake van, construction of which continued virtually unchanged into BR days. Thus, the model is likely to be Diagram AA15 or AA2. Most were built without vacuum brakes; many had a vacuum pipe but not vacuum cylinders, thus allowing the guard some degree of control over the train. BR made few alterations, the most common being to add the vacuum pipe, thus requiring a repaint from grey into bauxite; many received the XP rating for faster freights.

These models really are a simple 'paint and transfer' job. They are easy to break down into component parts (roof, body, chassis) and are easier to paint like that, especially inside the veranda, which really needs doing as that end of the cabin is just unpainted black plastic. In fact, the windows are solid on the cabin wall, so it's worth leaving them black to imply some semblance of glazing. Once painted, the parts



just push back together. The two liveries make a nice contrast with the difference in lettering style as well.

LBSCR 'Dance Hall'

Being an LBSCR design, the 'Dance Hall' brake vans (so-called because of their generous interiors) were a pre-grouping vehicle which I am sure lasted into British Railways even though I couldn't find a photograph to prove it. The Farish model is a very good representation of the prototype, key features being the side window (not ducket as on later designs), verandas with small doors and three lamps irons in a row on the ends.

I picked up this Farish model for a few pounds on eBay in its incorrect guise as an LMS brake van, and it was probably the easiest of all the brake vans shown in this article.

I repainted the woodwork BR bauxite on the assumption that such an old brake van would only have survived this long if it was vacuum/through braked but I stand to be corrected. The cabin bulkheads to the verandas were again unpainted black plastic so I painted them bauxite and picked out the solid windows in black which helps to soften the fact that there's no glazing there. The side windows were glazed from within the cabin with some clear plastic sheet. Transfers depict the brake van in engineering use as a stores van and although weathered, it's probably still a bit too clean for a long forgotten engineer's van.

SR 'Queen Mary'

The Southern Railway 'Queen Mary' 25T bogie express goods vans earned their nickname because of their sheer size (36' length and 8' bogies), particularly the palatial size of the cabin. They are certainly the biggest non-coaching stock brake vans to run in the UK.

The East Lancashire Railway (ELR) acquired No.56283 a few years ago, one of 25 brake vans built in 1936; their solid construction saw them last into the 1990s, in departmental service. The narrow profile of the smaller loading gauge to which they were built is apparent despite their size, though it caught me out one day during its restoration when I went to step from the platform onto the outer part of the veranda, misjudged the gap, and fell straight down between the vehicle and the platform – thankfully, nothing was hurt but pride!

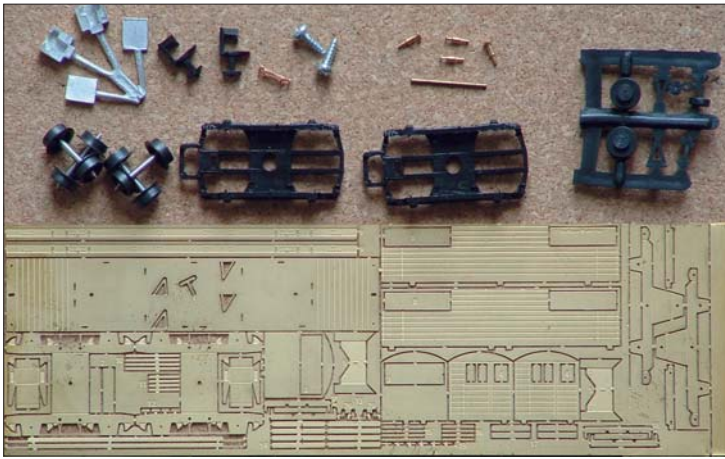
When 56283 arrived at the ELR it had the steel plating on the side of the cabin that was typically added by BR during the late 1960s. Removal of this revealed the letters 'SR' – original, perhaps from prior to nationalisation?

Above: ex-LBSCR 'Dance Hall' in use as a stores van.

Below left: 'Queen Mary' 56283 in restored condition on the East Lancashire Railway.

Below: a useful detail shot of the brake gear under 'Queen Mary' 56283.





Left: the components of the N Gauge Society kit for the 'Queen Mary' brake van.

Below: the cabin and veranda ends soldered in place.

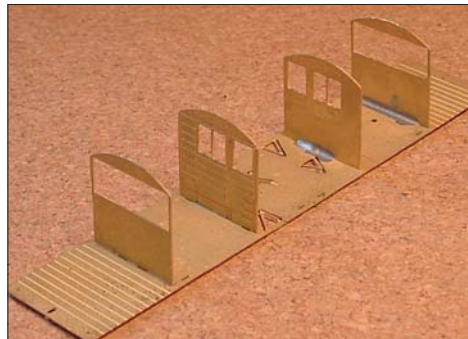
Above: ready for painting. Note the new solebars from brass channel and the replacement framework from plastic section.

The model is made from an N Gauge Society kit though it is definitely not one for the beginner – even my 'average modeller' abilities were severely tested! This is because the kit is made from etched brass, and despite 'slot and tab' construction, it's quite tricky.

The instructions suggest starting with the sides but I did the ends first. This was because I was able to use a block of wood to ensure perfect 90 degree joints to the floor while soldering in place. I did the inner (cabin) ends first and then worked out and did the outer (veranda) ends last. I used low-melt solder and a low-temperature soldering iron suitable for whitmetal kits – N gauge is sufficiently small and etched brass sufficiently thin that you don't need the power of a full-size iron.

The solebars come as part of the flat etch and require bending bars to make the U-shape. I do not possess these and my attempts to bend them in a vice got nowhere. Therefore, I substituted $\frac{3}{32}$ " x $\frac{3}{64}$ " brass channel – £2.50 bought enough to do two vehicles. Of course, you lose the etched rivet detail from the kit, but once it's painted, in N gauge, I really don't think you notice.

There are whitmetal pockets for the couplers on the bogies and some surgery is needed to get them to fit. I did not think these were good parts so I just glued the standard N gauge couplers into the bogie pockets with lots of Araldite. The couplings may not move, but this is not essential on a bogie (as that pivots round corners) and instead, the vehicle will be much closer-coupled than would otherwise have been the case.



The roof is from a piece of 10thou plasticard, rolled to get a curved shape: however, there is not much purchase on the thin brass with which to glue it down, and the roof is already starting to unfurl. I may replace it with a couple of van roofs from my large collection of spares.

There is a lot of small strapping detail and this was glued on using plastic microstrip rather than soldering the fragile parts on the etch – my ham-fisted soldering would not be up to it. I omitted some of the small details such as lamp irons, as these are the bits that are susceptible to getting knocked off even with careful handling – a case of better to leave it off and you won't know it's missing rather than attaching it badly or seeing a paint chip when it gets knocked off. There is a school of thought that says it is better to leave detail off if you are going to do it badly, as bad detail is more obvious than no detail at all. A model that captures the essence of the prototype can be missing a lot of the rivets!

Plastic rod was used for the handrails and I finished the model in fairly pristine condition as indeed 56283 is in its preserved state – with this brake van I can model either British Railways in the 1950s or the ELR today!

Midland Railway brake van

I wanted to achieve a particular weathered effect on the Peco Midland Railway brake van (diagram D1045), though I was not so sure about buying a brand new one to try something that might not work. The idea did not progress at all until at a swapmeet I could not resist buying a Peco LMS brake van for the princely sum of one pound. All that was wrong was that the roof was missing, but this was easily remedied by adding a spare roof from a Parkwood Models van kit, which only needed the rainstrips removing with a sharp knife.



Bottom left: the finished 'Queen Mary' brake in virtually ex-works condition (although the plasticard roof is starting to lift...).

Above centre: the trial vehicle for the MR brake van – this is the reworked Peco LMS brake van in the employ of the S&T Engineer.

Above: the MR brake van as it comes out of the box.





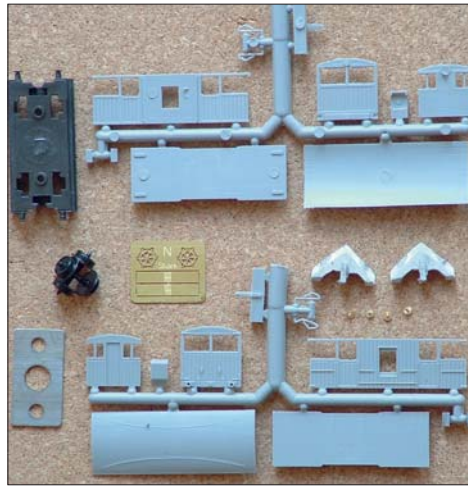
What I wanted was the impression that the vehicle had been repainted by British Railways, but that the top coat was now so weathered and faded that the original livery was starting to show through; in particular, the LMS lettering and number. The effect was easy to achieve by 'dry brushing', that is, wiping most of the paint off the brush with a cloth before applying. I used a No.1 brush, the larger size retaining just enough paint after being wiped to do the job. Patience is the name of the game – better three or four very light coats to build up the effect than one coat that's too heavy. The final coat is one of 'dirty varnish' to seal the transfers in place and make it look really weathered.

The Peco LMS brake van does not really represent any exact prototype but it does not look out of place amongst all the other brake vans.

I still could not bring myself to apply this technique to a brand new Midland Railway model but as luck would have it, I was able to purchase a second-hand one at a very reasonable price from the N Gauge Society Shop when it attended the July 2005 Chester Area Group's open day. With my prize back home, and after studying a few photographs, I decided that I could make a few simple cosmetic improvements to the model mostly by removing plastic with a sharp knife, my preferred tool being the chisel blade in an X-acto No.1 knife.

The first thing to do is disassemble the model; pop the wheels out using a small screwdriver, and separate the body from the chassis by using tweezers to undo the two nuts that hold them together. The roof just pulls off. There are two small grab handles to remove about threequarters of the way up the body-side, while the inner vertical handrails should only go down as far as the horizontal handrail, of which there should be another one below the moulded one; this was added with the fine plastic rod. The rainstrip on the roof should not go all the way across the roof, only above the entrance at the end so most of this was removed. On the chassis, the top footboard needs removing between the outer ends of the springs to leave just small footboards at each end.

The windows are quite big – too big in fact, especially at the open platform end – and I decided they would require too much work to fix, however it is really worth glazing them to remove the rather obvious see-through look. The weathered finish was as per the LMS brake van, and it has been lettered with an 'E' to



Top left: the MR brake van after alterations, re-livery and weathering.

Above: the parts in the N Gauge Society kit for the Shark brake van.

Above right: using a pair of rulers to make sure that the two halves of the chassis for the Shark brake van are parallel. The coupling boxes have slots cut in them to accept the whitmetal castings for the ploughs.

Centre right: the complete Shark brake van body prior to painting.

Right: a final photograph inside before the roof is glued on showing the correct internal livery of red and cream. Note also the ballast weight folded in half and glued inside the cabin.

Below: the finished Shark brake van in its original livery of plain black with yellow lettering.

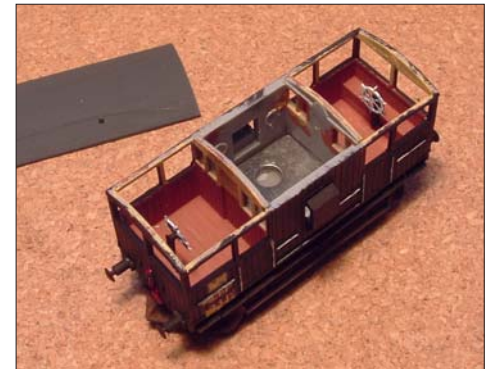
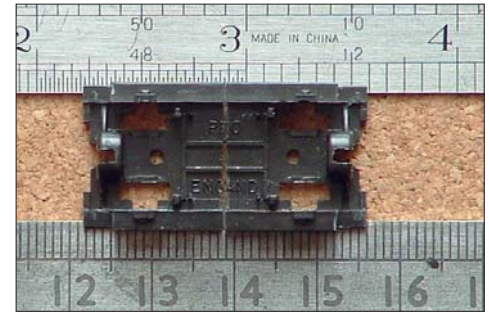
denote ownership by the Engineers' Department; these brake vans did last into the British Railways era, as the 1954 photo in Geoff Gamble's book proves (see references). On the model the 'MR' livery and number just show through, though of course, now I wonder, wouldn't the LMS have repainted and re-lettered the brake van after 1923 before BR did?

Shark ballast plough

This is an N Gauge Society kit but it owes everything to the late Andy Calvert, and not just because he was the Society's Wagon Project Officer for many years. Andy started this project as a private venture, asking N Gauge Society members to pay a deposit up front which became the deposit with the manufacturer for the tooling, with the rest payable on completion. When enough of us had ordered kits to complete the project, the tooling was donated to the N Gauge Society, though of course, we got our kits cheaper for having got involved up front.

To Andy, this was what the N Gauge Society was all about; like-minded modellers getting together for the benefit of each other. While the last project with which he was involved, the BR Mk.I horsebox, became a memorial kit to him after his untimely death, I tend to think of this kit as a more fitting tribute.

There is little to add to the excellent and very comprehensive instructions about the



construction of this kit. The hardest part really is to cut a section out of the Peco chassis in order to reduce it from a 10' wheelbase to a 9' one and the instructions acknowledge this. Despite my best efforts, I did not manage to make the cuts in the chassis at exactly 90 degrees. Care is needed when cementing the two halves together, or a poor-running chassis will result. Therefore, with the chassis halves upside down on a flat surface, I used two rulers, one either side of the chassis parts, to make sure they were in line, and then glued a piece of 10thou plasticard to the bottom of the chassis to keep everything in place while I cemented the chassis under the body.

The cast whitmetal ploughs add quite a bit of weight, but I also included the steel weight from the Peco chassis kit as extra ballast – if simply folded in half, it fits perfectly inside the cabin. The standard N gauge coupling would





look very odd emerging from the middle of the ballast plough so I followed the recommendations of the instructions and fitted a hook at one end only made from brass wire.

I chose the initial livery for these brake vans, overall black with cream inside the verandas (it makes a change to the monotony of grey and bauxite!). Most people think of the yellow/grey 'Dutch' livery they carried in later life, or perhaps olive or gulf red, so the black finish for my chosen period makes an interesting change. I've got another two kits yet to build from my original purchase, so there's plenty of time yet for those other liveries!

LNER Toads

Say 'Toad' to a railway modeller and they will immediately think of a GWR brake van, however the LNER also used the same telegraphic code for its brake vans. The Toad E was a 10' wheelbase design with no platforms and this is well represented by the Peco model. Having obtained a second-hand NE-liveried example from a swapmeet, all I did was the basic veranda guards, glazing, repaint and weathering to represent a British Railways version. The Toad D is a bit more involved.

At first glance, the LNER-designed Toad D looks just like a standard British Railways-built brake van, and indeed, British Railways used the LNER diagram as the basis for its quintessential brake van design. On closer inspection, it can be seen that the LNER Toad D has shorter footboards and no concrete weights on the platforms. The Peco model of the British Railways brake van was therefore discounted as it has the concrete weights moulded onto the body. The Minitrix model of the British Railways brake van does not have weights on the end platforms, which is a curious omission as the body closely represents the British



Railways design; the Peco Toad E body might be better, substituted onto a 15' chassis.

The Minitrix/Peco approaches both had their pros and cons. Taking the Minitrix option first:

Pro The correct 16' wheelbase, correct length over buffers and correct length of body, the first and final of these points meaning that the body aligns correctly with the wheels.

Con The body is the British Railways design which means the steel plate above the guard's ducklet is incorrect, the cabin doors are glazed when they should not be, the veranda end detail is incorrect, the end platforms are 1.5mm too short and it would be harder to shorten the footboards due to the way the brake shoes are moulded.

As for the Peco option:

Pro The veranda end detail is correct, the cabin doors are correct (no glazing) and the footboards would be easier to reduce.

Con The body is the wrong length, the chassis is too long (25' not 24') and the wheelbase is too short (15' vs. 16').

Which would you pick? It's a tough choice, but at the end of the day, I decided that a model using the Peco brake van parts would look the best, even though the wheelbase and body are the wrong length. The main key details would be correct, and a lot of the trick to producing a convincing model is to produce one that looks right, even if it isn't actually right. So I obtained another Peco Toad E model and a Peco 15' brake van chassis kit. The first job is the removal of unwanted details – all the end detail except the upper middle lamp bracket, and the top lamp brackets on the outside of the veranda sides. A sin-

gle new lamp bracket was added from very thin microstrip to the upper right side of the main van body.

Both the coupling fixing lugs under the brake van body and the weight locating lugs on top of the chassis need removing so that the body sits on the chassis with no gap showing. The 10' wheelbase weight still fits under the body, and the one from the 15' chassis kit was bent in half and glued inside the body which was then glued to the chassis, carefully checking that it sits perfectly centrally as there are no lugs to locate it. I sawed 1mm off each end of the chassis which corrects the fact that it is a scale 1' too long. A piece of 1mm x 2mm plastic strip fills the gap in the headstock, fronted with a piece of 10thou plastic strip. New brass buffers from the N Gauge Society Shop were glued into pre-drilled holes. I removed 5.5mm from the upper and lower footboards at each end. The lower footboard is easy to remove as it is below the solebar but the upper one needs care as it is in effect an extension of the lower edge of the solebar so you have to be careful not to take too much off. I used the upper edge of the solebar as a guide. To secure the couplings, I cut the tops off the coupling lugs that are supplied with Peco chassis kits and fixed them in place with a very sparing amount of glue, ensuring that the coupling still moved and that it was dead level. The tops of the platforms are from 10thou plastic sheet; the vacuum pipes and stands are spares from a plastic kit.

Finishing and weathering were as per the other models. Of all the brake vans in this article, I think this is my favourite as it required the most research and head-scratching, and not least because it picked up a Bronze Award in the N Gauge Society's 2005 Annual Model Making Competition.



Right: the brass etch from the N Gauge Society kit for the LMS brake vans.

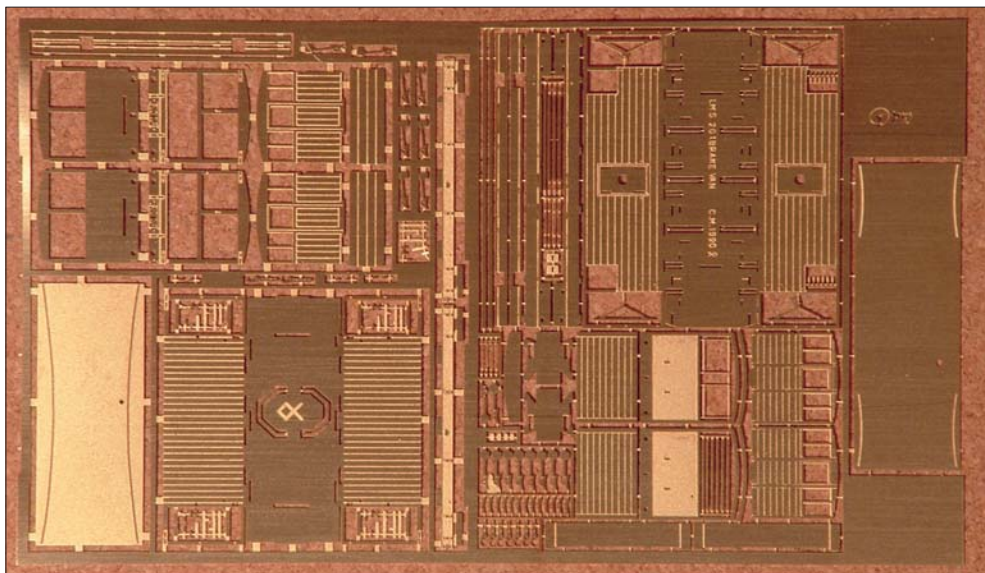
Below: 12' wheelbase LMS brake van.

Below right: 16' wheelbase LMS brake van.

LMS brake vans

This is another N Gauge Society etched brass kit, which actually makes two LMS brake vans, namely the 12' wheelbase and the 16' wheelbase 20 ton brake vans. The former were built by the LMS just after the grouping, and with a total build of 850, many lasted into nationalisation; the latter were built between 1935 and 1938.

There's little I can add to the four A4 pages of comprehensive instructions. I soldered the van bodies together with low-melt solder and a low-temperature soldering iron. The 16' van just requires the buffers removing from the Farish chassis supplied before gluing under the body, while the 12' one is a little more complicated as it requires two donor Peco 10' chassis – the ends (and W-irons) from one and the middle from another, all three parts being glued together with liquid poly before securing under the van body. Interestingly, if you



glue the spare ends together, you get a 7' wheelbase chassis with footboards which makes a perfect base on which to build a GWR shunter's truck!

Parts are included on the etch to model the distinctive ballast boxes that British Railways

added under the solebar but I omitted these and went for an LMS-built van. The 16' brake van design was built extensively by British Railways, and although we think of it as an LMS design it effectively became one of the British Railways standard types.



British Railways standard brake vans

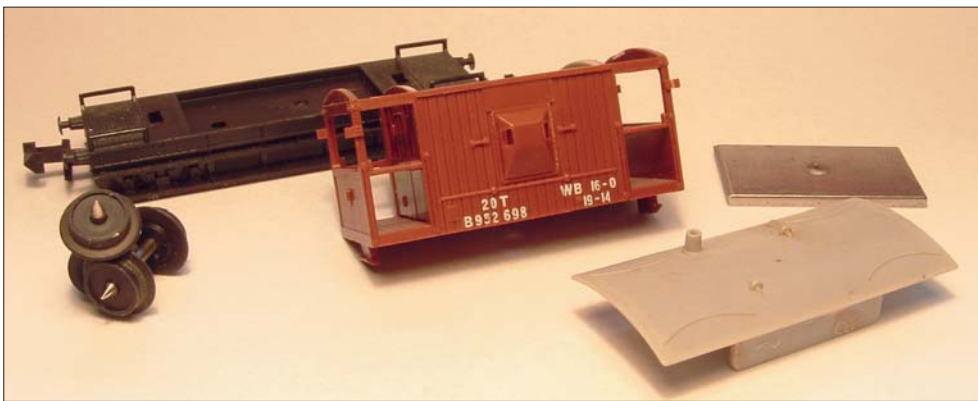
The quintessential British Railways brake van was based closely on the LNER Toad D. I described above how I considered the Minitrix model for the Toad D.

The Minitrix model is the obvious starting point for modelling the British Railways standard brake van. Although long out of production, they can still be picked up for reasonable second-hand prices at swapmeets. There's not really much to do to the model other than a bit of weathering as it stands, but there is one glaring omission which needs to be corrected; namely, the lack of weights on the end platforms.

To represent the concrete weights, you need a piece of 40thou plasticard 15mm x 7mm, with two square indents at what will be the corners next to the brake van body. I had three Minitrix brake vans which were going to receive 'the treatment', so I needed six weights for them. In order to get them the same, I drew the weight out on the computer using a CAD

Right: B954762 is a preserved British Railways standard brake van on the East Lancashire Railway.





program, then printed six templates onto very thin paper which I glued to a piece of 40thou plasticard with a wash of liquid poly cement. It was then just a case of cutting out the platform shapes using the templates and gluing them onto the platforms.

Plastic handrails are moulded on to the platforms on the chassis; they are reasonable, although not of round profile: also they are an inverted U-shape, instead of going from the solebar to the frame of the veranda end. You could probably get the weights in between them, but I decided to cut them off and fit replacement handles from 0.45mm brass wire. It's fairly easy to drill a 0.5mm diameter hole in the solebar, but not so easy to drill the corresponding hole in the frame of the veranda – of the 12 handrails I fitted, the hole in the veranda frame veered off on two occasions, requiring a bit of bodging and filling to make amends. The handrails themselves are bent into a sort of hook shape that then joins the two holes.

Above: the Minitrix model of the British Railways standard brake van disassembled into component parts.

Bottom left: unfitted British Railways standard brake van.

Bottom right: vacuum fitted British Railways standard brake van.

Right: BR standard brake van B953058 was seen on the hump at Feltham on 8 October 1955. Note the open cabin door, and the veranda guard rails, hanging unsecured as usual...

Photograph: the late Les Pickering, courtesy Bob Brown.

I painted two of the brake vans in unfitted grey livery as a change from the usual bauxite livery with which these vans are associated (bauxite adorns the third one). Although you cannot see much under the chassis due to the footboards, the vacuum and air brake cylinders are moulded, so I removed these as appropriate for each model. One of the two grey ones has the veranda guard rails left in place – at least one of my N gauge guards is safety-conscious!

Conclusion

It would be hard to justify even an imaginary location where all these brake vans from the many regions of British Railways would mix side by side (unless a reader knows different-

ly), but then again, that's one of the reasons for having an imaginary location! I chose to model the brake vans in the British Railways period of the 1950s and 1960s as that was when rolling stock started to stray from its home turf so on my layout, I'm getting away with it.

This has been another interesting project ranging from the simple to the complicated, showing that, whatever your modelling level, there's something you can have a go at to make a model that's just that little bit different. Finally, I hope it shows that it's not just the front end of a train that's interesting – the rear end has a lot going for it too!

References

A History Of GWR Goods Wagons (New Edition Combining Parts 1 & 2) by A.G. Atkins, W. Beard, D.J. Hyde, R. Tourret;
Railways In Profile Series No.5 British Railway Wagons Cattle & Brake Vans by G. Gamble;
British Railways Brake Vans & Ballast Ploughs by E. Gent;
British Railway Goods Wagons in Colour by R. Hendry;
Official Drawings of LMS Wagons No.2 by R.J. Essery;
Working Wagons, A Pictorial Review of Freight Stock on the BR System, Volume 1 1968-1973 and Volume 2 1974-1979 by D. Larkin; and
LNER Wagons by P. Tatlow.





...an exchange of railway modelling ideas for beginners of all ages

Westbridge-on-Sea

A new season, and a new 00 layout for the Pecorama exhibition

ROBERT ILES is watching the Pecorama professionals at work on the new 'Garage' layout.

The idea

The indoor model railway exhibition at the Pecorama complex at Beer in Devon is a focal point for visitors to enjoy and a source of inspiration for many modellers. The layouts, which are in all the popular scales, show what is possible to achieve in several domestic situations. It is also a showcase for some of the new Peco products that emerge every year.

For seventeen years the G45 gauge layout called *Grizzly Flats* occupied the 'Prefabricated Garage' setting in the Pecorama exhibition. It delighted thousands of visitors and showed how even a large gauge layout could run very satisfactorily in a relatively confined space. The American-theme railroad wended its way over several tough gradients, through a mountain landscape modelled against a backdrop of rugged scenery depicted on the back wall.

After running throughout the year, all day every day, the layout eventually earned its retirement, so a replacement was needed. The new layout is in 00 scale, and its centrepiece is an eighteen-arch viaduct built entirely from several of the new Wills viaduct kits joined end to end. This is constructed from a mixture of basic three-arch kits plus some extra arch-and-pier extension kits to give the required length. The basic design is in the style of Ribbleshead viaduct on the Settle & Carlisle railway.

The installation of the new layout provides the opportunity to examine and reiterate the important construction stages of model railway building. The *Right Away* pages are specifically here to help all newcomers to the hobby gain a useful insight into how things are done, but even seasoned modellers will acknowledge the benefits of, sometimes, going back to basics. No matter how many times we read about the hobby or see a thing done, there is always something new to learn or remember to do next time.

Setting the scene, the 'Prefabricated Garage' area is 16'6" x 8'4", a very useful size for a 00 layout and quite a different prospect from housing a G45 gauge railway. Access to work



on the layout is via the front viewing window and the bottom half of a stable door that allows the modeller to crouch under the baseboard into the central area.

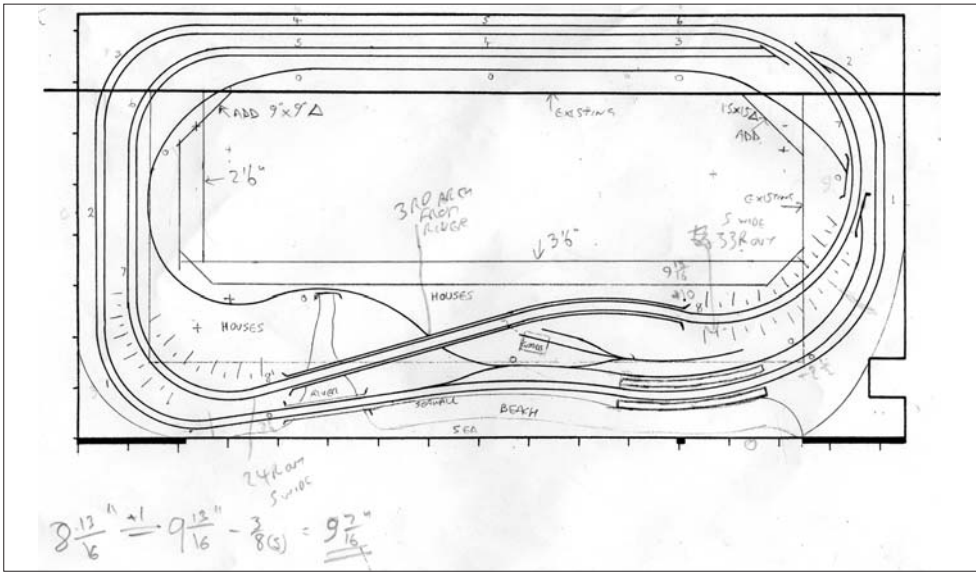
The new layout is set in a fictitious seaside location on the south coast loosely reminiscent of Dawlish in Devon. It is in the style of the Southern Region/Western Region in BR days during the 1960s. This gives plenty of scope to run a wide variety of both passenger and goods stock. Steam haulage will dominate, but diesel will make its way on to the tracks on plenty of occasions.

The track plan has three basic elements: a double-track folded figure-of-eight main line with a station, a single track branch line that also uses one platform, and a goods yard. Not all the track is visible; it disappears behind a backscene into an area that functions as a fiddle yard. The folded figure-of-eight design is used in another guise in the famous Pecorama 'Loft Layout' and functions ideally as an automatically-controlled railway that has to run reliably day-in, day-out for years on end.

Above: this is a part of *Grizzly Flats*, the original G45 American Mountain layout that occupied the 'Prefabricated Garage' in the Pecorama exhibition for seventeen years. The layout featured a typical US trestle bridge and a track that had steep gradients, winding through rugged pine scenery.

Below: a section of original framework with some new additions being fitted. Towards the background is a pre-cut curved section ready to be installed.





Left: traditional baseboard construction methods are used for professional layouts too. Sundeala is nailed onto 2"x1" support framework which is screwed and glued together.

Below: two different levels for the main line, one for the branch line and another for the river bed. All these are calculated from the datum point at station level.

Bottom: use clamps to secure sections as the glue dries and constantly check the baseboard with a spirit level. This also shows the height of the track supports and Sundeala exactly level with the viaduct trackbed.

Above left: some of the details on the original working drawing have changed, but it is all part of the evolution process. The pencil calculations are shown as part of work in progress. They were the initial calculations of baseboard widths and track heights of the elevated sections above the main board.

Above: the solid baseboard framework.

The baseboard

The old layout and scenery were carefully removed but some of the original 2" x 1" rough-sawn baseboard supports were left in place. These were in decent condition and would serve the new layout well. More supports were added to suit the new track plan. This required plenty of planning because the track and baseboard are on multiple levels to accommodate the branch line, the main line that crosses over itself and a river feature that goes through the viaduct. To that end, a basic height datum point was established for the main baseboard. It was decided that this

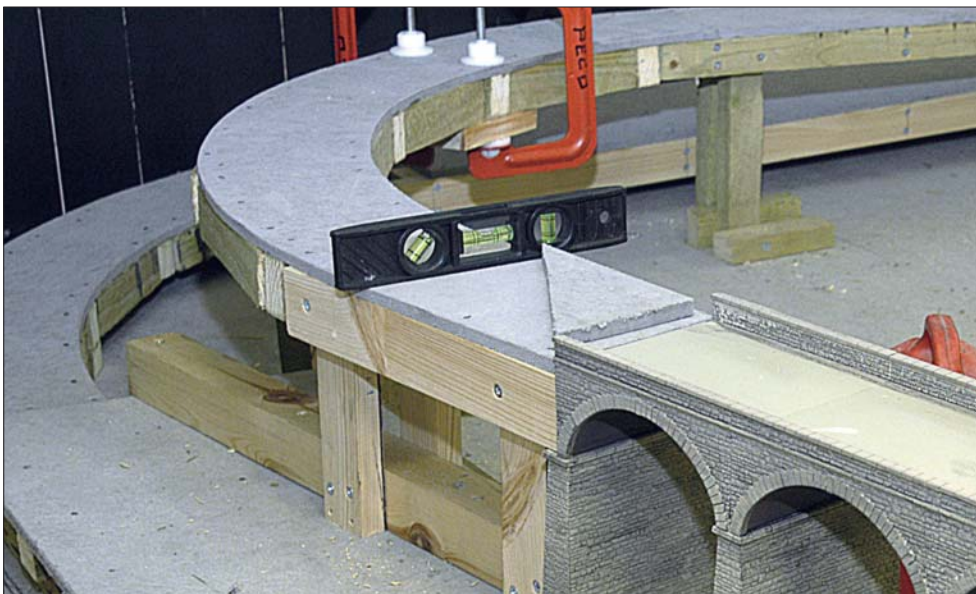


datum point was to be at the level of the station. This would be a reference point for all the features of the layout that depend on having an accurate height relative to the main baseboard. No track is below this level, but an allowance had to be made for the river which is below the datum level. The river is sited between the third and fourth arches of the viaduct. From the datum point, the heights of the elevated sections and the viaduct were calculated as described later. These appear as some of the pencil marks on the layout working drawing.

The minimum radius on the main lines is 21", and 17" on the branch. These minima and the other radii needed were established at the track planning stage. The required number of baseboard curves were prepared prior to assembly. These were cut on a bandsaw, but the home modeller who may not have a bandsaw, would cut them individually with a jigsaw. A very useful aid to track planning is the range of printed Peco track templates that are depicted as actual size items. These help to plan the number, position and angle of turnouts directly onto the baseboard before you buy the real thing. That said, because of practical matters encountered at the time of placing the track and organising features, one or two deviations from the original track plan have occurred – and why not? There is a certain amount of evolution that inevitably takes place and this can only be for the better.

The working drawing was always close by. The modeller could refer to the drawing as a reminder of the intended final result. This is fundamentally common sense, but nonetheless necessary to avoid any unnecessary rebuilding at a later stage.

Traditional construction methods were employed from the framework upwards. All



the suggested materials and techniques are advocated in the Peco 'Shows you how' series of publications and are designed to be within the capability of the average handy person. A modest selection of basic woodworking tools is required together with ordinary DIY skills. A handsaw, screwdrivers, spirit level, clamps, measuring tape, paint brushes, pencil, set square, hammer, bradawl and a drill, form a good basis for a tool kit. The consumable items will include impact glue, PVA glue, screws, nails, paint and brush cleaner.

The baseboard itself is made from Sundeala, a kind of insulation board that is ideal for the job. It is easily available, simple to cut and shape with a hand-saw or electric jig-saw and provides a stable, flat surface for the track. Like any baseboard material, which could also be plywood, chipboard or MDF, it will only perform efficiently with a firm framework that supports the board at all points.

The new sections of baseboard support were also constructed from 2"x1" rough sawn wood and were secured to the original structure with PVA glue and screws.



board in order to align and secure everything in place with easy access. In order to achieve the desired height for the viaduct, in relation to the rest of the layout, the support piers were mounted on battens of 2" x 1" laid flat to raise all the piers by 1". The battens were nailed to the baseboard and the viaduct piers glued down with impact glue.

The height of the 2" x 1" approach-track supports was worked out by measuring the height of the viaduct trackbed and deducting the

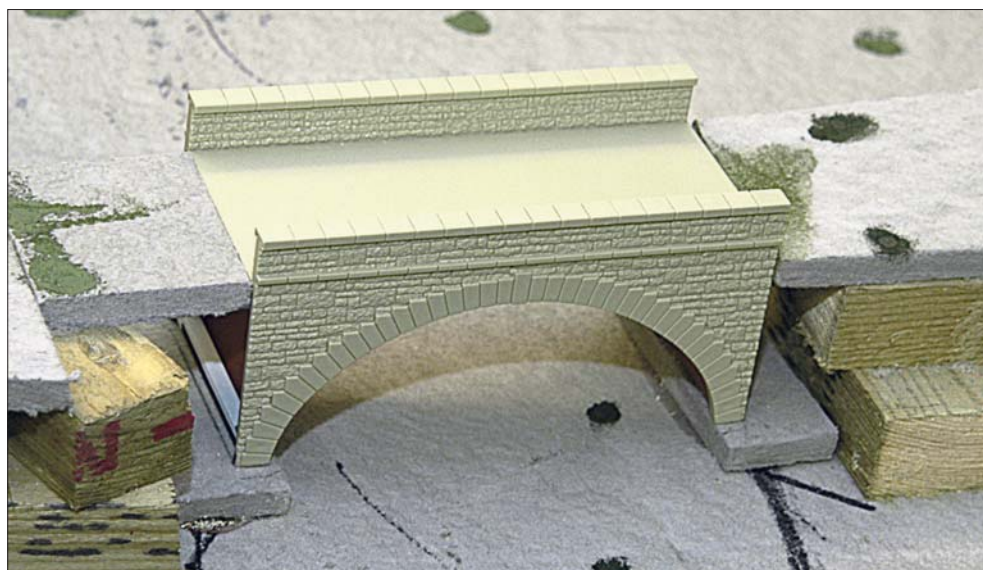
Above: a combination of curves and gradient at one end of the layout.

thickness of the Sundeala board. The combined height of the vertical supports, the longitudinal bearers and the thickness of the Sundeala would align perfectly with the trackbed of the viaduct. The ramp up to the viaduct is a particularly important area. It is impossible to take too much care or over-engineer the structure. The same building principles were applied to the ramp approaches to the small bridges over the river.

The gradients are a maximum of 1:40 which means that for every 40 centimetres travelled along the track, it becomes raised by 1cm. This gives a manageable slope for a locomotive to haul a train. The modeller can make a cardboard template against which the gradient can be measured. The height of each support can be calculated in a similar way to the viaduct approaches.

At every stage a spirit level was used to check the level parts of the baseboard, in all directions. Grey matt paint was applied to the whole baseboard. Time spent at this stage will reap dividends; a good baseboard is the secret of smooth, reliable running that promotes greater realism. Wobbly trains on a model railway will make it look like a toy!

To be continued.

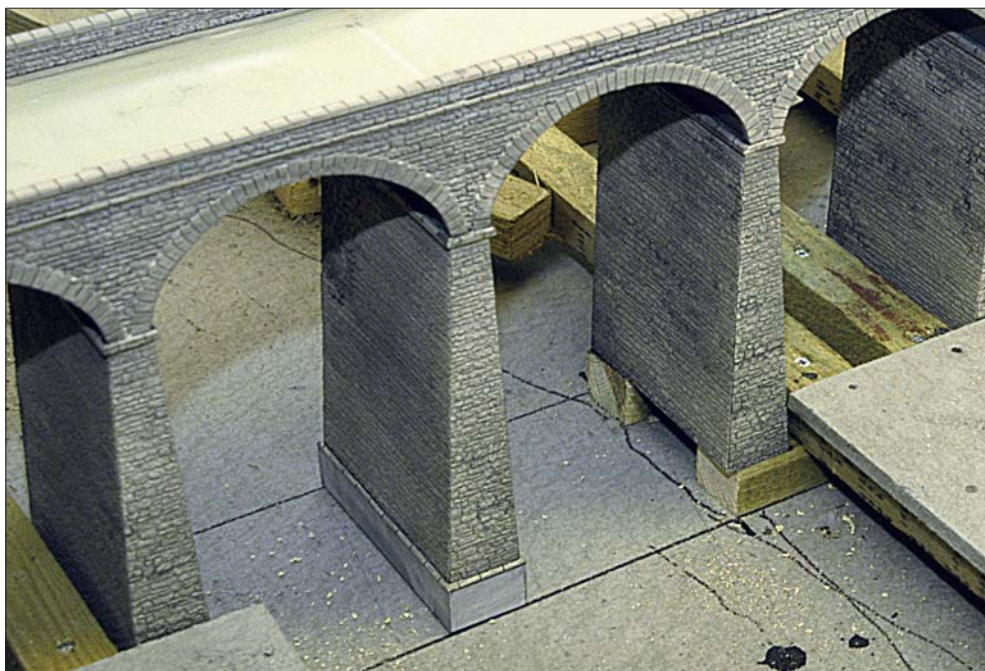


The baseboard was nailed and glued to the framework with PVA glue. Screws can also be used for this task instead of nails. Use the clamps to hold the frame and baseboard in place whilst the glue dries. PVA glue is extremely strong and dries quickly.

The viaduct is the main focal point around which the layout is based. It was therefore the first feature to be incorporated into the base-

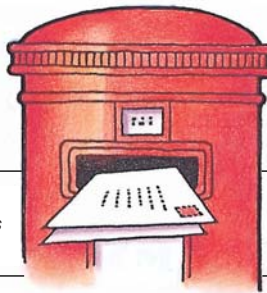
Above: the small river bridge approaches were treated in the same way as those for the viaduct. The combined height of the supports and baseboard made a perfect alignment. The steel nail heads were painted with a spot of enamel paint to stop rusty stains appearing if any damp becomes present, either in the atmosphere or in water-based finishes.

Right: the piers are all supported on 2" x 1" laid flat to raise the viaduct by 1". Longitudinal battens were placed along each side of the entire length except at the site of the river where a single batten supports the pier that stands in the middle of the watercourse.



Photographs by Jolyon Sargent.

READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

GREAT EASTERN BRAKES

Malcolm Lee fitted his GE Decapod model (RM March) with vacuum pipes and hoses at each end. This is wrong. The GE used the Westinghouse air brake, so the model should have air brake pipes and hoses which are distinctly different.

Air brake pipes and hoses were slimmer. There was a shut-off valve in the pipe. The hose hung through a clip on the side of the pipe. The end fitting was totally different as they connected on their side face, not the end. These features can be seen on modern locomotives and wagons.

GE locomotives were fitted with vacuum brake equipment by the LNER but retained the air brakes, so had both types of pipe and hose side by side. There are a lot of good photos in the 2002 Ian Allan book *Steam in East Anglia: a colour portfolio* by R.C. Riley.

Air brakes were fitted to some LNER and BR-built locos of classes B17, J39 and L1 for use on the GE Section.

B.G. PEARCE

Editor's note – and V3: see reviews pages. We were saddened to learn of Mr. Lee's passing, shortly after publication of his article.

BLONDIN CRANES

That Dam Railway, about which John Lee penned an article in this month's RAILWAY MODELLER [April issue – Ed.] must be one of the most interesting and convincing narrow gauge layouts to have appeared in your hallowed pages for a number of years. I look forward to seeing it in the flesh at the Epsom and Ewell Show in April.

However, there is one minor technicality I would like to comment upon. The superbly built crane on the dam is not a Blondin Crane as the caption states. Blondins were rope cranes – ropes or cables would be suspended from towers or the sides of valleys, and the block and tackle could be manoeuvred across the gap, taking the load to where it was required. They were named, fairly obviously, after the famous Victorian tight-rope walker, Blondin.

Blondins are ideal for use on dam construction projects, as they can cover the whole length of the dam, but I was surprised to find, when I searched on the internet, that they were also used until the 1970s in the slate quarries at Llanberis. They were used to pick up individual slate wagons and move them around the quarries, presumably able to place them on a number of different levels, saving a lot of rail haulage.

NICK HOLLIDAY

BULLEID DOUBLE-DECKER

In the July 2000 edition of RAILWAY MODELLER, Mr Don Ware provided a fascinating article with scale drawings

for his scratchbuilt model of the Bulleid double deck EMUs that were operated on the Southern Region. Mr Ware commissioned his own whitmetal bogie components for this project, and was offering sets of them for sale on the products page of the same issue.

I have tried to contact Mr Ware to see if any of these are still available, but so far without success. If Mr Ware is reading this item, or if anyone knows of his current whereabouts, could they please contact Ray Blanchard on 020 7732 9675.

RAY BLANCHARD

SEATON JUNCTION

I was especially interested and impressed by the article on *Seaton Junction* in April's RM; partly because I too am an emigré SR fan (in Lincolnshire), but also in view of the practical, 'fun is equally important' approach that seems to characterise Brian's approach to the hobby.

I refer specifically to his open admission that he likes to run old Tri-ang stock as a little 'self-indulgence'! Bravo, I applaud wholeheartedly this celebration of past products which (as in my case) were all-important in involving us in this pastime.

Unless Brian also has advance access to the forthcoming Hornby new issue M7, I assume that the one featured in the article is also a late Tri-ang (or perhaps near identical) Tri-ang-Hornby example.

My recent return to active railway modelling was via the re-acquisition of a treasure trove of mint Tri-ang, Hornby-Dublo and Wrenn models following the death of my father. As I'm sure many readers will have known, opening the first box was a fatal point of no return and plans were immediately underway for a new layout on which to run Dad's old, but superb models, along with the later Hornby and Bachmann examples I have since bought.

Which brings me to the point of writing. Can Brian, or any other reader, offer advice as to what, if any, modifications he has made to his old loco and rolling stock to cope with modern 100 code track, and points in particular? Most of the old Tri-ang and H-D locos will run on the track without problem, but the points are another matter entirely. Even the 'Dublo locos, built to a finer scale, bump over, or stick at most of my new code 100 turn-outs.

Re-wheeling the locos is prohibitively expensive and destroys originality. Easing the pinch points on the turn-outs may be an option (older Hornby ones seem to work, but you can't get the right radii), but might be tricky.

I'd almost resolved to having to construct a separate layout just to run Dad's older treasured models, but *Seaton Junction* seems to show that I

might still rejoice in seeing my H-D *Barnstaple* or Tri-ang 2-6-2 Ivatt tanks and 'Battle of Britains' on my larger, scale and landscaped setting, alongside Bachmann Ns and 'Lord Nelsons', plus Hornby Qs and BR Standards.

Is there an answer here? I'd be delighted if there is.

G.F. MARTIN

In response to Mr. Martin's letter, we are pleased to offer the following thoughts, the first of which will not be particularly welcome to him.

We have no 'magic wand' to cast over the running properties of Tri-ang and Hornby-Dublo stock from the 1950s and early 1960s. If stock bumps along chairs on code 100 track, then the only solution is to rewheel it. Wheels from this period were quite coarse and of variable quality, and from our experience no amount of tinkering with flanges, frogs and check-rails will guarantee good running. Just occasionally taking a sliver off a check-rail with a mini-drill has overcome a particular isolated problem, but this is not generally recommended.

However, it seems to us that not all modern stock is immune from the type of running problems outlined by Mr. Martin. We have seen better running with locos from the Tri-ang-Hornby era of the late 1960s than more up-to-date items. Wheels and flanges from that later period had become finer, and the motorised chassis adapted to take Wills and Nucat body kits still perform admirably. Some of the locos on *Seaton Junction* represent our first efforts at kitbashing over 40 years ago, and that is why we make no apologies for running them still.

With specific regard to the track, and with due respect to Peco, we try to avoid using small radius points, and always use the live frog variety. Stock seems to accept the medium and large radius points much more readily. Also, turning onto the inner radius of a curved point can cause problems. Speed is an important factor here, as momentum and centrifugal force are wanting to take the train onto the larger outer radius. Safe negotiation of points is also not helped by the fact that leading pony trucks and bogies on locos can be so light. Extra weight or springing in this area can pay dividends. In one case a ball of Blu-Tack placed invisibly between the cylinders sorted out this problem on a DJH kit. And of course the importance of careful laying of track cannot be stressed enough.

We have also been surprised by how often brand-new coaches and wagons can bounce off at points. Some of our stock runs perfectly one way round but not in the other. We have found that the wheel back-to-back measurements are sometimes at

fault. Another factor is incompatible coupling heights when stock from one manufacturer is paired with that from another. Again some extra weight, particularly in 4-wheeled goods stock, can improve matters substantially. Often the repositioning of a light goods vehicle from the front to near the rear of a train is all that is needed. We also wonder if wheels are always square-on to the track, when turning a wagon round will enable it to run over the same track in the same direction.

Equally we have had problems with kit-built stock, where fine wheels but a rigid chassis without compensation can create the same sort of difficulties, but in reverse as it were. Too little play as opposed to too much.

We offer these comments, not on the basis of being experts, but from the viewpoint of average enthusiasts happy to share experience.

KEVIN RAYWORTH,
BRIAN WHEELIKER

COAL YARD TERMINOLOGY

In this month's magazine [*March – Ed.*] there is an article by Richard Bardsley on modelling GWR branch lines. In it he refers to 'Coal Staithe's' and, on his plan of a possible terminus, indicates their location. There has recently been much discussion regarding this topic on a website and I believe that the fruits of that discussion would be of interest to your readers.

First of all, the term 'Staithe's' is incorrect. The word really refers to a structure or embankment constructed to allow shipping coal, as typified by the magnificent, if rather scary, timber trestles built on Tyne- and Wear-side, from which coal was tipped directly into the holds of the ships. In the North East, coal drops were common at stations – raised tracks with spaces below into which the coal could be dropped through bottom doors in the wagons. These also appeared in odd locations throughout the UK. The sleeper-built structures so beloved of modellers should really be called bunkers or perhaps wharves, but not staithe's.

Secondly, the way Richard has positioned the bunkers is extremely unlikely to have occurred in real life. As drawn, the open ends of the bunkers are directly adjacent to the main running line – any road vehicle being used by the coal merchant would have to stand on the track to load, and this would be dangerous and difficult to control. The signalman would not be able to allow a train to enter the station without being able to know that the track was clear, and this could not be guaranteed unless gates were introduced.

Furthermore, the positioning of the bunkers with their closed end adjacent to the track is surprisingly rare on the prototype, although considered the norm by modellers. Goods yards were intended to be multi-user, and placing structures like these by the tracks would severely affect the flexibility of the yard. In addition there are a number of factors that make such an arrangement less than ideal for the coal merchant. Looking at photographs and published plans of stations suggests that the majority had no permanent storage for coal. Wagons would be unloaded directly onto the carts for delivery. The private ownership of the wagon would give the mer-

chant economic storage space, and he would have a few days to unload a wagon before demurrage or other charges might be levied. Any coal left in the bottom of the wagon at the time it had to be sent away would be shovelled onto the ground in piles and subsequently taken away by cart.

Where the quantity of coal left warranted it, bunkers might be built, but they were often some way away from the tracks, at least on the other side of the roadway serving the siding, so that the coal stack did not obstruct vehicle movement. For obvious reasons the open end of the bunker would then be facing the tracks.

All such storage systems would require double-handling of the coal, and this was, and is, anathema to any business, so working this way would have to have benefits to the merchant. As mechanical handling has been introduced and improved, this aspect has perhaps had less impact on costs, and many of the coal concentration yards of the 1950s would have extensive bunkers, probably purpose-made using pre-cast concrete panels, served by conveyors and tractor mounted shovels, allowing the wagons to be unloaded as quickly as possible, to minimise British Railways' charges.

NICK HOLLIDAY

LOCOS FOR SALE?

The recent Bachmann ads reminded me of the enclosed photo taken of a Class 60 working a scrap metal train on the Marsh Barton branch in Exeter. Perhaps you could use it as a RM prototype for everything, tongue in cheek!

MALCOLM FLETCHER

PRaise INDEED!

Wow! It had to happen one day: the outstanding realism of *Stour Lane MPD (SR)* had me fooled. [January issue – Ed.] Chris Hoddinott and son have hit the top spot, with fishplates, telephone wires, weeds and the grimy, rusty, work-worn features which complement the superb locomotives, that reveal more detail upon every further scrutiny. Excellent! (And this, from a 'Duchess' lover!)

I was also well impressed with The Seathorpe Branch where, once again, realism is enhanced by creative use of the imagination so convincingly.

Personally, I find it refreshing to read of Hornby Gresley coaches: I wrote to Hornby a few years back to urge the company to expand its range of these lovely coaches and I know many others did the same. Good result.

Much of merit is evident in *Whitfrom to Whitworth*, and the cobbled streets, flagged pavements and market stalls are outstanding. One rarely sees much effort to provide cant and camber on model roads (let alone on the PW) but Peter Whitworth's engineering is virtually flawless. The walls and integrated scenery are jolly well done.

G.W. RICHARDS

TENDER 'BOOSTERS'

I was impressed to read that the new Hornby A3s could pull a 6-coach rake up a 1 in 36 incline – certainly a better performance than the tender-driven version. However, why not let us have the best of both worlds by providing a ready-to-run tender with a drive in it which hooks straight on to the loco, or



Above: any chance for a locomotive supermarket? Let's see...60 053. Hardtop, two careful owners, never raced nor rallied, 3100bhp, 62mph top speed. Originally cost 1.25m, on your drive for – how much?

Photograph: Malcolm Fletcher.

at least, a driven chassis which will fit simply into a standard issue tender? I know that it is a good idea because, recently, I borrowed the chassis from a tender driven *Scotsman* and fitted it into the tender of an older loco-driven *Scotsman*. The wiring between the tender and the loco was the rather unsightly give-away, but what a monster I had created.

By the way, in case anyone doesn't already know this, a tender drive does pick up on both sides if you remove the rubber tyres and make a small addition to the wiring.

FRED WEITERER

NOT GOING GREAT WESTERN!

With reference to your March Editorial, entitled *Go Great Western...*, it may come as something of a shock to find that there are people like me in the world who positively dislike the Great Western Railway. We have no love or interest in things Brunswick Green, chocolate and cream, etc., and we did not go to Devon for our holidays as children! To me and probably others, it is tedious going to exhibitions to see the same unimaginative layouts based in the south west of England.

I do not think I am alone in my antipathy, but your editorial somehow suggests that people model the Great Western out of choice. I wonder how true that is? Manufacturers, to the best of my knowledge, do not conduct surveys of what the public want. In which case people take what they are given. To my recollection, this 'love affair' with the GWR began with the 150 celebrations back in the late 1970s [sic – it was in 1985: Ed.], when we were 'treated' to views of idyllic stations, perfectly behaved children, bewhiskered station masters with Worzel Gummidge accents and other arrant nonsense.

I am not writing this to offend my GWR-loving brethren, (and sisters), in the hobby, but please, let's try to introduce a little balance. We were a diverse group and this homogeneity of type is taking that away from us. There is far too much of, 'the public wants what the public gets' attitude, rather than the other way around.

KEITH CLARKE

ERA-CHANGING: SOME TIPS AND POINTERS

Following last month's issue when you referred to Variable Era Layouts, you may be interested to know that I have

a layout which can represent GWR 1947, BR Steam 1960 and Modern Image 2000. For the benefit of others who may be considering this, or indeed those who haven't considered it, I can give a few tips and pointers as follows:

1. If your layout is only viewed from one side, or if the viewer is in the centre of a circular layout, you can economise by using 'chameleon' rolling stock, for example coaches with different liveries on each side, tank engines with different emblems each side etc.
2. To assist in the changing of lighting columns, station nameboards etc., I use platforms constructed of solid timber which permits the provision of drilled holes for the sturdy retention of interchangeable items.
3. Signals (non-working) may be changed to alternative quadrant or to colour light by the use of sticky hoop-&-loop pads on the bases.
4. The backscene may be modernised with the provision of a few modern buildings card mounted and kept in place with Blu-Tack.

All this is, of course, in addition to the change of rolling stock, road vehicles, buildings etc. In case this may be thought to be a bit of a chore, I can tell you that in fact I find it quite stimulating, the equivalent perhaps of the wife's joy in re-arranging the furniture!

GRAHAM TIERNEY

THANKS AND APPRECIATION

As the winner of the second prize in the RAILWAY MODELLER 2005 Holiday Competition, I would like to express my thanks and appreciation to the staff and proprietors of the magazine.

I took my trip to Paris at the end of February and thoroughly enjoyed the experience. Although I have visited France many times, Paris had never been on the itinerary, so this was a novel experience. February may not seem the obvious choice for such an excursion, but having chosen to share my prize with my fourteen-year-old grandson Peter (also a reader of RM), it was necessary to make the visit during a school half-term. The weather was dry and the lack of crowds made it much easier to visit the high-profile attractions. The journeys by rail were made without real problems and the benefits of the Channel Tunnel were obvious; again this was a new experience. The provision of the three-day Paris Travel ticket was a great boon and was used to effect on the Metro, the efficiency of which made a great impression on Peter.

I have been a continuous reader of

RM for nearly fifty years and value it as a sound and reliable publication. This was the first time in my life that I have won anything more than a box of chocolates and I was impressed by the generosity of it: excellent travel facilities and excellent accommodation. Thank you very much Peco and RAILWAY MODELLER.

A special thank-you should go to Liz Turner and the staff of Ffestiniog Travel for their efficiency and the care taken to match the arrangements to our needs.

JOHN REOHORN

B1 DRAWING COMMENT

One of the many projects currently on my workbench is a detailing job on a 4mm scale B1 (a Replica body on a P4 chassis by Alan Sibley) so, because I'm on the lookout for relevant information, I turned with interest to the scale drawing in the February issue.

Now, I do admire the quality of the late Ian Beattie's drawings but there are some oddities about the tender as shown – the back half is OK for a B1 post-1955 but the front half looks more like one for a K3! The front cut-outs in the coping-plates are too long, the toolboxes are wrong and the front division plate is too far back – compare the drawing with the tender on David Southwell's model, which looks right. The rear vacuum and steam-heat bags have also been transposed – the former should be to the left of the drawhook. So I'm afraid the drawing was no help to me at all and could mislead others who might want to rely on what's published.

A few items on David's model also had me checking my reference sources. Very early B1s had a different type of electric lighting, where fitted – the type modelled didn't seem to appear on B1s until around No.1190. As a Scottish modeller I give Piercy full marks for providing the curved fillets in the running-plate angles, however, these were a feature only applied by Cowlairs Works from 1956 and 1011 was never repaired there. Finally, the rear tender division plate pictured is the high one introduced from late 1955. Curiously, David seems to have fitted both this and the earlier low-rise one across the water-scoop dome: presumably both are supplied in the kit, but maybe the instructions don't say that they are alternative parts for different eras.

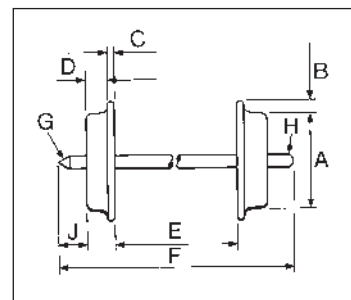
My main source for the foregoing comments is *Yeardon's Register of LNER Locomotives Vol 6*, plus a lot of other published B1 photos. Perhaps David was working from a reliably-dated photograph or his friend has particularly asked him to model 1011 this way. It's been said before in these columns that it's our hobby and it's up to us how we practise it, in which case it would be worth saying so here in order not to mislead other modellers who might see these features as typical of a B1. In the end, creating accurate models comes down to the oft-quoted advice about careful study of a reliably-dated photograph of your chosen subject.

But I still thought David's model looked most impressive and, if I weren't already heavily committed to P4, one of these kits would seriously tempt me to move up to 7mm!

ALASDAIR J.C. TAYLOR

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BR/Sulzer Type 4 'Peak' 1Co-Co1 in N from Graham Farish



Samples are to hand of the new Graham Farish Class 44 'Peak' in N.

The first of the BR Derby Type 4s, D1 *Scafell Pike*, was inspected by 'top brass' at St. Pancras on 21 April 1959, and its nameplates were unveiled officially at Carlisle on 14 July the same year. It was named after the highest (at 963m) peak in England, in the Lake District, and gave the family of 44s, 45s and 46s its nickname.

The 44s were powered by a 2300hp Sulzer 12LDA28A engine, and in working order weighed 138tons 2cwt. Their multiple working equipment was later removed, likewise the Stone-Vapor train heating boiler. All were based at Toton in later years.

44 003 *Skiddaw* was the first to be withdrawn, in July 1976: 44 001 was second, in October that year, and it was cut up at Derby works in February 1977. Fortunately two of the big 1Co-Co1s have been preserved, D4 *Great Gable* and D8 *Penyghent*.

The model to us captures the bulky look of the real things very well. Placed on a scale drawing the model matches the main dimensions exactly, and the 'look' around the cab and end area is right. Cab detail, even in this small scale, is excellent, with full-depth con-



trol desks and seating visible through the flush-glazed side and front windows. Windscreen wipers are present, and picked out very well from the surrounding glazing. Nose end doors, and the characteristic bonnet seam are present and correct.

Roof detail is also crisp and well defined. Boiler water filler hatches, and the associated bodyside steps, are excellent, and the detail parts bag includes two tiny hatch covers which

can be fitted in place if desired. The real things absconded in short order, though, so the parts may not be needed in practice!

Along the side the grillework shows evidence of the rib construction of the real things, and the louvres are very neat. The BR crest and nameplates are printed sharply and in register.

The mechanism incorporates the well-proven modern Graham Farish drive train, with five-pole motor mounted centrally and driving gear towers. Flywheels (2) aid smooth running. The split-frame method of current collection is employed as usual, but new frame halves have been produced for the 44, as each half incorporates small clips which are used to hold the cab detail mouldings in place.

Performance is smooth and quiet, with a little bit of motor buzz straight from the box. The long 1Co bogie frame has sufficient swivel and side-play to allow the big diesel to traverse 9" radius curves – well in excess of the prototypes' 3 1/2 chains minimum radius (5 originally). The buffers are correctly on the bogies, and although the model looks a little odd traversing sharp curves, on straights the low-slung appearance of the real things is main-

tained. The detail pack also includes brake pipes and multiple working equipment pipes, although as noted above the latter pipework was removed. As ever, check your chosen prototype and era before deciding to fit or omit.

The model weighs over 110g, so should be able to haul the kinds of freights asked of the prototypes (coal chiefly, especially once the class was concentrated at Toton).

As well as class leader D1, Graham Farish has listed 44 008 *Penyghent* in BR blue with full yellow ends as a companion, in addition to two versions of classes 45 and 46. Interestingly, unlike for instance the Class 37s in the GF fleet, the 'Peaks' do not have plug-in nose fronts to allow different placement of headcode boxes etc; the bodysides are one-piece. This will not make for easy swap-arounds (44 009 *Snowdon* had a four-character route indicator at one end near the twilight of its career, as a result of repair following collision damage), but neat 'shut lines' are better.

Even this far along the road since their demise the 'Peaks' are still popular machines (is there a 'Peak Army' old comrades' association?), and this Graham Farish recreation will be widely welcomed too.

For N

SAMPLE SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE ref.371-201, £76.95.

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



Billinton E4 0-6-2T in OO from The OO Works

Fifteen of these Billinton radial tanks were spotted by your reviewer, mostly around New Cross Gate on occasions when pocket money permitted taking the train home from school instead of the usual two-mile walk. That these rail journeys resulted in a *later* than usual arrival home should surprise nobody. Actually 32503 was not one of those seen but they all looked just like the latest SR loco from The OO Works and some were almost as smart.

Distinctive features of these 58-ton engines, well captured in the model, were the 4'6" radial trailing wheels, only 6" smaller in diameter than the drivers. While shunting at NX Gate on greasy rails one very wet afternoon, the coupled wheels of an E4 locked up upon braking, the loco sliding along with only those big trailing wheels turning majestically, leaving this young spotter with a memory which has lasted five decades.

The model is batch-built and ready to run on 16.5mm gauge track. The body is a crisply defined resin casting with metal detailing, and the mixed-traffic lined black livery is hand finished to a very high standard. The later BR crest is fine if you like modern image. The alternative number offered, 32468, has the lion-on-wheel crest, and that loco also escaped young Brewer's net in the mid-1950s. Boiler feed pipes and clacks, and the handsome whistle are brass finished, rather indicating that this engine is someone's 'pet', but where is not clear, as no shed plate is present although our Locoshed Book for early 1956 places 32503 at 75A Brighton Newhaven.

Two pre-nationalization liveries are available, SR plain black with Sunshine lettering, and olive green (presumably lined black/white), both with a choice of any number.

The smokebox, saddle and boiler



mountings have the correct Billinton look as do the sidetanks with radiused top edges and the commodious cab, slightly narrower than the tanks. There is a suggestion of boiler backhead detail in the cab, but the bunker will have to be 'coaled' by the engine's owner. Buffers are sprung and there is a single brake pipe front and rear. Memory suggests that there should really be three pipes at each end, for air, vacuum and steam heat; again, easy items to source and to add if required. A Westinghouse compressor for the airbrake sits correctly on the off-side footplate.

Boiler and tank-top handrails are separately applied wire in pillars, very neatly done, and those at the cab doors are moulded in, although effective enough. Tank filler lids and smokebox door handles and hinge straps are well applied details. Three lamp irons are in place above the front buffer-beam, but nowhere else.

The main frame is milled from solid brass, providing useful adhesive weight. The Mashima motor is mount-

ed horizontally between the second and third coupled axles and drives the centre one via a worm and double reduction gears.

The running is smooth enough, but our sample was wired up back-to-front and proceeded bunker first when that was not our intention.

Tension lock couplers are screwed into the frame front and rear, together with a scale cosmetic hook on the buffer beam. Guard irons are substantially made from brass and also screwed into the frame. Brake blocks and hangers are present. These

engines did not have pull rods outside the wheels. The Romford driving wheels have no balance weights. The spokes, tyres and coupling rods are painted black. The trailing wheelset runs in the frame with a fair amount of slack which seems to simulate the appearance and action of a radial truck quite well, although about 20" seems to be the minimum practical radius.

The body can be unshipped from the chassis by removing two crosshead screws, one in the false floor of the bunker (so any 'coal' added must be removable) and the other rather unsympathetically positioned on the footplating just behind the front bufferbeam and offset to the offside.

This is an attractive low volume ready-to-run model of a south country favourite.

For OO

SAMPLE SUPPLIED BY
The OO Works, 'Brendon', Langham
Road, Robertsbridge, East Sussex
TN32 5DT.

PRICE £155.00 plus £5 P&P

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



CDA china clay hopper in N from Peco

New to the N gauge fleet of modern wagons from Peco is the CDA-coded china clay hopper.

For years, the transport of this important material was entrusted to traditional wooden-bodied vehicles, and those that lasted into the mid-1970s were refurbished and fitted with sheet rails and tarpaulins – the 'Clay Hoods'. By the mid-1980s, however, these wagons were becoming life-expired, and a new vehicle type was required to replace them.

BREL Doncaster turned to the HAA-coded 'merry-go-round' hoppers, and converted a testbed in 1986. The roofed and vented conversion was deemed successful, and so in all 139 hoppers were converted at Doncaster in the ensuing years, allowing the replacement of nearly 500 of the elderly 13-tonners.

The new Peco model captures accurately the shape of the roof, with its ribbing and ridge on one edge. The body carries the main and supplementary vents on the ends: the extras were added to improve the airflow into the vehicle when the cargo was being unloaded. Note that the orientation of



the small vents, which are correctly towards the same side of the body, should be above the side of the chassis with two (vs. one) unloading chocks: the chassis is a clip-fit under the hopper bottom, so is a snip to correct if the model is one of the few that came out of the factory 'wrong way round'.

Two liveries are offered so far, whereas in the main there is only one on the prototype: whitened with clay dust! The as-delivered blue with ECC

logos (ref.NR-305) is joined by versions in EWS maroon (ref.NR-306). In practice the harsh operating environment, and flexing of the galvanised superstructure under loading and unloading, caused the decals to deteriorate rapidly, whereupon they were removed as unsightly.

In 1994, the fleet passed to Transrail on pre-privatisation, but whether any CDAs carried this company's identification before EWS took it over is questionable.

For N

MANUFACTURED BY
Pritchard Patent Product Co.,
Underleys, Beer, Seaton, Devon
EX12 3NA.

PRICE
£12.50ea

WHEEL DATA
B. 0.8mm, C. 0.4mm, D. 1.7mm,
E. 7.3mm.



Tank wagons old and new in 4mm scale from Bachmann

Time once again to catch up with some more wagon output from Bachmann, inevitably overshadowed in more recent months by new locomotives and coaching stock.

The three-pack of Esso tank wagons (ref.37-668) will suit the steam-era modeller perfectly. Light weathering on the Class A regulation livery suggests post-war days, with these wagons nearing replacement. Subtle representations of spillage are present on two of the trio. The pack comprises fleet No.303 without ladders or platform, with horizontal tank tie-rods and running on three-hole disc wheels; No.3060 with ladders and platform, tie rods and wheels as above; and No.2678, without ladders or platform, and with tie rods looped around the central filler cap. (All three fillers are different too.) This wagon runs on split-spoked wheels. Each model has detachable slimline tension-lock couplers in NEM pockets on swivelling mounts, and is a very smooth runner.

Representative of the modern replacement is TTA-coded 45-ton tanker No.60705, operating under Shell colours (ref.37-579). Its pristine condition allows the tiny lettering to be read (with a magnifier, of course). The servicing panel and Railfreight Petroleum sector branding are also



very well produced. Couplings are as above, and this tank too is a very good runner.

For 00

SAMPLES SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
ref.31-612, £57.20

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Hornby weathered wagons in 00



Three recent additions to the selection of triple-sets of wagons in 00 from Hornby have been released: all three have had subtle weathering added.

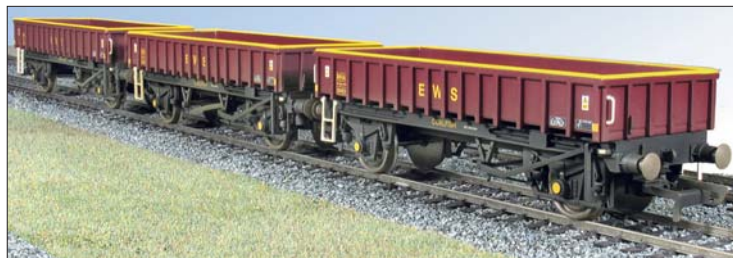
The sets are firstly three HAA hoppers (ref.R6222A), with consecutive fleet numbers 356732, '3 and '4; the china clay-carrying CDA-coded roofed variety (ref.R6223A) representing Nos.375125, '6 and '7; and EWS-liveried MHA-coded Coalfish lowside opens (ref.R6225A), the trio being Nos.394831, '2 and '3. The prototypes were converted from redundant HAA hoppers, thereby enabling Hornby to utilise a common chassis across the

three packs. All the models are very well moulded and finished, have good trackholding and are fitted with sprung buffers and slimline tension lock couplers. These are fixed into NEM pockets on swivelling mounts.

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE £32.99ea

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Weathered TTAs in 4mm scale



Kernow Model Rail Centre has commissioned, from Bachmann, a limited edition (500) pack of four TTA tank wagons. They are in unbranded grey livery with a weathered finish.

The Bachmann team has produced this set of totally individual wagons. They carry much more detail than just altered running numbers, and are based on photographs taken by Kernow Model Rail Centre at Long Rock depot, Penzance. Bachmann has faithfully reproduced the markings on

each wagon, even those that were not level on the prototype. The solebar markings are also accurately reproduced.

For 4mm scale

AVAILABLE FROM
Kernow Model Rail Centre,
98 Treloar Street, Camborne,
Cornwall TR14 8AN

PRICE £38.95, post free.

Top link passenger steam power from Hornby in 00

The newest release from Hornby of its rebuilt Bulleid 'Merchant Navy' is of No.35019 *French Line CGT* and accompanying 5100-gallon tender (ref.R2528, £105.00). The model represents the loco as running between May 1959 (when rebuilt) and February 1961 (speedometer fitted). It was withdrawn in September 1965, and scrapped at John Cashmore's yard in Newport, Monmouthshire.

The shipping line, the Compagnie Générale Transatlantique, operated amongst other vessels three of the finest French liners, *Ile De France*, *Normandie* and *France*.

The model is every bit as good as previous versions of the big SR Pacifics in the Hornby stable: the nameplate – in a rare script lettering style, which the shipping company used in its publicity material, and to which we have tried to get close above! – is excellently printed in such a small size. The 70A Nine Elms shedplate is correct for the time, as is the one-long-one-short arrangement of sand fillers beneath the nameplates on each side of the engine.

Digital command control capability



is included, in the form of an eight-pole dual inline (NEM652) socket, ready to accept the decoder of the purchaser's choice if needed. The model is, as with other 'Merchants', engine drive from a five-pole skew-wound can motor.

C'est magnifique!

Additionally, two new identities have been applied to members of the Hornby GWR 4-6-0 fleet; one a 'Grange', and a 'Castle'.

The acclaimed mixed-traffic 68xx was reviewed in full in the May 2005 edition, and No.6877 *Llanfair Grange* (ref.R2547, £99.99) matches its stablemates in all areas for quality. It also carries the 'shirtbutton' monogram.

About the only thing we would want to add to the model is the characteristically Great Western front coupling link hook, aside the coupling hook on the bufferbeam. GWR-type shed codes – TYS, PDN etc – are not given, but in early BR days this engine was shedded at Worcester.

The building after which the locomotive took its name was a monastic residence near Abergavenny which, due to confusion, also gave its name (in a different form) to sister No.6825!

The 'Castle' represents No.4081 *Warwick Castle* in 1950s finish with early BR emblem on the straight-sided Hawksworth-pattern 4000-gallon ten-

der (ref.R2543, £93.50). The model carries an 87E Landore shedplate, so although slightly anachronistic (4081 had moved on from 87E by the time the practice became established) we feel it would be in order to keep the front buffers of the model brightly silvered: this was for several years a trademark identifying feature of the Swansea depot's stud.

Both models feature loco-mounted transmissions, and are DCC ready: an eight-pole NEM652 dual inline socket awaits the purchaser's choice of decoder. Motors are a can type on the 'Grange' and a small Ringfield on the 'Castle'.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES
In text.

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Brawa lamps



Modellers planning to make a layout interchangeable in terms of time period will find the latest additions to the Brawa range of great use. The packs all feature the company's patented socket arrangement, allowing easy swapping and removal for transport.

Typical of new releases are modern platform lamps (ref.5851, £11.95 for a pack of three) and lamps on wooden posts (ref.5842, £15.50 for a pack of three). One of each is illustrated.

For H0

SAMPLES SUPPLIED BY
M.G. Sharp Models, 712 Attercliffe
Road, Sheffield S9 3RP.

PRICES in text.

Class 04 shunter in 00 from Bachmann

The latest example of the Bachmann Class 04 shunter (ref.31-339, £44.90) represents No.11217 in as-delivered black but with weathering. Many early diesels shared accommodation with steam, and the pristine top and grimy lower section of the model is nicely evocative of a machine some way down the cleaning roster.

No.11217, built in December 1956 and sent to Percy Main shed on Tyneside, became D2247 in the soon-after-enacted renumbering scheme. After a working life of just under 13 years, it was withdrawn by BR in November 1969, and scrapped at Briton Ferry in South Wales slightly less than a decade later.

The model's packaging is not branded 'DCC ready' and, being a diminutive model with a split-frame chassis, it will be more than a five-minute job to fit a decoder in! Performance is good out of the box, but the short wheelbase means large insulfrog points and crossings need to be approached at more than dead slow to avoid stuttering.

The weathered wheels look a little odd in motion, due to the coupling rods' inadvertent role as masks during the spraying process.

Supplied within the polystyrene inner tray is a bag of detail parts for the purchaser to install: cab door and cab-side handrails, plus brake pipes fit into



factory-formed holes where required. Handrails fitted by Bachmann are appreciably fine.

Buffers are sprung, but the slimline tension lock couplers fore and aft are screwed rigidly to the chassis; they cannot swivel, and do not have snap-out NEM forked tails to allow easy replacement of other types of coupler.

In short, a nice model of an often overlooked prototype.

SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
In text

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Gresley V3 2-6-2T with Westinghouse pump in 00 from Bachmann

The latest version of the Bachmann 4mm scale model of the handsome Gresley three-cylinder Prairie tank is now available, with weathering and Westinghouse pump as No.67682.

The muse for the model is the former LNER No.390 of September 1939, the first of the class of 92 machines in all to be built as a V3 (with 200lb/sq.in. boilers *inter alia*) as compared to the total of 63 older V1s that were converted to this format. The presence of the Westinghouse pump marks the model out as representing one of the 12 tanks thus fitted for operation over ex-Great Eastern metals. No.67682 was a north-easterner for much of her life, beginning at Gateshead and shedded, at the time of the model's representation of her, at 52C Blaydon. Withdrawal came in September 1963, at just 24.

The model features the effectively grimy weathering that Bachmann has applied to much of its recent output.



(The weathering on this model is at variance with its listing in the 2006 Bachmann catalogue.) This does not obscure detail on the loco's flanks, making it a tricky job to renumber the model if needed. Brake pull-rods are included with the packaging for the

modeller to fit, as are vacuum brake standards. The air brake fittings incorporated additional lower-height buffer-beam standards, which are absent on the model.

No socket is included for those who wish to fit a digital command controller

and, as the model is arranged on the split-frame chassis pickup principle, installation of a decoder will not be entirely straightforward.

Performance is smooth and quiet, as with earlier versions of the V1/V3. Sprung buffers are present, and the slimline tension lock couplers are fixed to the leading and trailing pony trucks; the former of these is also wired for pickup.

For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE ref.31-612, £57.20

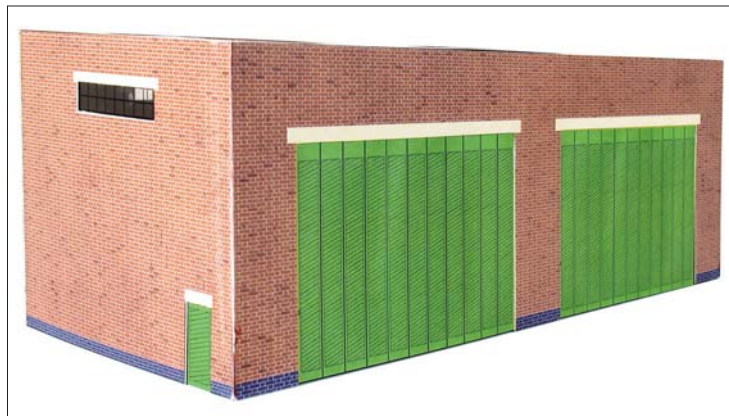
WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

MOD transport workshop building plus air raid shelter kit in 4mm

The latest 4mm scale card structure kit (ref.CKIT 06) from Roger Smith is based on a motor transport workshop which was measured in 1978 at ex-RAF Fradley aerodrome near Lichfield. The same design was also found at a former Government site next to a shadow factory at Clay Lane in Birmingham. The design features front doors made up of wooden panels hinged together and guided top and bottom.

The kit is well printed in colour and enjoyable to build using your reviewer's usual modest arsenal of tools – scalpel, steel straightedge, scrap of flour paper and glue. The instructions are fine but typed 'all-caps' which made them tiring on the eyes, we found.

The walls of the structure are double thickness of card, with Roger's usual rebated corners which provide a strong but simple joint. The main doors can be modelled as partly open if desired. Printed glazing material is provided for the high level windows in



the end and rear walls.

We thought that the small door in each end wall was underscale at about 22mm high and if we had been building 'for ourselves' would have enlarged it to around 26mm high before assembly commenced.

The brick air raid shelter is also a

WWII-era building which might have survived into later years, perhaps in the vicinity of an MPD or marshalling yard. Construction is along similar lines with double thickness walls and rebated corners. The plan of the walls is printed on the inside of the flat roof and therefore the model is assembled



upside down, and everyone wonders what on earth you are doing until, when the glue is dry, you turn the work over with a flourish and reveal a 4mm scale air raid shelter.

For 4mm scale

SAMPLE SUPPLIED BY
Roger Smith, 121 Wellsford Avenue,
Solihull, West Midlands B92 8HB.

PRICE
£5.99.

More 4mm scale vehicle kits from R. Parker

Six additions to Mr Parker's range of 4mm scale vehicle kits in whitemetal have arrived and our made-up samples are, from left to right, as follows.

The 1956-61 Nash Metropolitan was marketed as an Austin in the UK and, as we recall, was actually an A35 in wolf's clothing (ref.VE39, £9.00).

Very numerous in its era was the well-remembered 1961-69 Austin A60 Cambridge (ref.VE40, £9.00).

The 1957-61 Ford 400E is now available with flatbed body as the 15cwt Float (ref.VE36, £11.00).

Two small commercials for early release are a 1953-59 Bedford CA series Ice Cream Van (ref.VE27, £10.25) and 1955-60 Morris LD Ambulance (ref.VE29, £11.50).

Finally, the Morris J4 10/12cwt van was from the 1961-68 era (ref.VE37,



£11.00). As before, the castings on all models are sharp and clean.

The models are good replicas of their once so familiar prototypes, and all are appropriate for that long last decade of BR steam.

SAMPLES SUPPLIED BY
R. Parker, 19 Oaklands, Malvern
Wells, Worcestershire WR14 4JE.

PRICES
In text and include UK P&P.

Phoenix acrylics

Phoenix Precision Paints has recently released a range of acrylic paint in 14 shades plus a thinner, each supplied in 30ml plastic jars. The colours are Light Rust, Light Red Brick No.2, Gloss Black, Gloss White, Bold Yellow, French Blue, Poppy Red, Light Blue, Signal Red, Flame Red, Crimson, Olive Green, Lilac and Chocolate.



SAMPLE SUPPLIED BY
Phoenix Precision Paints, P.O. Box
8238, Chelmsford, Essex CM1 7WY.

PRICE £2.00 per jar.

North Eastern structures in 4mm from Hornby

Part of the charm of the Hornby 'Skaledale' range of ready-to-plant 4mm scale buildings is its regional adaptability: it is not necessarily tied to one geographical region or style of architecture. The latest releases, though, are firmly North Eastern Railway-inspired.

The station building (ref.R8629, £16.75) has echoes of Knitsley station, on the Lanchester Valley branch, and also of Lealholm, in Eskdale. Both feature the stepped gables which, although atypical of North Eastern buildings, were distinctive features of part of Thomas Prosser's time at the helm of the NER Architect's Department. It measures 130mm long x 90mm wide over bay window, and stands 120mm tall from plinth to top of chimney pots.

To extend the structure lengthwise, Hornby has released a matching toilet block (ref.R8630, £5.99) and extension building (ref.R8631, £5.99). Both are 48mm long x 58mm wide x 58mm tall to uppermost gable, and incorporate recesses at their bases to accommodate the main station building's plinth. The extensions and 'mother ship' do not fit precisely together out of the box, but the modeller can disguise the joins relatively easily.

The platform shelter (ref.R8638, £5.99) is a near-match for the prototype provided for Goathland – a station still active as part of the North Yorkshire Moors Railway, of course – right down to the lamp at the left-hand end as viewed towards the seating area. It is 73mm long x 35mm wide overall, and stands 52mm tall. The interior panelling is a nice touch.

The typically NER brick-built signal box (ref.R8632, £11.75) – think Levisham, NYMR – is 72mm long, 50mm wide and 85mm tall to top of chimney pot. The steps and associated veranda (for single line token exchange purposes) adds 33mm to the length. The arched locking room windows, with decorative brick surround, are worthy of particular note.

The double-road stone-built engine shed (ref.R8637, £22.99) is a sizeable



220mm long x 143mm wide, and stands 115mm tall to the peaks of its gable ends. The circular vents are characteristic North Eastern features, as is the lack of doors; the interior walls of the model have stone-effect finishing as a result of this trait.

The water tower (ref.R8639, £9.99) is 67mm long x 50mm wide and is 97mm tall to the top of the ladder. It boasts a fine representation of the tank panels (again, in NER style) and a water-effect finish inside the open top of the tank. The ladder could be replaced by something a little more to scale, but the downpipe at the other end is fine as it is.

Finally, no North Eastern layout could be complete without coal drops – or 'open coal deposit' as Hornby terms it (ref.R8634, £10.50). The three-

cell structure is 170mm long x 72mm wide, and stands 58mm to the top of the rear wall. The structure would most likely be destined for the extremities of the goods yard, although drops were sited beside platforms (at Coxwold and Amotherby for example), which must have made for a dusty experience for waiting passengers! The gap between the planked deck sections accepts most makes of 16.5mm gauge track: for maximum realism some beams need to be added beneath the sleeper base to simulate the load-bearing joists of the real thing. Hornby additionally offers a covered two-cell structure 115mm long and 72mm wide: it is 112mm tall to the apex of its roof. Described by Hornby as a 'covered coal shed' (ref.R8633, £12.99), it seems to us that the real things were

more likely to have been used to aid the unloading of sheeted wagons with cargoes that needed protection from the elements.

This rather lengthy overview is due to the significance of this suite of structures. Hornby has provided a collection which, with minor adjustments to the (London Midland!) maroon paintwork, will in general be ideal for pre- and post-grouping, plus BR and post-BR modellers alike.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES
In text.



40' container kit in 4mm scale from C-Rail Intermodal

C-Rail Intermodal has increased its range of container kits with a 40' x 8'6" ISO type in 4mm scale. It is the most common kind of container across the globe these days.

The kit has been moulded crisply in a neutral grey plastic, and includes locking bars which have been moulded in a shade of plastic to replicate the galvanised steel of the real things. The locking bars, three sprues to a pack, are available separately to be fitted to Bachmann 20' and 45' boxes if desired. The container is deliberately 1mm too tall, as it has to match the Bachmann products, which are similarly a mite overscale. Bulk packs of five kits are offered.

Paint of suitable shades, mixed by Phoenix, is available from C-Rail for most of the major shipping lines, and to fit the new 40' container a sheet of waterslide transfers has been pro-



duced by noted US firm Microscale. It provides sufficient transfers for four containers, in the liveries of OOCL, Yang Ming, Hanjin and P&O.

The completed model is a good fit on the Bachmann twin wagon, but the holes in the floor of the container may need opening out a little to allow the wagon's spigots to fit home snugly.

For 4mm scale

AVAILABLE FROM
C-Rail Intermodal, Morven, Roome
Bay Avenue, Crail, Fife KY10 3TR

PRICES
40' container kit – £5.00
40' container kit x 5 – £23.50
Container locking bars pack – £1.00
Paint – £1.80 per tin
Transfers – £4.95 per sheet
P&P – £1.50 per order.

Contemporary-livery HST train packs in 00 from Hornby



Close on thirty years after their introduction the High Speed Train sets are still going strong on the erstwhile Western Region of British Railways. The livery has moved on somewhat, though, from the IC125 blue & yellow with regulation blue & grey Mk.III coaches: the current First Great Western scheme has somewhat unkindly been nicknamed 'Barbie' by some observers of the current scene.

The Hornby HST has had nearly as long a track record, making its debut in 1978. Improvements have taken place over the years, most notably scale length Mk.III coaches, such as are supplied with this new train pack.

As is traditional, the power cars are motored and dummy Class 43s, Nos.43185 *Great Western* and 43192 *City of Truro* respectively. (As an aside, perpetuation of traditional names such

as these is so much more 'railwaylike' than corporate 'plugs'.) Two Mk.IIIs are provided, standard class Nos.42042 and '43.

Continuing the tradition theme, the motor is the tried and tested Ringfield 'pancake', driving both axles of the trailing bogie of 43185; on each is a traction tyre. No DCC capability is provided for: modellers are referred to our recent booklet (October 2005) for

advice on fitting a Ringfield with a digital decoder.

To extend the set – but not complete it until Quarter 3 this year, when the ex-Lima TGS is due for reintroduction – individual first, buffet and standard class coaches are available in the same livery.

For 00

SAMPLES SUPPLIED BY
*Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX*

PRICES
*FGW HST train pack (ref.R2500) –
£95.00
Mk.IIIs, buffet, FO & SO – £18.50ea*

WHEEL DATA
*B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.*

Latest Bachmann POs in 00

Four new additions to the Bachmann Blue Riband range of private owner wagons are illustrated here.

The Pease & Partners 8-plank side & end door wagon, with clear Thorne Colliery marking, is based on a Chas. Roberts example illustrated on p.93 of *Private Owner Wagons, a second collection* by Keith Turton (ref.37-132, £6.65). Alongside it is an 8-plank fixed end type in Stewarts & Lloyds ownership (ref.37-157, £6.65).

The two with coke extension boards are 7-plank wagons with end doors. The South Wales & Cannock Chase Co. wagon (ref.37-181, £6.75) is modelled on a Gloucester prototype, as is the wagon in the plain black livery of Elders Navigation Collieries (ref.37-182, £6.75). This model is a good reminder of the times when shipping

companies were not unknown in the colliery industry, gathering supplies for their vessels 'in-house'.

The models are painted and finished expertly – wagon builders plates are legible, for instance – and run smoothly on split-spoke metal wheels (the SW&CC one has plain spokes).

For 00

SAMPLES SUPPLIED BY
*Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY*

PRICES in text

WHEEL DATA
*B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.*



More Mk.II and Mk.III stock in modern liveries in 00 from Hornby



Hornby has continued its programme of coach releases with different running numbers (denoted by the suffixes to the reference numbers) from previous versions, even if the liveries are not being seen for the first time round.

The Virgin-liveried Mk.III coaches are a standard class (ref.R4097C, £19.50) and buffet first (ref.R4098E,

£19.50), fleet numbers 12104 and 10236 respectively. Both are naturally the current scale-length vehicles, and have been finished very well. The presence of buffers marks both coaches out as non-HST stock: although the real things have been superseded from the West Coast Main Line they are not extinct – yet.



In similar vein are the Mk.II open standard (ref.R4225A, £19.50) and open first (ref.R4224A, £19.50) in the First Great Western green with gold striping – now superseded by the 'Barbie' colours – representing fleet numbers 6219 and 5636 respectively.

Metal wheelsets carry each model along smoothly and without wobble.

SAMPLES SUPPLIED BY
*Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX*

PRICES in text

WHEEL DATA
*B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.*

Book Reviews

The Alcester Branch

Stanley C. Jenkins
and Roger Carpenter
Wild Swan Publications Ltd,
1-3 Hagbourne Road, Didcot,
Oxon OX11 8DP.
270mm x 215mm 96pp
Softback £18.95
ISBN 1905184050

This six-mile South Midlands branch had an untypically complicated history, essentially as follows. Opened in 1876 and operated by the GWR in uneasy alliance with the Midland, it was closed as an emergency measure during World War I, re-opened in 1922-3, closed a second time during World War II, and re-opened a second time in 1941. Passenger traffic was again withdrawn in 1944, the branch remaining in use for wagon storage and occasional freight traffic until the 1950s, with final closure being effected in 1960.

The book is presented in the publisher's familiar rather genteel style, with several full-page uncropped photographs. Wonderful for modellers are the well-drawn track plans, OS map extracts and timetables. An appendix by Garth H. Tilt on the branch signalling is of particular interest.

We believe that this GWR branch has never before been the subject of a monograph, and that this book will certainly fill a gap in the published history of Midlands railways.

Steaming in Three Centuries

Irwin Pryce & Leslie McAllister
Irish Railway Record Society
(London Area)
245mm x 170mm 192pp
Softback £12.95
ISBN 0902564080

The sub-title of the book is *The Story of the 101 Class locomotives of the Great Southern and Western Railway* and it is published to mark the return to steam of the preserved Class 101 No.186 in her 127th year.

The class in question began life at Beyer Peacock in Manchester and was developed over the years at Inchicore

by a notable band of engineers including McDonnell, Aspinall, Ivatt and Coey, with Maunsell and Bulleid also getting a mention, for they, too, were Inchicore men in their time.

The book includes unscaled drawings of some variations within the class and over 200 photographs of the engines at work throughout Ireland, 'from Derry to Kerry' and from Portrush to Valencia Harbour. A driver tells of his experiences driving and firing them and there is a short description of their ill-fated cousins, the classes 700 and 710. The story of the two surviving Class 101s is fully told, with a detailed description of the restoration of No.186.

An excellent 16-page colour section enlivens the well chosen but inevitably monochrome collection of archive pictures.

In service during three centuries, these pretty 0-6-0s became Ireland's most numerous locomotive type, and it is splendid to know that two are in the safe custody of the Railway Preservation Society of Ireland.

The book is available post free from Paul Trickett, IRRS, Bury Lodge, Offchurch Lane, Radford Semele, Leamington Spa, Warks CV31 1TW.

Liverpool & Manchester

1: LNWR lines

Bob Pixton
Kestrel Railway Books, PO Box
269, Southampton SO30 4XR.
273mm x 210mm 124pp
Softback £14.95
ISBN 0954485998

Although the 30 mile-long Liverpool & Manchester Railway was one of the earliest main lines in the world, it is less well known that in later years, between the two cities, there were 80 stations, seven termini and ten loco sheds, taking no account of the north-south lines, goods lines and dock railways.

This photographic collection deals with the ex-LNWR lines in the area, and includes some shots and a plan of the L&M Liverpool Road station in Manchester, dating from 1830. The installations of similar date at the Liverpool end of the L&M, namely the site of the 'Moorish Arch', Wapping tunnel, Sankey viaduct, Earlestown. Parkside, Kenyon Junction etc. are also illustrated.

Throughout the book the pho-

tographs, maps and prints are of great interest, but the captions sometimes fall short of the publishing standards which we have come to expect. Although the contemporary tramways (and a modern motorway) are mentioned in the caption to the c1913 shot of Eccles station, the more recent Metrolink branch to that town goes unmentioned. More seriously, the caption for 'Turbomotive' No 6202 at Edge Hill betrays a fundamental misunderstanding of the unfortunate history of this locomotive.

Two further volumes in this series will cover the routes operated by the Cheshire Lines Committee and the Lancashire & Yorkshire Railway.

Jack in a Box

Alan Cliff
Gwasg Helygain Ltd,
68-70 Kinmel Street, Rhyl,
Denbighshire LL18 1AW
210mm x 145mm 28pp
Softback £2.95
ISBN 0955033837

Here is the latest *Jack the Station Cat* story for 5-8 year olds, or even 58 year olds! A shorter version of this story originally appeared in *Jack the Station Cat Signalman and Other Stories*, but this latest version has new material with additional illustrations. It tells how Jack's Aunty Buzz, a retired Station Cat (remember?) comes to live at Tail's End and relates the adventures the cats have when Sydney the Signalman is taken ill and they run the box. This is a splendid way of teaching children, not to mention their parents, how a traditional signal box works.

The immaculate text, so satisfying to read aloud, is supported by Nigel Cliff's sketches which impart a good railwaylike atmosphere to the story.

Monmouthshire Eastern Valleys

Featuring Newport Docks

Vic Mitchell & Keith Smith
in association with Dave Edge
Middleton Press, Easebourne
Lane, Midhurst, West Sussex
GU29 9AZ.
240mm x 165mm 96pp
Hardback £14.95
ISBN 1904474713

This latest Middleton album is in the *Welsh Valleys* sub-series and follows the now-familiar format of captioned photographs in route order, OS map extracts, ticket and timetable facsimiles etc. The account starts with a description of the geographical setting and historical background, accompanied by a formidable looking gradient profile.

The route is described in three sections, Newport Docks to Mill Street, Newport High Street to Blaenavon Low

Left: captured cold on Mallow shed on 7 September 1957 was 101 Class 0-6-0 No.176, which retained its saturated boiler at the time. Built in August 1873, it was withdrawn in 1959.

Photograph: Frank Hornby.

Level, and the Talywain Branch and North to Brynmawr. The section on the Docks is of particular interest, with photographs of cranes, ships and loads and maps of several installations.

The photographs span steam and diesel eras and, as with all Middleton albums, are chosen to portray railway infrastructure, such as stations, signals etc, as well as locomotives and stock.

This is an interesting addition to the literature on the railways of South Wales.

Sutton Scotney

Life at a country Station

Kevin Robertson
Kestrel Railway Books, PO Box
269, Southampton SO30 4XR.
265mm x 190mm 56pp
Softback £7.95
ISBN 1905505000

This is the third volume in the publisher's *Great Western Aspects* series. The sub-title describes well the contents which relate the story of Ernie Penny's working life as signalman at the eponymous passing station on the single-line Didcot, Newbury & Southampton section of the GWR, or BR(W) – it made little difference. Even takeover by SR in 1950 was marked principally by the need to requisition stores from Eastleigh rather than Reading.

The author has researched his subject well, although his dramatized style, with much dialogue, eg 'OK mate' replied Ernie, 'talk to you on the bells in a minute' is clearly fiction overlaid on fact and may not be to every reader's taste.

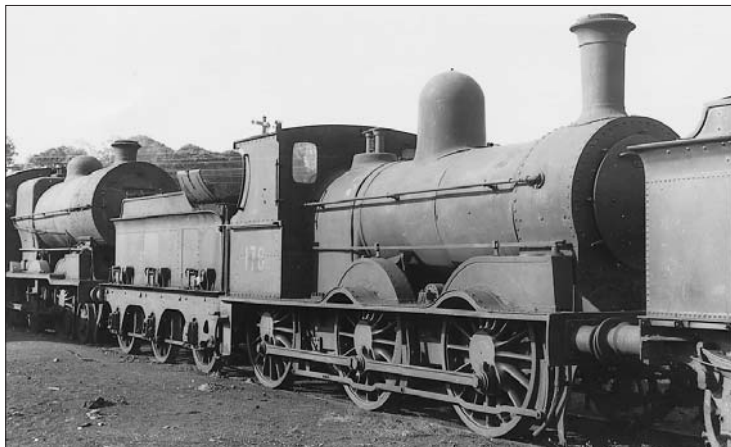
Illustrations include a signalling diagram for 1943, a surviving page (down trains) from the Train Register book and a good selection of b/w photographs of the station and surroundings over the years.

If your interests lie in the operation of a cross-country single line in the closing years of the traditional railway, and especially if mechanical signalling is an important factor, then *Sutton Scotney* is an absorbing read at a modest price.

Tavistock North & South

A.R. Kingdom
Ark Publications (Railways),
'Woodstock', Liverton, Newton
Abbot, Devon TQ12 6JJ.
210mm x 138mm 48pp
Softback £2.95
ISBN 1873029128

This attractive booklet is No.4 in the *Railway Arkives* series. A pleasant collection of b/w photographs of both stations in their very late years and later is supported by informative captions, the author's reminiscences, some ticket facsimiles and a track plan of each station. It is a pity that there is no 'location' map showing the relationship of the two stations in geographical and company terms. The author's text goes some way to explaining things, but a map would undoubtedly clarify the situation for those who are not aware of



the one-time juxtaposition of GWR and SR in Devon and Cornwall and who form a considerable and ever-increasing body of potential readers.

The photographs are atmospheric and many are previously unpublished. Several shots of railway infrastructure and trackwork will be of particular value to modellers, for example the roof of the train shed at Tavistock South as seen from the footbridge and a glimpse of under-canopy detail at Tavistock North.

Iron roads to Burns Country

Michael Pearson
Wayzgoose, Park View, Tatenhill Common, Staffs DE13 9RS.
208mm x 295mm 64pp
Softback £4.99
ISBN 0954911644

The book's sub-title is *a guide to the scenic railways of South-west Scotland* and it is certainly that, and much more. It is an essential and astonishingly inexpensive reference for anyone exploring the area by public transport. The area covered is from Glasgow to Carlisle via Kilmarnock and Dumfries and down the coast from Largs to Stranraer via Ardrossan and Ayr. Burns country, and 'Sou' West' country if you like.

Each town visited is given an attractive map showing the railway and local points of architectural, industrial and leisure interest, including, more often than not, the ground of the local football club.

A gazetteer takes the towns and villages in alphabetical order and, after a general description, gives details of hotels, restaurants, shopping, things to do and connections. The last-named includes buses, with route and telephone numbers and service frequencies, taxis, car hire and, where appropriate, ferries. All this information is enlivened with excellent up to date colour photography, mostly of trains in scenic settings and occasionally showing interesting details of towns and stations.

The book concludes with railway gradient profiles and a list of the companies and organisations which contributed to the cost of publication, explaining in part, no doubt, the ultra-reasonable cover price.

Video Reviews

Southern Region Steam 2

CineRail
P.O.Box 10, Birkenshaw,
Bradford, Yorkshire BD11 2BQ.
65 mins £19.95

The camerawork of Michael Marsden and others are combined with the true sounds of the era to create an evocative recollection of the Southern Region, mostly between 1959 and 1968, in the 29th production from the Marsden Rail stable.

The DVD worked well in a home DVD player but the purchaser would be wise to check its compatibility with the software on a PC or an Apple Mac DVD viewing program. The transfer of cine film to disc has been achieved very successfully, retaining the nostalgic atmosphere of film. The original films were shot in both tripod-steady and hand-held manner, probably on 16mm and 8mm stock.

For anyone who would rapidly like to gain knowledge of the Southern Region, this could be regarded as a good potted history to whet the appetite for further research. It is full of enjoyable interest, unburdened by too many technical trifles. The commentary is animated, with informative factual and descriptive content. Oddly, the majority of the commentary sound came from the left speaker while the train sounds seem to come almost entirely from the right – no matter. Inevitably, some of the locomotive sound recordings are dubbed, presumably with reference to the authentic sound source.

The opening sequences feature 'West Country' and 'Merchant Navy' classes, then expand to some other design achievements of Chief Mechanical Engineer O.V.S. Bulleid; it is good to see a few Q1s in action. The work of other engineers is introduced at the appropriate times.

The locations of Waterloo and the lines through Guildford, Shoreham and Brighton provide the backdrops for all the steam action. Those familiar with these areas today will be able to make many comparisons and see how some features have changed or, more remarkably, remained the same.

The final day of steam in July 1967 is

captured with shots at Kensington Olympia. The presence of the crowds that attended is an indication that changes were afoot.

Some additional black-and-white footage of the 1930s through to the 1960s will bring back memories for some and show a taster of past times to others. You do not see those school-boy spotters with a side parting and wearing a vee-neck pullover any more! These more ancient sequences have a fascination of their own and could easily be the subject of a separate DVD or two.

The DVD is a very good source to help identify many types of loco and rolling stock. Some super shots of goods wagons, Pullman cars and Mk.I coaches show the diversity of traffic in the region. Holiday excursions were more common then and the extensive coverage of the Isle of Wight railway system is enlightening. As an aside, those aware of motoring and fashion history will find plenty to delight the eye.

The inexorable fading away of steam means that there are shots of locos awaiting their final journey to the scrap yard. Their majesty is still evident, but this hint of sadness is relieved by the news that some of the locos shown were bought for preservation.

Towards the end of the DVD there are shots of children running alongside moving trains that would clench the stomach of today's parents and safety officers!

Southern Region Steam 2 – Marsden Rail 29 is a well-structured DVD that is easy to view from beginning to end. Alternatively, just like a good reference book, a dip-in here and there has its rewards. It is relevant to both the modeller or historian. The price includes postage, and the programme can be obtained in DVD or VHS formats at the same price.

Memories of the Sidmouth and Budleigh Salterton branches

Branch Line Video
84 Himley Green, Leighton
Buzzard LU7 2QA.
1 hour 35 minutes £18.95

Unlike some railway videotapes, this one does not have a sketch map of the area concerned on the box cover. This is not a problem for us locals, but for those not familiar with the unusual configuration of branches in this part of East Devon, parts of the film could be quite confusing.

Tipton St John's role of a quite busy junction station in a rural situation provided the connection between one of the branches to Exmouth and the Sidmouth 'twig'. Exmouth, itself no

Left: Chinley, meeting point of the lines through the Hope Valley and via Matlock, was extensively enlarged in the early years of the last century. The photograph dates from around 1902, when the new station opened; finishing work is still seen under way to the right of the view.

Photograph: Phil Caley collection.

ordinary station, was also the terminus of its 'other' branch from Exeter Central via Topsham and Lymington. Thus in this delightful part of coastal West Country, the Southern had inherited and developed a surprisingly complex multi-station railway network in miniature, rather redolent of its style much further east in Thanet etc.

Other reminders of the Eastern Section were the large numbers of commuters and season ticket holders which used the trains to access the County Town for work, school etc, as evidenced by several of the local ex-railwaymen interviewed here.

Highlights of the film include the well remembered 1965 LCGB East Devon Railtour which traversed both branches behind steam locomotives. The DMU era is also covered on a trip from Sidmouth to the Junction and from Tipton to Exmouth via Budleigh Salterton.

Each station is shown in the film as well as many lineside views, connections being made at Tipton St John and shots of the SR station at Exmouth and the Starcross ferry.

The film ends with a 'then and now' sequence of the two branches which, in the manner of these compilations, is fascinating and depressing at the same time.

Script and narration are good and there is no distracting background music.

Sheffield & North Derbyshire

CineRail
P.O.Box 10, Birkenshaw,
Bradford, Yorkshire BD11 2BQ.
77 mins £19.95

The latest treat for those collecting the extensive Marsden Rail series covers mainly Midland routes in and around the Steel City, but begins at the LNER edifice, Victoria, and the Woodhead electrics that were such a feature there for many years. We journey up to the tunnel (closed nearly a quarter of a century ago now...), before returning to Sheffield for a tram ride to the city centre in 1958.

We leave Sheffield via the Midland station, and follow the line along the Hope Valley to Chinley. Naturally, part of the programme covers the Cromford & High Peak railway, with its tortuous curves and steep gradients.

The tailpiece of the film is a step up from the enthusiast-shot footage (not that there's anything wrong with the camerawork), being a BR-produced film highlighting the work-intensive operation of the Sheffield freight yards. A bogie bolster is followed as it makes its stately progress around the area, travelling about half a mile as the crow flies in a working day. The modernised yard planned for Sheffield was to sweep all these inherited pre-grouping facilities to one side.

Steam, early diesel and electric power all feature in this enjoyable programme. The narration is clear and easy to follow: the BR footage has its own narration, in contemporary style, which adds to the interest of the piece.

The price includes postage, and the programme can be obtained in DVD or VHS formats at the same price.



Peco celebrates its Diamond Jubilee

Although the actual 60th Anniversary date for the Pritchard Patent Product Co Ltd is in April, Peco will be having a special celebration over the August Bank Holiday weekend, on Sunday 27 and Monday 28 only. For the first time ever, there will be a small but select Model Railway Exhibition, where a number of invited layouts will be attending. This will be a weekend not

to miss for enthusiasts who enjoy visiting exhibitions around the country.

Of course there will also be the usual attractions taking place at Pecorama during that time, including the resident model railway exhibition, the Beer Heights Light Railway, a large display of miniature live steam traction engines, and other entertainment. Full details will be published in due course.

'Jack' helps children's charity

Vulnerable, excluded and disadvantaged children and young people across Britain will benefit from the international sales of the eighth book in the *Jack the Station Cat* series of story books, *Jack in a Box* (see book reviews pages), featuring the cleverest cat on the railways.

The book is dedicated to National Children's Homes and it is hoped to

boost the 2006 fundraising campaign. Jack's fame is spreading worldwide and even helps in the teaching of English in Africa.

Preparations are under way for *Jack the Station Cat* themed fun days during the summer at a number of locations.

For further details of the books and fun days, contact the author, the Rev. Alan Cliff on **01745 344963**.

Lochgorm Kits news

A Highland Railway Jones 'Duke' Class 4-4-0 locomotive body and the associated chassis in 7mm scale are the initial items in a range of 'Scratchbuilder's Aids'.

These are joined by the Directors' saloon with clerestory roof, body and chassis only and the later six-wheel brake. With the instructions comes a list of suppliers for the parts required to complete the kits.

The Duke body is £85.00, Duke chassis £35.00, Directors' saloon £65.00 and the Brake van £30.00. Signal components are also planned.

An etched brass kit for a Fox 8' bogie in 7mm is proposed. 4mm and 7mm catalogues are available or visit www.lochgormkits.co.uk.

Andrew Copp, Lochgorm Kits, 3 Broomhill Court, Keith, Banffshire AB55 5EL.

21 ton hopper kit for Gauge 1

Iron Road, in collaboration with M&M Models, has released a 21 ton hopper wagon in Gauge 1. 2000 of these



LNER-instigated wagons were built in 1936. The brass kit is available with sprung or rigid axleboxes from around £105.00. It is also available ready-to-run in brass, grey primer or a livery.

Iron Road offers a number of services including building, repair, servicing and modifications, including DCC decoder fitting to 0 and 1 gauge locos.

Contact: **Iron Road Modelling Services, 7 Moonrakers Way, Christchurch, Dorset BH23 4RD. Telephone 07792 989353. www.ironroad.co.uk**

ExpoEM 2006

Bletchley Leisure Centre is the venue and May 13-14 are the dates for expoEM this year.

A special feature is devoted to modelling in EM and P4 in the post-steam era; it includes four layouts, demonstrations and support from DEMU (Diesel and Electric Modellers United).

The diesel and electric layouts will be supported by demonstrations from Phil Eames with *Calcutta Sidings* and a

P4 layout under construction. Alan Monk will demonstrate the advantages of DCC and the installation of sound chips. The DEMU information stand will also be there.

Several layouts will attend to represent the age of steam, plus demonstrations of loco construction, architectural modelling and painting and lining.

See Societies & Clubs or contact steveyoung28@hotmail.co.uk

Nürnberg Toy Fair CD-ROM

In the April issue we mentioned briefly the extensive review of the Nürnberg Fair within CONTINENTAL MODELLER. At the same time we also said that it was impossible to make this report complete within the tight printing timetable that we set ourselves, and so as an experiment we were to publish a full report on a CD-ROM.

So far this idea has proved to be exceptionally popular with readers and this is perhaps not surprising since the CD-ROM only costs £1.95, including postage & packing. Stocks are still

available and we would encourage any reader who would like to know more about what manufacturers are planning for the future to buy their copy (from our Technical Advice Bureau, address as usual) without delay.

As a bonus, the CD does include three sequences of film, as well as an introduction by Andrew Burnham, the Editor of CONTINENTAL MODELLER. In all the CD makes for very entertaining viewing and a good read at a very reasonable price.

Ashford MRC 25th exhibition

The weekend of May 13-14 is the one for the Ashford Model Railway Club's show at The Stour Centre, Tannery Lane, Ashford, Kent.

More than twenty high quality layouts will be there including *Antwerpen Sint Claralei* (H0), *Belmont Road*, (00, RM Aug 05), *Dead End* (00), *South Sheppey* (EM), *SE28* (00), *Dovey Valley Railway* (9mm) and *Chatham Dock* (0, June 05).

Hornby and Bachmann will demonstrate their latest models alongside more than twenty other traders.

The event is expected to attract

plenty of visitors; it is set to be even bigger than the 2005 show which was supported by over 3000 visitors. Opening times are from 10.00 until 17.00 on Saturday and 10.00 until 16.00 on Sunday.

Admission is: adults £5.00, concessions £3.00, families £15.00. Access is suitable for wheelchairs. There is ample parking and the venue is easily accessible by public transport.

Further information is in *Societies & Clubs*, and is available from info@ashfordmrc.co.uk or **07900 263620**.

Redditch show

The 27th model railway exhibition will be held at the Civic Suite, Redditch Town Hall, Alcester Street, Redditch on the weekend of May 6 and 7, from 10.00 until 17.00 both days.

At least twelve high quality layouts in gauges from N to 0 will be there with full trade support. The venue is in a single, air-conditioned hall. Light refreshments are available.

The show will feature *Arrowmouth* (see photo below) the Club's flagship layout and the debut of *Holditch* in 2mm and *Ardlorn Ferry*, a Scottish Region layout in 4mm.

The venue is off Access 2 on the Town Centre Ring Road and 10 minutes walk from the rail and bus stations. Redditch has a half-hourly train service seven days a week to and from Birmingham New Street.

There is car parking near the venue. The venue is also accessible for the disabled.

Admission is: adults £3.00, children and senior citizens £2.00 and families (2+2) £8.00.

More details are in *Societies & Clubs*, or can be found at: www.redditch-mrc.com.



Accucraft W&L wagons and loMR loco



Accucraft has added two Welshpool & Llanfair wagons to its range: an open and a van, both ready-to-run, will be available from the end of May. They will come with 45mm gauge wheelsets fitted, but with a 32mm set included.

It is hoped to have production samples to view at the 16mm Association Garden Railway Show and G Rail.

The van is £42.50 and the open wagon is £35.00.

A track-powered, 1:20.3 scale, 45mm gauge Isle of Man Beyer Peacock 2-4-0T, No.4 *Loch* is available from stock at £855.00.

Contact: **Accucraft UK Ltd., Woodview, Brockhurst, Church Stretton, Shropshire SY6 6QY. Telephone 01694 723806.**



Vale of Rheidol open from P&J Models

A new 16mm scale, 32mm gauge drop-door coal wagon, based on the Vale of Rheidol line, is now available from P&J Models.

The plywood body is machined to size and, in common with other models in the range, has working brake gear, working door hinges and 24mm wheels to match their existing range of wagon kits.

The price of the wagon kit is £44.00 plus £2.00 postage and packing.



Contact: **P&J Models, PO Box 312, Paignton, Devon TQ3 2ZX. Telephone 01803 556701.**

Derby Show parking suggestion

Stewart Ward, exhibition manager of the Derby show (which takes place on Saturday 22 & Sunday 23 April) suggests that visitors on the Saturday should make use of the Park & Ride facility to avoid city centre parking which can get very busy.

There are two Park & Ride sites – Pride Park, off the A52 east and A6 (M1) south, adjacent to the football stadium, from where buses run every 10-15 minutes from 07.00 to 19.00, and at The Meteor Centre next to the UCI cinema, off the A608 Mansfield Road, with access also from the A38 and M1

north, from where buses run from 08.30 to 18.00 every 10-15 minutes.

For only a couple of pounds the inclusive cost covers parking the vehicle and the short bus ride for up to seven passengers; the drop off point is almost outside the door of the Assembly Rooms.

Remember, however, that this facility is not available on Sunday.

Further information about the exhibition and a link to the Derby City Council map of car parks is available on the web site, www.mmmg.org.uk

Full details in *Societies & Clubs*.

London to Peterborough, first class

First Class Simulations have announced its latest product, the *East Coast Express (Part one) London to Peterborough*. This add-on to the Microsoft Train Simulator features twenty-three stations and is set in a contemporary theme. Part two is expected mid-2006 and this will complete the journey from Peterborough to

York. The rolling stock includes Class 91s, Class 43s and 317s for the local services. The product presents fifteen activities staged over a variety of seasons and conditions to test all levels of experience.

Contact: **First Class Simulations, PO Box 586, Banbury, Oxfordshire OX16 6BY. Telephone 01869 338428.**

SHOP NEWS

OPEN

Model and Hobbies, Steyning

Brian and Angie Jackson, proprietors of Models and Hobbies of Steyning, have purchased the long-standing business of J.Morris of North Lancing in West Sussex, with effect from March 31. The change of ownership follows the decision by founding partner Betty Colby to retire.

The four original partners started the business at the present address over forty years ago. During those years the Morris reputation as Continental railway specialists has grown enormously, but

British railway modellers are also well served. Other stocks include slot-car, diecast, plastic kits, second-hand models and books.

The combined business will operate from the existing North Lancing shop; eventually the Steyning shop will close.

We all wish Betty a long and happy retirement.

J.Morris incorporating Models and Hobbies, 80 Manor Road, North Lancing, West Sussex BN15 0HD. Telephone 01903 745850.

Orange Model World, Ludham

Another new shop has opened, this time on the outskirts of the picturesque Norfolk Broads village of Ludham.

It is adjacent to the gift shop, mini mart and boat chandlery. Refreshments are available too.

There is ample car parking and boat mooring for those on holiday at Womack water.

Paul and Gwyneth's thirty years model trade experience and comprehensive stocks help to make your visit even more worth while.

Orange Model World, Broadwater Marina, Womack Staithe, Horsefen Road, Ludham, Norfolk NR29 5QG. Telephone 01692 678500. www.orangemodellworld.co.uk

Model World, Guernsey

A change of address for Malcolm Tostevin's shop Model World in Guernsey.

There are large stocks of British, Continental and American outline on display together with a working 00 layout. Guernsey has no VAT, so visitors can benefit from

very competitive prices.

The shop is open on Tuesdays, Thursdays and Saturdays from 1.30pm until 4.30pm.

Model World, Strawberry Farm Complex, St.Saviour's, Guernsey. Tel/ans/fax 01481 263565.

Scale Model Rail Centre, Horley

Incorporated with the Horley Bookshop is the Scale Rail Model Centre. They have recently moved the business from Eastbourne and now supply 00 and N gauge products to the locality.

The new premises stocks all the

best products and Raj Vithlani, John and Jeremy will be pleased to discuss your requirements.

Scale Rail Model Centre, 117 Victoria Road, Horley, Surrey RH6 7QS. Telephone 01293 783558.

The Model Shop, Exeter

Dave Harding, his wife Glynis and daughter Stephanie are all involved in The Model Shop and now they have a beautifully refurbished shop in which to share their enthusiasm with the customers.

They moved in during 2001 but realised that space was getting short as the business expanded. Now they stock all the big name

manufacturers for British outline and welcome enquiries from Continental enthusiasts too.

Dave is a seasoned and very active modeller often seen on the exhibition circuit. He is always willing to share his knowledge and expertise with fellow modellers.

The Model Shop, 4 St. David's Hill, Exeter, Devon EX4 3RG. Telephone 01392 421906.

Limited edition Hornby from MZ

A new, limited edition of 1000 Hornby 4mm scale Class 466 Networkers in the striking South Eastern livery, will be available from ModelZone.

The Networker is priced at £74.99 from any ModelZone store or via mail

order plus £6.00 p+p.

Full details and store locations are on www.modelzone.co.uk.

Alternatively, for mail order, call Croydton 0208 688 6519 or Tockwith 0870 745 5011.

4mm LMS 20T coke hopper wagon

The prototype for this Steam and Things kit is the LMS Coke Hopper Wagon to Drawing D1729 of which 200 were built (100 in 1930 and 100 in 1935). The BR 20T Standard Coke Hopper Wagon to Diagram 1/150 was virtually identical.

The body is in 12 thou brass, and because there were in excess of 1,000 rivets on the prototype, the rivets have been etched on an overlay. This is a full kit, body and chassis, and is complete except for wheels and bearings.

The earliest BR-built vehicles were virtually identical to the LMS wagons. It should be possible to modify this kit to include the later BR examples, and in time Steam and Things might produce BR variant kits if there are enough requests. More than likely, the firm will offer an add-on etch for the various body and panelling styles.

The W-Irons have been designed for Alan Gibson 26mm standard axles and



waisted bearings, so that the wagon can be built in 00, EM or P4, although there is no compensation in the kit.

The kit also includes castings for buffer housings, leaf springs and axle-boxes. Turned steel buffer heads of the correct diameter are also included, as are a full set of decals/transfers, for both the LMS and early BR period.

Contact: **Steam and Things, PO Box 277, Surrey Downs, South Australia 5126, Australia. Telephone (+61) 08 8265 1570.**

Bachmann J94 in Gauge 1



Bachmann Brassworks has launched its first Gauge 1 locomotive. It is a former LNER/BR J94 Class 0-6-0 Saddle Tank often known as an 'Austerity', having originally been built during World War 2 for the War Department.

After the war the LNER purchased 75 of them, which passed to British Railways in 1948. The last of the class was withdrawn by British Railways in October 1967. Many were also built by Hunslet for industrial use after the war for companies such as the National

Coal Board.

The J94 is available with high or normal bunkers and retails in brass finish at £499.50. It can also be purchased ready-painted in black for £560.00. The painted versions do not carry numbers or crests, allowing the purchaser to finish the locomotive accordingly. Further details can be obtained from any Bachmann stockist, or from: **Bachmann Europe PLC, Moat Way, Barwell, Leicestershire, LE9 8EY. Telephone: 0870 7519990.**

National Railway Museum roundup

LNER A3 No.4472 Flying Scotsman: at the NRM for an 18-month overhaul. Smokebox, chimney and blastpipe stripped, cab removed. Train protection warning system, air braking system and cladding removed prior to boiler lift. Motion and wheels to be removed, fireboxes refurbished.

LNWR 0-8-0 G2 No.49395: crank axle and loose horn-stay rivets removed for repair. Will leave NRM in April to work on North Yorkshire Moors Railway.

LMSR 4-6-2 Coronation Class No.46229 Duchess of Hamilton: re-streamlining at Tyseley Locomotive Works to take about a year.

GWR 4-4-0 No.3440 City of Truro: after essential repairs at the Gloucester & Warwickshire Railway, back in service at Toddington before 2006 tour.

BR No.60800 Green Arrow: at NRM for motion and cylinder repairs. Will be repainted Apple Green as 4771, then after running-in, will return to York for Giants of Steam excursions.

LMS diesel shunter No.7050: repainted in LMS livery to go on display in NRM Great Hall from April.

BR diesel-electric Type 4 Class 40 No.D200: two-year loan agreed with North Yorkshire Moors Railway to continue services.

Class 47 No.47 798 Prince William: to be inspected and refurbished for mainline operation including On Train Monitoring Recording. To be used for yard-to-yard moves and marshalling long trains.

Pullman Car, 1st class parlour No.326 Emerald: to West Coast Railways for asbestos stripping and refurbishment.

Marcle Models new catalogue

A recent (Dec 05) review of Schreiber card kits in CONTINENTAL MODELLER prompted Christopher Cooke of Marcle Models to send us his latest illustrated catalogue which lists card kits of all sorts of subjects from Schreiber and other European specialist publishers, predominantly Polish. As well as ships, aircraft and architecture in scales 1:24 1:50 1:100 1:200, 1:250, 1:400, and smaller for the buildings, there are several kits of (mainly continental) railway interest in H0 scale (1:87), including signal boxes, water towers, stations and quite a varied selection of German and Polish prototype locomotives and stock.

The sixty-page catalogue lists over 1000 card models and includes some 500 illustrations. It is available at £3.50 (overseas surface mail £4.50, airmail £5.50).

Contact: **Marcle Models, Turnagain, Finch Lane, Amersham, Buckinghamshire HP7 9NE. Tel & Fax 01494 765910.**

Corgi – new Trackside vans

A new series of light commercial vans in Corgi's Trackside range is designed to complement 00 layouts.

The limited-edition models depict the Morris LD van in Gas and Royal Mail colours, a Morris J2 in yellow and

an Austin J2 in BR Swindon Ambulance livery, a Ford Transit in white and Post Office Telephone paintwork and a Bedford CA van in Evening News identity and Matador red.

Contact **01223 566212.**



CASTLE ROCK
An exhibition layout in 009
by Henk Wust



NEW COMPETITION
Model a PPM50
Light Railcar



KYRE FOREST
An East Anglian station in N
by Gerry Greenwood

Coming next month

- WINTERINGHAM HAVEN A diesel era layout in 4mm by the Hull MRS
- LSWR 700 CLASS 0-6-0 Drawn and described by Ian Tattersall
- DCC FOR DAPOL M7 IN N Another conversion project from Roger Miller

plus all the regular features

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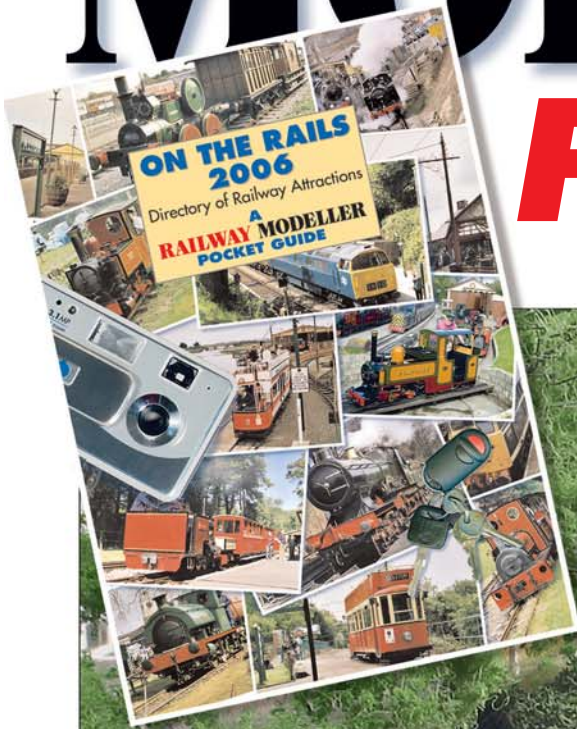
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NEW COMPETITION
Model this PPM50 Light Railcar
(4mm scale drawings included inside)



HALIFAX MIDLAND
Compact S Scale Terminus



CASTLE ROCK
Wartime 009 Layout

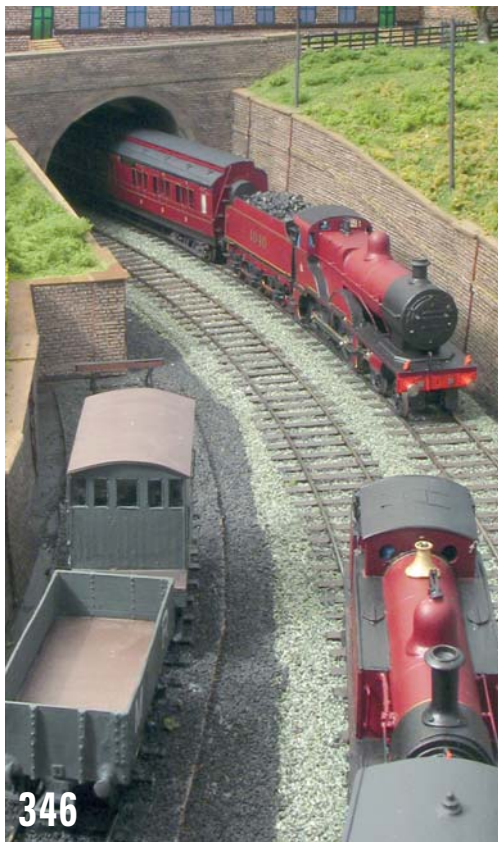


KYRE FOREST
East Anglian Station in N



Prizes include a trip to see the railcars
in action & free tickets to Warley 2006.





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RAILWAY MODELLER

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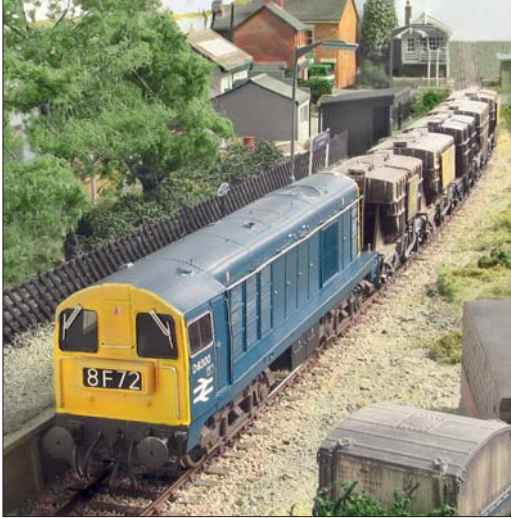
Terry Tasker was inspired by Common Lane Wharf to build his first layout.

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from the **EDITOR**

Competition time!

Introducing a new modelling competition, with a distinctive subject at its centre!

Readers with long memories might recall our September 1986 issue, when we announced our 'Build a Pacer' competition. Well, twenty years on, the subject is an even smaller rail vehicle: the PPM50 Light Railcar, produced by Parry People Movers. An article, with 4mm scale drawings and a selection of close-up photographs, begins on page 375: the model can be to any scale, must be motorised, and needs to be completed by the end of October in order to make it through to the next round. The shortlisted models will win their creators a complimentary ticket to the Warley National Model Railway Exhibition, where the final judging will take place once Peco Mobile Studio professional photographs have been taken of the finalists' models.

The first prize will be a wonderful opportunity to experience the real thing at first hand with unlimited free travel for a day on the Stourbridge Town-Stourbridge Junction shuttle, plus an invitation to visit the Parry headquarters in the West Midlands, hosted by the Chairman, John Parry, for a discussion about what PPM is doing and what the firm sees is the way ahead in the future. The main winner, together with the runners up, will each receive a year's subscription to RAILWAY MODELLER, or have it extended if they are already 'on our books'. Finally, all entrants will receive a family ticket to Pecorama here at Beer: no-one leaves empty-handed!

Holiday Guide – welcome back!

Bagged with this issue you will find our 2006 Guide to Railway Attractions, now titled Directory to Railway Attractions. For many readers it makes a welcome return, and it does enable us to include many money-off special offer vouchers once again, which we know are popular.

The new Directory includes improved maps indicating locations of all the attractions listed, but the written information is generally a little briefer than before. If you are able to use our website, www.peco-uk.com, and look for our Directory to Railway Attractions, found under the RAILWAY MODELLER section, you will see that links to all sites have been set up, and just by clicking on the appropriate highlighted address you will be taken to even more information.

So start planning your visits today, and work out those itineraries for this summertime!

Dam-building, not busting...

At the same time as we were preparing John Lee's article on his 009 dam construction site layout (see RM April), our regular contributor Paul A. Lunn dispatched a package to our office with, by sheer co-incidence, a dam construction layout suggestion inside! To maintain the momentum on this interesting subject – and see our letters pages for further comment on John's article – we present Paul's suggestion (written with Anne E. Balmer) in this issue.

It is a standard gauge take on the subject, which was inspired by the Derwent Valley Water Board's structures in Derbyshire, which were themselves the recipients of some *very* low-flying exercises by the Avro Lancasters of 617 Squadron; though this is an entirely different story...

DCC Weekend at Pecorama – come by bus!

A final reminder that our next Digital Command Control weekend, situated in the Lecture Theatre and marquee in the grounds of the gardens here at Pecorama, will be on 10 and 11 June. All the major players in the field will be available to display product and answer questions. There will also be DCC-controlled layouts on display.

As an added bonus for vintage transport fans, on both days the site will be linked with the Seaton Tramway – well worth a visit in itself – by Routemaster bus, running a service which is normally operating on Sundays and Bank Holidays only throughout the summer. The London icon makes nine round trips each day, starting from mid-morning, so give it a try!

Hold on – I'm comin'

Although listed in the 'coming next month' panel for the June issue (in the May edition), we have held Ian Tattersall's feature on the LSWR 700 Class 0-6-0s until July, out 15 June, and hope all good South Western fans will not mind the wait too much!

Cover: A 1970s scene on Wintringham Haven sees EE Type 1 D8300 shunting Presflo cement wagons.

Photograph: Steve Flint, Peco Studio.

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Assistant Editor TIM RAYNER

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Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

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Halifax Midland

A pre-group S scale terminus in a boxroom

by **STEPHEN RABONE**

I blame it all on the late David Jenkinson! Some years ago I purchased a copy of his book *Carriage Modelling Made Easy* and spent many hours drooling over the photographs of his magnificent 0 scale model carriages. By the time I had finished reading the book I'd decided that I simply had to attempt to produce at least one Midland Railway carriage using his techniques. At the time, however, I was heavily involved with constructing my 1960s based 4mm scale layout, *Hellifield* (RM April and May 2004) so there was little chance that anything could be built immediately.



Eventually, *Hellifield* was completed so my thoughts turned to what new project I could attempt! I've long been fascinated by the pre-grouping Midland Railway, no doubt influenced by many trips as a child and teenager to the former Midland lines in the Peak District and, of course, the lines north of Leeds. I'd grown up being very familiar with the Midland Railway architecture, signal boxes and the various ex-Midland engines that could still be seen in the late 1950s and 1960s. A recurrent thought

▲ A local train from Leeds enters platform 1 behind 0-4-4T No.1356.



▲ 4F No.3837 arrives at Halifax with a local freight from Leeds. The wagons are all built from brass or white metal S Scale Model Railway Society kits. In the sidings No.990 awaits its next duty whilst a six-wheel luggage van, built from card, and a suburban coach, which has zinc sides, stand in the carriage siding.

▲ Compound No.1040 arrives at Halifax with the through coaches of a train from St. Pancras.

Photographs by Steve Flint, Peco Studio.

was that perhaps I should consider going back in time from the British Railways period to that of the Midland in the early 1920s.

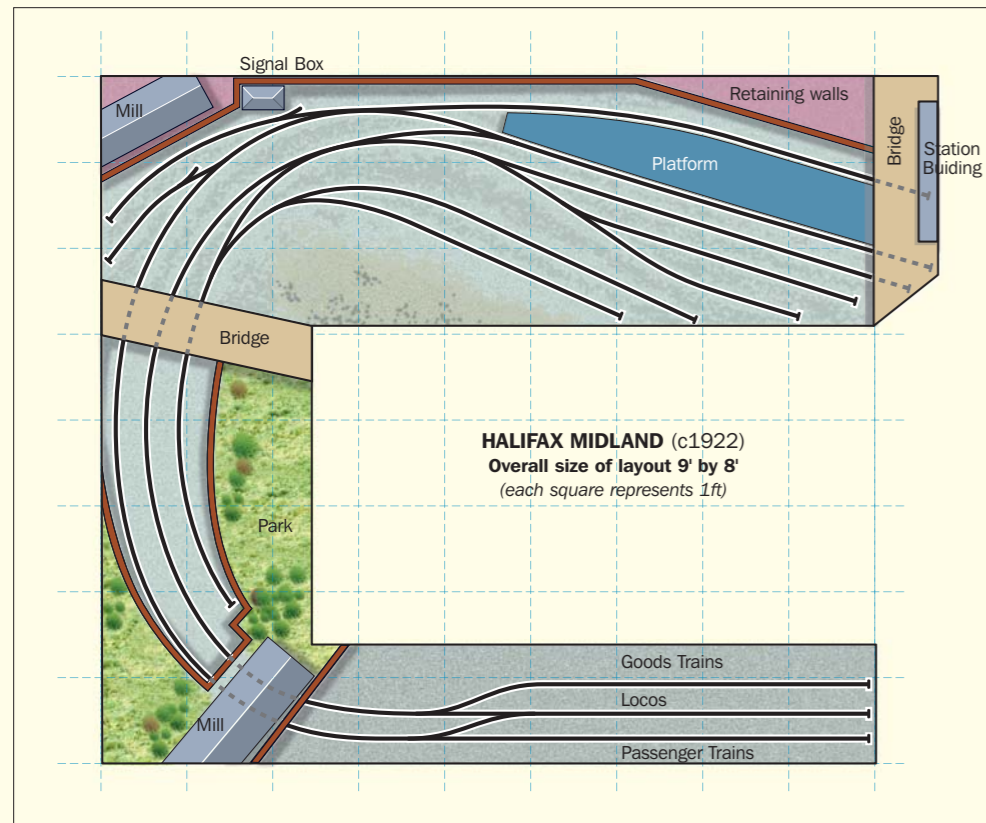
I'd modelled the Midland Railway in 7mm scale for a short time, but I found the space required for an interesting layout too great, given the available area in my home. In addition, I'd found the amount of heavy metalworking a disincentive to model making after a stressful day teaching young children. I thought, briefly, about starting a project in 4mm scale with the possibility of backdating *Hellifield* to the 1920s being considered, but the realisation of the skill needed to replicate that intricate lined livery, in such a small scale, was no incentive to start. Then fate intervened: looking on a website which listed Alan Gibson's kits, I noticed that he produced a range of S scale Midland Railway locomotive kits.

Now for those of you who don't know what S scale is, I should perhaps explain that it is the only model railway scale in the UK that does not mix metric and imperial units of measurement. Its scale is 1:64 or $\frac{3}{16}$ " to 1 foot and the standard track gauge is a mind boggling 0.884". Don't worry about that as track gauges take care of such details. The advantage of the scale is that it is 19% larger than 4mm scale but only about 66% the size of 7mm scale. For those of you who actually do want to mix metric and imperial I can reveal that 1" in real life equals 4.765mm in S scale.

The perceived disadvantage of the scale is that there is relatively little produced in kit form, although this is slowly improving. On the other hand, this means that anybody who is prepared to scratch build, or use the components that are available from the S Scale Model Railway Society, is going to produce something of great individuality.

The first S Scale project

A quick phone call to Alan revealed that he did, indeed, produce such a large range of locomotive kits in S scale, as well as various other key components such as wheels and wagon parts. So it was that, one Saturday afternoon, I sat down with the plans for a square panelled Clayton bogie parcel van and started on my first S scale model. I'd decided that, unlike David Jenkinson, I'd build my model out of cardboard. Why? Simply, because I enjoy working with a



material that is usually available free and has a feeling of being more natural than plastic.

By the end of that first afternoon I'd managed to make one side of the van, complete with the panelling. I had cut this very carefully from thin cardboard and then glued it, using PVA adhesive, on to the main side. I followed the suggestions in the book, simply substituting card for plastic, and by the end of the weekend I had the basic carcass of the body completed. To make the clerestory roof I decided to use a 4mm scale aluminium roof from Comet Models as a former, onto which I secured a piece of wet cartridge paper. PVA adhesive was coated

A view of the scratchbuilt MR 0-4-4T. The model uses Alan Gibson frames and wheels, a Portescap motor and a combination of brass and plastic for the body.



liberally onto this and further layers of wet paper were laid on top. After four layers had been applied the paper was left to dry. Once this had happened I was able carefully to cut the, now curved and surprisingly strong, paper into three strips for the clerestory roof and attached them to the main body structure. And there it was, my first scratchbuilt carriage body.

Enthusied by this progress I built the under frame out of various odds and ends of brass wire, plastic, and copper clad sleeper strip. For the running gear I used slightly modified MJT etched brass bogies to which I attached Ratio plastic 4mm scale Midland bogie sides. This set the trend for much of my S scale modelling; there are numerous 4mm scale components that are suitable for use in S scale. Although the manufacturers might not tell you, many supposedly 4mm scale

products are actually slightly overscale, and are thus eminently suitable for use in S scale.

Having built my first model the next step was to paint it and also to attempt the complicated lining out. Here I, not for the first time, decided that a pragmatic approach was necessary if I was to achieve some sort of success. I obtained a gold marker pen; Pilot produces a very fine-pointed one, which is available in many stationery and art shops. The gold isn't really accurate for the straw coloured lining but once a fine black line is drawn down its middle, using a Staedtler overhead projector pen, the difference in colour is almost unnoticeable.

A carriage needs a locomotive

Of course, what I needed now was a locomotive and a phone call to Alan Gibson resulted in a 4F 0-6-0 locomotive kit arriving a few days later. The etchings are based on his 4mm kit, slightly enlarged, and the kit includes all the components needed, including some castings specifically for S scale. I specified that I wanted EM Gauge wheel profiles, rather than the more scale wheels preferred by more skilled S Scale modellers. Once again pragmatism came into play. I knew I could build track but not of the standard needed for near-to-scale wheel flanges and profiles.

After my experiences in both H0 European outline and British 4mm scale, I have come to regard tender drive as being preferable in many ways to having the motor in the actual locomotive. This is of course a somewhat controversial view but, by using a standardised tender drive unit, I knew that I could obtain consistent results in terms of running and adhesion. Many of my locomotives on *Hellifield* have been fitted with tender drive units from the old Airfix 'Royal Scot' locomotives and have given consistently good performance. I decided, therefore, to re-wheel one of these units with S scale wheels, as the wheelbase is virtually spot-on for that required under Midland Johnson tenders. I've also used them under the larger Deeley tenders, although here the wheelbase is slightly too short.

Put simply, I pulled off the original 4mm wheels from their axles and remounted them on the longer S scale axles. The S scale wheels were then fitted outside of these and the complete wheel set replaced in the tender drive. The old 4mm scale wheels, with the gear on the back of the wheel, still provide the actual drive. Some paxolin strips are fixed with Araldite to the plastic motor casing and nickel silver pickup wires are soldered in place and bent to bear down on the metal treads of the S scale wheels. The result is a self contained power unit which will give consistent results whether mounted behind a six-coupled or a single driver locomotive.

The drive unit is then attached to brackets inside the metal tender body, which I weight heavily with lead to give good adhesion. After building

A close up view of a Bain round-panelled clerestory coach built using Worsley Works etched brass sides. The roof is built up out of a combination of plastic foundation and card overlay.

four tender drive units for my locomotives, I have found the results are just what I'd hoped for in terms of performance and consistency.

Construction of the rest of model was straightforward, as is usual with Alan's kits, although I decided to dispense with sprung horn blocks and soldered the lot up solid. The locomotive itself is obviously un-powered so required sufficient weight to allow the wheels to rotate freely and also pick up current reliably. Within a few weeks, the completed model sat upon a short test track just begging for a layout to be built.

More carriages and wagons

At this stage in my S scale career I decided that more rolling stock was a good idea. The obvious answer was to build a few of the S Scale Model Railway Society's wagon kits; there is currently a range of both pre grouping, grouping and nationalisation period models available. They are a mixture of etched brass and white metal kits, some of which are complete, whilst others need additional components to be sourced or made by the modeller. A cheque was sent off to the Honorary Parts Officer and several enjoyable evenings' work produced the beginnings of a freight train.

Clearly, I'd also need some passenger carriages so I decided to construct some of the square panelled Clayton bogie carriages, which have the same basic body style as the bogie van mentioned earlier. This time I used a slightly different technique. The plans in *Midland Carriages An Illustrated Review* by David Jenkinson and Bob Essery were enlarged to S scale dimensions on my photocopier and then copied again on to card.

The corners of the windows were pierced with a sharp point and the windows cut out. Obviously, one side would be a mirror image of the photocopy so, using the pinpricks as a guide, I cut out the windows from the reverse side of the card. This time instead of cutting out a tracery of card for the panelling, I decided to cement microstrip directly onto the card using Mekpak liquid polystyrene cement. The rest of the construction proceeded in exactly the same manner as for the bogie van, with the exception of the bogies.

I'd decided I wanted more accurate bogies for these vehicles so it was necessary to stretch the MJT etchings to the correct length by cutting them into several pieces and then re-soldering them together with strips of brass to give the required wheelbase. It was a rather tedious task but, once again, I decided it was easier to adapt existing components rather than to scratchbuild the bogies totally.

Well, now I'd built my passenger train I really needed a typical red express passenger engine, so another cheque was dispatched to Alan and, over the next few weeks, a Midland 2P 4-4-0 gradually took shape. Needless to say I had some trials and tribulations getting the bogie to stay on the track, especially running through my test track's crossover. In the end I decided to use a junk Hornby cast metal bogie off, I think, a



Scratchbuilt 4-wheel brake van. The model is made largely from plasticard whilst a variety of S and 4mm scale parts have also been used in its construction.

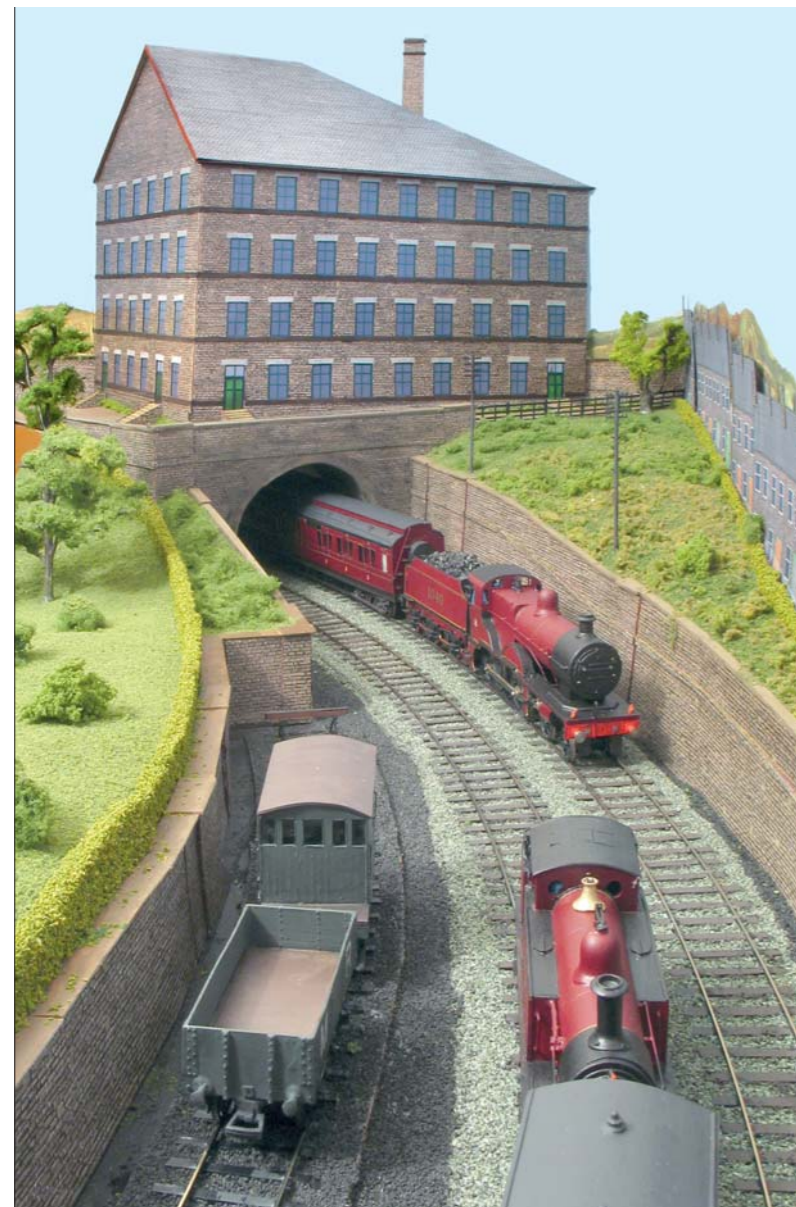
'Britannia'. This, coupled with using 4mm scale Jackson bogie wheels, ensured that the engine behaved itself when running and didn't keep derailing.

By now three years had passed since I first started to model in S scale and it was clear that a layout really did have to be built. If three years seems a long time to get this far, don't forget that I was also building rolling stock for *Hellifield*, so progress was very much in fits and starts as the mood took me.

The layout

Finally in late 2003 circumstances allowed me to start construction of an S scale layout. A small boxroom became





◀ One of those dark satanic mills towers above the tunnel as No.1040 arrives from St Pancras. In the foreground No.1356 does a spot of shunting of passenger stock.

available for my use and, whilst the available space in it for a U shaped layout was only 9' x 8', this has proved sufficient to build an interesting if rather compact layout. Over the Christmas holiday of that year I completed the basic trackwork. Honesty compels me to admit that the present track layout is not that originally planned. The freight yard has undergone several changes in order to give me more siding length.

The concept of the layout is that the Midland Railway built a small terminus in Halifax with lines from Bradford and Leeds. The line approaches Halifax on what appears to be a double track, although as I shall explain it is actually operated as two parallel single-track lines. The trains emerge from the storage sidings from a tunnel underneath one of those 'dark satanic mills' for which Halifax was notorious. Just before reaching the station, on the left there are two sidings; one of these is for holding locomotives between duties, whilst the other can just hold a three-carriage rake of passenger vehicles. Above these sidings towers yet another woollen mill, this one being part of the Crossley carpets empire.

Midland 2P No.483 has just left the station, on its way to Leeds, at the head of a rake of Clayton square panelled non-corridor coaches. The loco is built from another Alan Gibson kit, whilst the coaches are constructed from card with microstrip plastic for the beading. The crew of No.3837 are about to buffer up to a Cambrian Railways open, which has brought a load of Welsh slate to Halifax. The cobblestones, or setts, in the goods yard are actually Metcalfe Models 4mm slate sheets, which in this scale, to my eyes, look quite effective.



▲ A track level view of Midland 2P No.483 as it leaves Halifax. The typically varied profile of Midland trains is evident in this shot.

All the tender locomotives on the layout are powered by re-wheeled Airfix 'Royal Scot' tender drive units. New wheels and axles are fitted, but the old 00 wheelsets are retained to provide the power. The method of fixing the mechanism to the tender body can be seen. Simple pickup wires collect the current and provide a completely self-contained unit, which when weighted runs smoothly and has sufficient power.



The station itself is a modest affair of just two tracks either side of an island platform. The line disappears under a road bridge as if continuing to the buffer stops which we can't see. Upon the bridge is a small station building, based loosely upon that at Keighley which, of course, is also located on a road over bridge. Towards the front of the layout can be found the freight yard. There are five sidings of various lengths, whilst there is also a long headshunt parallel to the main line. The signalbox controlling the station was built from a brass etching by Churchward Models.

The track itself is built entirely from 4mm scale components; I've used SMP bullhead rail and copper clad sleeper strip. This is about the correct width for standard sleepers but slightly anaemic looking when used for S scale points. In order to improve the appearance of the track I've put small blobs of solder on the inside of the rail, which when painted a contrasting colour to the rails

and sleepers, give an impression of cast iron chairs. I've tried to keep the radius of curves as large as possible; on the curve into the station the minimum radius is just less than 4', whilst the tightest curve is on the turnout from the headshunt, which is a flange squealing 36" radius. Until I installed a checkrail on this curve operation was erratic, to say the least, but the checkrail appears to have cured the tendency for wheels to climb over the rail. The points are operated by steel wire in plastic tubing; slide switches set into the baseboard surface control both the movement of the points and the electrical polarity of the point common crossing.

As will be obvious from both the plan and the photographs, there is precious little space for scenery beyond the railway boundary. Originally I had planned to have a feature based around a row of terraced mill workers' houses at the front of the layout. However, I soon realised that their position would prevent easy access to the layout

during operation, since they would be right in front of the station throat pointwork. Instead I chose to replace them with a larger freight yard with the tracks set in cobblestones or, as they are properly called, setts. I'd also intended originally to build a goods warehouse at the end of the headshunt, inspired by the one at Bingley. Once again, I realised, as construction progressed, that this would dominate the layout at this end, and also hide my favourite view of the layout as the trains sweep out of the tunnel. Eventually, I decided that the Halifax town council had earmarked this site for a new park, so now the locals can enjoy the sight of those marvellous crimson lake locomotives and carriages whilst they stroll around the park.

As space is so limited, retaining walls play a crucial part in the scenic development of the layout, just as they do around the real railways in Yorkshire. I therefore purchased large quantities of Metcalfe Models dressed

stone cardboard sheets. Many hours were spent attempting to build convincing walls, bridges and tunnel mouths. Whilst I am reasonably content with the result, on any future layout I shall revert to using embossed plastic to represent stonework. The stone cardboard, whilst quite convincing, lacks relief and is difficult to weather.

In order to give the impression of an industrial town such as Halifax I decided to utilise the capabilities of my computer to make a backscene of terraced houses and mills. To do this I first scanned various sheets of commercially available stone paper into the computer using Microsoft Photo Editor. Then I drew windows and doors in Microsoft Paint (this program can be found in the Windows Accessories section of your computer). These were then simply copied and pasted onto the scanned stonework, dragged to the desired position on the 'wall' and were then printed out. Obviously, a little experimentation is necessary to get the results you want but, once mastered, the method is very quick. These print-outs of buildings were then simply glued to a piece of hardboard to give an industrial backscene

Operation

The key to the operation of the layout is the storage yard. The rear track is used for passenger trains, the middle line for storing locomotives and the front one for freight trains. As space is limited it was not possible to organise a run-round loop in the station area without excessively tight curves. Therefore I have had to use a subterfuge.

Passenger trains arrive at the station, usually hauled by a 4-4-0. A second 4-4-0 engine, facing the opposite direction, then arrives light engine from the locomotive shed, which is imagined to be beyond the

tunnel. It has actually come from the storage yard and couples on to the train. It may pull the carriages out of the station to allow the incoming engine to run into the loco sidings. Eventually the train departs for the storage yard, followed shortly by the engine of the incoming train 'going on shed'. You will have noticed that both the arriving and departing passenger train have to use the same track; there is simply insufficient space to allow passenger trains to depart 'right road'.

Freight trains, in the same way, only use the inner track on the station approach. On arrival the train will stop on the curve, the loco will uncouple and run round its train

Looking towards the end of the line, with the tracks disappearing under the station over-bridge to the buffers. The station which is loosely based upon that at Keighley, is hemmed in between the mills and retaining wall. 0-4-4T No.1356 prepares to leave on a short local train to Bradford, whilst No.990 runs in on a train from Leeds. By the early 1920s these locomotives, so closely associated with express workings on the Settle and Carlisle line, were appearing on more mundane duties.



The local freight to Leeds, behind the regular 4F No.3837, waits for the signal, whilst 0-4-4T No.1356 stands by the water crane. Two luggage vans can be seen in the yard. The six wheeler uses a SSMRS etched Cleminson 6-wheel underframe kit with a card body. In the background is the author's first S Scale model, a Clayton bogie luggage van, the body of which is built completely out of card.



via the outer track and the centre road of the storage sidings. After shunting the departing train will depart running 'right road'. This method of operation is a compromise, but one that doesn't unduly bother me; I'd rather have a slightly inaccurate scenario than no layout! Likewise, I'm sure that the Midland would never have allowed those facing points into the loco and carriage sidings, but this is a model railway and we can't always follow the prototype absolutely correctly.

Further developments

What was originally conceived as a glorified test track has, to my surprise, developed a character of its own and slowly but surely my collection of locomotives and rolling stock increases. In actual fact it is now impossible to have all my stock on the layout at the same time.

There are now five locomotives in operation with another two under construction.

0-4-4T No.1356 shunts a carriage as 3837 stands in the goods yard.

1P 0-4-4T No. 1356 has been semi-scratchbuilt out of a combination of Alan Gibson frames, brass, plastic and castings and is fitted with a Portescap motor.

2P 4-4-0 No. 483 and 4P 4-4-0 No. 990 are both built from Alan Gibson kits.

4P 4-4-0 Compound No. 1040 is built from a Worsley Works 'part-kit' rescaled from the original 3mm etching together with various Alan Gibson components. The locomotive has been fitted with a 4mm Comet bogie soldered rigidly to the pivot point. The rear bogie wheels have no sideplay as they would foul the sliding crossheads on my tight curves. On the other hand the leading bogie wheel has a very large sideplay. In effect the model is a 2-2-4-0.

4F 0-6-0 No. 3837 is an Alan Gibson kit.

In the workshop are a 3F 0-6-0 and a 700 4-4-0 from Alan Gibson.

Further carriages will include various round panelled suburban coaches and Bain clerestory express vehicles, using sides courtesy of Worsley Works. Alan Gibson's elliptical roof coach body kits are also on the 'to build' list.

4F No.3837 trundles into the goods reception line at Halifax with a trip freight from Leeds.

Quite where all this is taking me I'm not sure at the moment. I occasionally have fantasies of a real main line layout, perhaps in Airedale but only time will tell. For those of you who might like to learn more about the techniques touched upon in this article, you can read in greater detail how I tackled the various challenges in my Internet diary on my website at:

www.geocities.com/sscale2000.

The S Scale Model Railway Society

2006 is a historic year for the SSMRS as it celebrates its 60th Anniversary. It's a small but friendly group of modellers whose interests are extremely wide, and encompass both British and overseas modelling. Any modeller considering modelling in S scale, of whatever prototype, should definitely join the



Society. The membership of the Society is well known for its helpfulness to others and without the advice and encouragement of several of the members I doubt *Halifax Midland* would have progressed so far. You will also have access to the Society's informative bi-monthly *Gazette*, as well as a growing range of parts. In addition there are

events organised several times a year.

The Society has an excellent website at: <http://www.s-scale.org.uk/>.

The membership Secretary is: Dr Andy May, 10 Claire Gardens, Horndean, Waterlooville, Hampshire PO8 0JH.

NSR goods stock

Modelling the North Staffordshire Railway – 4

Some historical considerations and a selection of models, by NEIL BURGESS.

If the choice of locomotives and passenger rolling stock for a layout is often constrained by considerations of company ownership, it is often assumed that these do not apply to goods wagons. Here it is more a matter of obtaining as many types from as many companies as the modeller chooses. Having modelled British Railways during the 1950s for many years, I am aware that if this approach is acceptable anywhere, it will be there. Nationalisation and earlier long-term pooling arrangements for goods wagons meant that almost anyone's vehicles might turn up at any time in trains plodding their way across the country. However, even in the 1950s there were limits to this kind of thing, since the traffic of a particular area might not justify certain types of wagon, certainly in any numbers.

This was particularly so with Specially Constructed Vehicles (SCVs), like bogie trolleys, armour plate wagons, transformer and large girder wagons and the myriad other types which appeal to modellers because they are something out of the ordinary. In reality, SCVs were often subject to circuit workings conveying regular flows of particular traffic: staff were instructed to unload and return them to their point of origin as swiftly as possible. Even quite ordinary types of wagon might be subject to restrictions, such as the BR 24-ton mineral wagons, which often worked in block trains between certain collieries.

Prior to the Great War things were very different even from what happened with the four post-1923 Group companies. Wagon pooling began before the Great War, though the first national arrangements came into force in 1915. Before this all wagons needed to be returned to their owners when unloaded unless there was a specific return cargo for them to carry. Thus an LSWR wagon sent over the Somerset & Dorset and Midland lines to Uttoxeter on the North Staffordshire would need to be returned empty to its home system



by the most convenient route once it had been unloaded, unless the LSWR agent in (say) Derby had found a load for it to carry onto its home system. The same considerations applied to wagon tarpaulin sheets and loading ropes. Even after 1915 by no means every type of wagon was included in the pooling arrangement and these only spread gradually through the first half of the twentieth century. Any model in the pre-1950 era needs to recognise these practices if a convincing picture is to be created.

Wagons, just like other railway property, convey a sense of the owning company and the location modelled. In the pre-1914 era this means that wagons should reflect the companies in the area and the types of traffic handled. In most cases priority needs to be given to the vehicles of the owning company, or companies if a joint line, and their immediate neighbours. Similar considerations apply to privately owned wagons, principally coal carriers.

Top: these two ancient vehicles typify wagons on nineteenth-century railways, many of which lasted well into the early decades of the twentieth. On the left is 5114, of 8 tons capacity, having two-plank fixed sides and sprung buffers set into wooden bodies, which, like 'dead' buffers, were extensions of the solebars. This model was made in ply and strip wood, using drawings in Ken Werrett's invaluable series of wagon drawings, here from the August 1963 edition of *Model Railway News*. On the right is 2949, another 8-ton vehicle with single plank fixed sides, which formerly had 'dead' buffers, but has been rebuilt with rubber 'self-contained' buffers. This model, built from plastic sheet, is produced from an illustration in *North Staffordshire Wagons*, showing the prototype mounted on a transporter wagon of the Leek & Manifold Light Railway – a means by which several elderly NSR vehicles were recorded for posterity. Both wagons have the single-shoe brake, fitted on one side only. 5114 is in the 1912 livery, 2949 in the earlier version.

Above: two more antiques, No.481 on the left having three-plank drop sides and 1897 being a counterpane of 2949, but fitted with ordinary sprung buffers. Both are built in plastic sheet from photographs in *North Staffordshire Wagons* and are finished in the pre-1912 livery. Notice that the size and shape of the Staffordshire knot varies, as did the prototype.

Left: a larger 8-ton wagon is No.6216 on the left, a standard design from Luke Longbottom's time as Locomotive, Carriage & Wagon Superintendent and again with two-plank fixed sides, alongside 5511, an 8-ton goods van. Details to help build the models came from *North Staffordshire Wagons* and they are constructed from plastic sheet. Brakes have improved, being two-shoe types, though in both cases fitted on one side of the vehicle only.

Photographs by the author.



Right: the evolution of the 10-ton open is illustrated here by 904 on the left, with rounded ends, grease axleboxes and single-side brakes, compared to 06052 on the right, with square ends, oil axleboxes and two sets of independent brake gear. Once again, *North Staffordshire Wagons* provided the information and the models were constructed from ply and stripwood.



Below left: every steam-age goods train needs a brake van and these were often very characteristic of their owning companies. The North Staffordshire built two types, of 20 and 10 tons, which bore a strong family likeness to one another; and more than a passing resemblance to those of the LNWR. The model is the first 'Knotty' wagon I built, in plastic sheet, using *North Staffordshire Wagons* for the information.

Below right: representing the North Staffordshire's neighbours are an LNWR 10-ton open, from an ABS whitemetal kit – very good, but you wouldn't want too many in a train – and a Great Northern 9-ton open, built in wood from a weight diagram and photograph in Peter Tatlow's *A Pictorial Record of LNER Wagons* (OPC, 1976). The Great Northern wagon has one brake shoe on either side, operated by a right-handed lever on this side and a left-handed one on the other.

Bottom right: the Midland 8-ton drop side open, 16600, has a left-handed brake lever, operating the two brake shoes on the other side through a cross-shaft between the V-hangers. It is built from a Slater's kit, using an illustration of the prototype in Bob Essery's *An Illustrated History of Midland Wagons*, Vol. 1 (OPC, 1980), which shows that 16600 still had this arrangement when re-lettered by the LMS. Great Western No. 10792 is a much more sophisticated vehicle than the others illustrated here, sporting a steel underframe, oil axleboxes and Dean-Churchward II brakes; the model is from a Cooper-Craft kit.

Connections

The North Staffordshire system connected directly with five major companies, all of which had running powers over its lines. These were the London & North Western at Stafford, Crewe and Macclesfield; the Great Central, also at Macclesfield; the Midland at Derby and Burton-on-Trent; the Great Northern, also at Derby and at Stafford; and the Great Western at Market Drayton. The Lancashire & Yorkshire and the Cheshire Lines Committee were to be

found in Manchester and transfer of their traffic onto the North Staffordshire via the LNWR was also a possibility.

The main traffic flows over the NSR were north-south, Macclesfield to Stone and Stafford, with the LNWR at either end; and east-west with the Midland and the Great Northern at Derby and the LNWR at Crewe. It seemed appropriate to concentrate primarily on the wagons of the North Staffordshire, with the LNWR, Midland and Great Northern in second place and the Great Central, Great Western and Lancashire & Yorkshire in third. From an operating viewpoint I should aim at having as many NSR wagons on the layout at any time as all the other companies' stock

together. This did not preclude building the odd wagon from somewhere else – I had already acquired a North British van – but these flights of fancy needed to be kept under control!

The third question concerned the types of wagons required. For an industrial layout serving a colliery, a brickworks, a pot bank and a small engineering works the obvious candidates were minerals – essentially coal – and opens, plus a few vans and bolster wagons, the latter for iron, steel and timber for the engineering works. In 1920, the North Staffordshire's returns to the Board of Trade indicated that it owned 6,569 goods wagons, of the types seen in the table below.

North Staffordshire Wagons in 1920

Type and carrying capacity	number	% of total
Open wagons between 8 and 12 tons	5323	81
Covered wagons between 8 and 12 tons	336	5
Rail and timber trucks, including twins	325	5
Brake vans	127	2
Cattle trucks	66	1
Mineral wagons between 8 and 12 tons	18	
Covered wagons under 8 tons	9	less than 1% altogether
Miscellaneous goods vehicles	2	
Open wagons under 8 tons	nil	nil
Railway Service vehicles	363	6
Totals	6569	100

Source: *North Staffordshire Wagons* by G.F.Chadwick (Wild Swan Publications 1993) p.93.





Left: two more minerals, illustrating some of the potential pitfalls of historical modelling. Longton Hall colliery actually existed, but I have been unable to discover whether it ran wagons of its own and, if so, how they were painted. I have therefore devised a scheme of my own, as applied here to a 1907 specification RCH wagon. John Howard Ketley also existed, operating a fleet of wagons, one of which, illustrated in Allan C. Baker's *The Iron, Steel and Coal Industry in North Staffordshire* (Irwell Press, 2003), has been used as the basis of lettering the model on the left. However, Bernard Holland could throw no light on what colour Ketley's wagons were painted, so it may not be the red used here. Bernard also indicated that Ketley's name appeared in full on some wagons. The basis of this non-convertible coke hopper is the Slater's kit for a peak-roofed salt wagon, minus the roof and with rectangular ends. The cupboard doors are not very usual on English wagons, though more common in Scotland.

Several important observations can be made on the basis of these figures.

The vast majority of the wagon stock consisted of open merchandise wagons with a carrying capacity between 8 and 12 tons; there were four times as many of these as all other company wagons put together.

There were very few vans – for every one there were more than 15 opens.

None of the vans or opens had a carrying capacity greater than 12 tons.

The company owned virtually no traffic coal wagons – locomotive coal wagons were in the Service stock. The vast majority of coal was carried in private owners' wagons.

These figures are relatively typical of smaller companies of the period. The larger lines might have more specially constructed vehicles, but these were a relatively small proportion of their much greater totals. This enabled me to set out some historical criteria for my wagon-building, which were as follows.

Open merchandise wagons would be relatively small; George Chadwick's book *North Staffordshire Wagons* indicates that most had low sides, up to 2'3" and three planks deep. Such wagons, sheeted over when necessary, carried a vast array of goods, often loaded far above the height of the sides.

While the major companies experimented with both bogie and four-wheeled high-capacity wagons from the beginning of the twentieth century, such types remained relatively few and far between, confined to main routes where their high capacities might best be used. This is fortunate on a small layout like *Lane End* since large vehicles tend to swamp the scene.

North Staffordshire Wagons also indicates that apart from some vans built for silk traffic from Macclesfield, there were no vacuum-braked goods wagons at all, not even those with a 'through pipe' to maintain the vacuum

brake in a train. Most vehicles built before 1914 had timber bodies and underframes, while grease lubrication for axleboxes was very long-lived, as elsewhere, and only in the last decade of the company's life did oil lubrication begin to appear.

Over the decades wagon types evolved very gradually, there being a strong 'family likeness' between those built throughout the company's history. It would add variety to have examples of as many 'related' types as possible.

The Board of Trade issued instructions that unsprung – 'dumb' or 'dead' – buffers would be prohibited on vehicles in revenue-earning stock after the end of 1913 (1915 in Scotland). These had previously been prohibited on wagons built after 1889 for use in England and Wales, so by 1913 any unsprung-buffered stock must have been at least 24 years old and much of it probably older still. Some vehicles were converted to sprung buffers, but in all probability the majority were either scrapped or transferred to the service stock to eke out their remaining usefulness. In 1912 it would therefore be possible to see a few such wagons, but not many.

Early wagons had brakes on one side only, often a single shoe bearing on one wheel. The North Staffordshire had many such in 1912, some with a large wooden slab for a brake shoe. The Board of Trade ordered in 1911 that all new construction should not only have brake levers on both sides to prevent shunters having to cross and re-cross the track in order to pin down the brakes, a cause of innumerable injuries and fatalities, but that the two brake levers should be 'right handed', i.e. that when viewing the wagon side-on the lever handle was at the right-hand end. The regulations were so worded because one interim device used by many companies was to have both brake handles at one end of the wagon, linked together by a cross-shaft between two

Below left: as noted in the text, most mineral wagons in the early twentieth century were much smaller than their latter-day steam age counterparts. These two, both from Slater's kits, illustrate a 6-plank end-door wagon to the 1887 RCH specification and a five-plank fixed door type, showing how small these were. Both are lettered for Florence Colliery, a 'neighbour' of my *Lane End* layout and use Powsides 'all in one' pressure-release transfers. However, the smaller size of No.174 has resulted in its lettering being re-ordered to fit the side, including leaving out 'Ltd' on the owner's title.

sets of V-hangers. The second 'left-handed' lever was generally the one added after construction and the brake shoes were on the other side with the 'right-handed' lever.

Unless the shunter was left-handed, the 'left-hand' lever was more difficult to apply and this was held to be potentially dangerous. Given the vast numbers of wagons requiring conversion, companies were given time to effect the work, the number of years depending on the total wagon stock. Companies owning between 3,000 and 20,000 wagons were allowed 15 years to comply, so the North Staffordshire would have had until 1926. Nevertheless, photographs indicate that there were many wagons with single-sided and left-handed brakes running throughout the 1920s and possibly into the 1930s. Indeed, there was considerable variety in braking arrangements in the early years of the twentieth century and this needed to be reflected in the models.

Mineral – primarily coal – wagons displayed all the variations noted above, but it became clear that a key feature was their relatively small size compared with the 1923 RCH specification vehicles and their descendants down to the BR all-steel minerals of the 1940s. In particular many collieries and coal merchants used five-plank wagons, 14'11" over headstocks and of around eight or ten tons' capacity, not least because their facilities were geared to accommodating them. This encouraged resistance to later attempts by the railway companies, particularly the Great Western, to introduce larger types during the 1920s. Fortunately the excellent Slater's range came to my rescue here with both side-door and side- and end-door types.



Right: two unusual Midland wagons, both built from Bob Essery's two-volume *Illustrated History of Midland Wagons*. 29914 on the left is a circular plate wagon to diag. 322, while the other is a goods brake and mail van to diag. 392, one of which was in 1911 regularly attached to the 3.0 am. Burton-Stoke goods to pick up Midland parcels traffic for stations on the North Staffordshire system. Both are courtesy of Slater's, the circular plate wagon being built using parts from its cattle wagon kit.



Below: the traditional goods yard scene: low-side with staff and shunting horse pose for the camera (photo: author's collection).

Building wagons for Lane End

I have always enjoyed building wagons, whether from kits or from scratch. Working in 0 gauge offered the possibility of constructing far more vehicles from scratch than I had before and I found that there was something very satisfying about the size and mass of 7mm vehicles.

Scratchbuilding was a necessity since there are only a couple of NSR kits in 7mm scale, but this was offset by the need for far fewer wagons than I had constructed for my 4mm layouts. I initially aimed at around 30, divided roughly equally between North Staffordshire, private owners and neighbouring companies. I had already built my late father-in-law two 'Knotty' wagons, a 20-ton brake and a 10'5" wheelbase open, both from drawings in Chadwick's book. That invaluable source offered drawings for other projects and I sorted through my backnumbers of *Model Railway News* and *RAILWAY MODELLER* to find a selection of drawings relating to neighbouring companies. The Midland and the LNWR are fairly well supplied with kits, in plastic by Slater's and whitemetal, etched brass and resin by ABS and Mercian respectively, so I set about building several of these. Slater's also provided the private owner minerals, though I had to make sure I bought the smaller and older types rather than the 1907 RCH versions.

I normally work in styrene sheet and strip in 4mm and have produced several models using this medium in 7mm also; but I have also started to use wood for opens, a mixture of 1/16" ply for floors, sides and ends and various sizes of stripwood for the underframe and larg-

er details like end stanchions. Ironwork is represented by styrene sheet and strip and bolts and other fastenings from either plastic rod and strip, or else the Grandt Line range. My experience in 4mm scale suggested that three-point compensation through rocking W-irons was useful, though the Slater's kits often omit this without detriment. However, since I use the firm's etched parts for scratchbuilding, it makes sense to make use of the compensation.

Slater's buffers and couplings also see service, being mostly similar to at least some North Staffordshire items. The use of single-sided brakes on many wagons means that after building a few minerals I acquired a useful stock of left-over parts which could be used in scratchbuilding. Wagons with single brake shoes and long levers use scratchbuilt gear, the large brake blocks being cut and shaped from stripwood.

Wagon liveries are a potentially difficult area for the pre-grouping modeller. Essery, Rowland and Steel's book *British Goods Wagons* (David & Charles, 1970) indicated that the North Staffordshire painted its wagons 'purplish red oxide' for the body, black corner plates, solebars and headstocks black.

Prior to 1912, wagons were lettered 'N.S.R', with the two full stops, in letters around 6" high, with running numbers painted on the body or solebars. From 1912, larger letters were used and numbers initially appeared on cast plates affixed to the solebars. In both cases the Staffordshire knot was used on the body, usually in the middle of the sides of opens, though on the right-hand ends of the sides of vans.

North Staffordshire Wagons confirmed these details and offered abundant illustrations to help.

What, though, is 'purplish red oxide'? The accompanying illustrations show my interpretation: because no-one produces a colour for NSR wagons, it's a matter of trial and error. I first mixed up a shade from Humbrol matt blue and brick red, which seemed to me to reflect the description, if nothing else. Since I am modelling wagons in weathered condition, it is not critical to have exact colour matching between vehicles and red pigments tend to fade badly over time, going off in a pinkish direction.

I then spoke to John Sherratt about this. He was the Historical Model Railway Society's North Staffordshire steward and is a member of the North Staffordshire Railway Study Group. His preferred solution is to use Phoenix Precision Paints' GWR Indian red, a shade tending in the crimson lake direction, which I think is ideal for newly-painted stock.

By the by, John and I also discussed whether the colour used on goods vehicles by at least some companies, including the NSR, might have been the undercoat shades for their carriage and locomotive liveries. There is no proof of this that we know of, but it seems at least plausible. However, a look at the Richards Collection of 7mm models in the National Railway Museum indicated that he had used a lighter, almost salmon, shade of red; and he applied this to underframes as well. Richards was a very meticulous historical modeller – anyone interested in pre-grouping work should go to York and spend time on his vast collection of models – so it just goes to show that there is a range of interpretations of colour and style. The late Bernard Holland, who knew more about north Staffordshire's private owners' wagons than just about anyone, admitted to me that many of these details are lost to history and no-one can state categorically that this shade or that is the right one eighty years after 'the Knotty' and other owners ceased to exist.

This is not an 'anything goes' argument; there is always a need for research and paying attention to the best discoveries of others, but what anyone is likely to come up with is a 'best estimate' rather than the 'last word'.

Modelling the North Staffordshire series

pt.1 – initial thoughts	February 2003
pt.2 – planning	February 2005
pt.3 – locos and stock	February 2006



Kyre Forest Mark II

An East Anglian terminus in N gauge with scratchbuilding in evidence

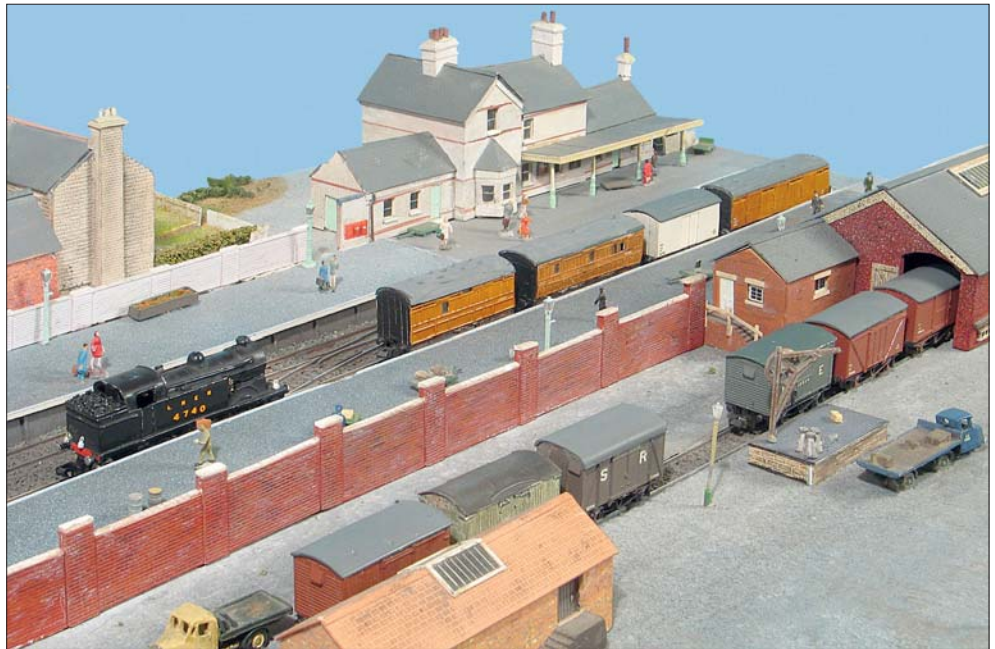
by **GERRY GREENWOOD** of *Colchester & District MRC*.

It all started when I was given 12 Peco Setrack points. I had just decommissioned my previous layout *Colchester Loco*, which was a five-board 'in line' layout, which could easily accommodate over 40 locomotives and required four operators. I had already decided that with my next layout, I would have a complete change, and go from a very large to a very small layout. So the Setrack points mentioned above would now come in very handy.

The only criteria to be observed were that the layout had to be based on an LNER Great Eastern station set in the 1940s, and the layout had to be no larger than 4' x 1'6", as I had in my possession a board of this size. The obligatory scanning of track plans then took place, and finally I settled on Stoke Ferry, a small terminus in West Norfolk, which contained most of the features for which I was looking for inspiration.

The research

The railway came comparatively late to Stoke Ferry. Several schemes had been proposed in the early and middle 1800s, but all had finished in failure. Finally in 1878, a group of local dignitaries held a meeting to make plans for building their own railway. This was to run from Denver, on the Great Eastern line from Ely to Kings Lynn, with intermediate stations at Ryston and Abbey. The plans went through smoothly and an Act of Parliament was granted in 1879. Construction started at Denver in 1881, and the railway opened to the public on 1 August 1882.



The line was never a success with the public, and it was no surprise therefore when passenger services were withdrawn on 22 February 1930. However, since a new sugar beet factory had been built next to the railway at Wissington, freight traffic continued along the length of the branch until 1965, when Stoke Ferry was closed to all traffic. Freight trains did however continue to run to Wissington for many years after this date. All the preceding facts are true. What follows is

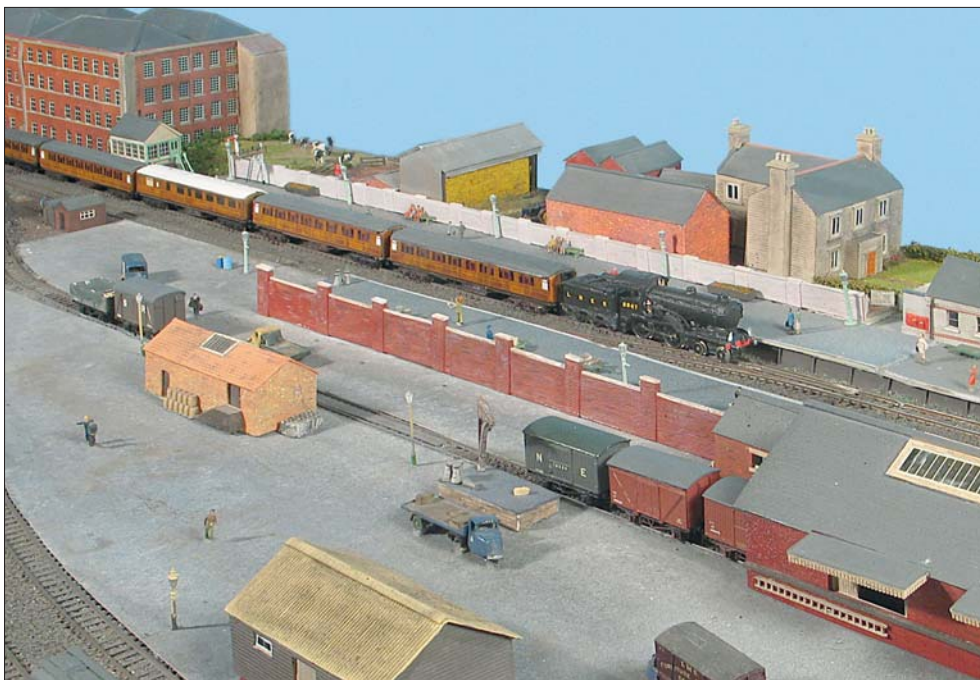
complete fiction to justify the large maltings and small village on the layout.

It has been assumed that, following the successful building of a maltings complex at Mistley in Essex, the firm of Free Rodwell & Company built a similar operation at Stoke Ferry, taking advantage of the arable nature of the area, and the new railhead. The company also built a number of houses on the site for its employees and in the 1930s also provided some greenhouses on a spare piece of land for the workers to take advantage of the improving leisure conditions of the time.

As this addition to the complex altered the character of the area, it was decided that the name 'Stoke Ferry' could not be used for the layout title and the name *Kyre Forest* was adopted. Readers will no doubt have already worked out that *Kyre Forest* is an anagram of Stoke Ferry.

The layouts Mark I

As previously described I had in my possession a piece of chipboard measuring 4'6" x 1'6", so this determined the final size of the layout. The track plan showed that there was a twin track station, with a trailing siding set at an angle of approximately 10° to the main line. A quick check of the Setrack points showed them to have an angle of close to 20°, but as I already had 12 of these points I decided to press on regardless. This primary siding had three additional sidings running back parallel to the station lines, and there were two kick-back sidings, one being the shed road and the other running into the maltings complex.



The control panel was built into the baseboard and lived inside the main maltings building, which had an overall roof. This building was also home to the minute fiddle-yard of two lines. I had decided at this point to run the layout as a semi-diorama, with a two-coach push-pull train running up and down, and various goods wagons standing in the yard.

It was about this time that Colchester Club's Open Day was due to take place and the layout was taken. My chief operator, Adrian, soon found out that it was impossible to use the control panel due to lack of space under the overall roof. It did not take long for the roof to be removed from its position. After this, things seemed to settle down with the push-pull train running up and down very nicely. Leaving Adrian alone I went off to get a couple of cups of tea, not a very wise move as it turned out, because on my return I found that Adrian was running a tiny goods train and was trying shunting movements in the yard! This was something that I had thought was impossible with the very tight radius of the points.

After the Open Day had finished, a lot of very hard talking took place, and it was agreed that I would install some electromagnetic uncouplers so that shunting movements could be made official. We were invited to a number of exhibitions, and after each one further improvements were suggested and implemented, the main one being the addition of a 2" extension to the front of the layout, this increasing the width to 1'8". This meant that we were able to add a third road in the fiddle yard, which ultimately gave a third train. However, the time eventually came when no further improvements were possible and it was then time to move on to Mark II.

Mark II

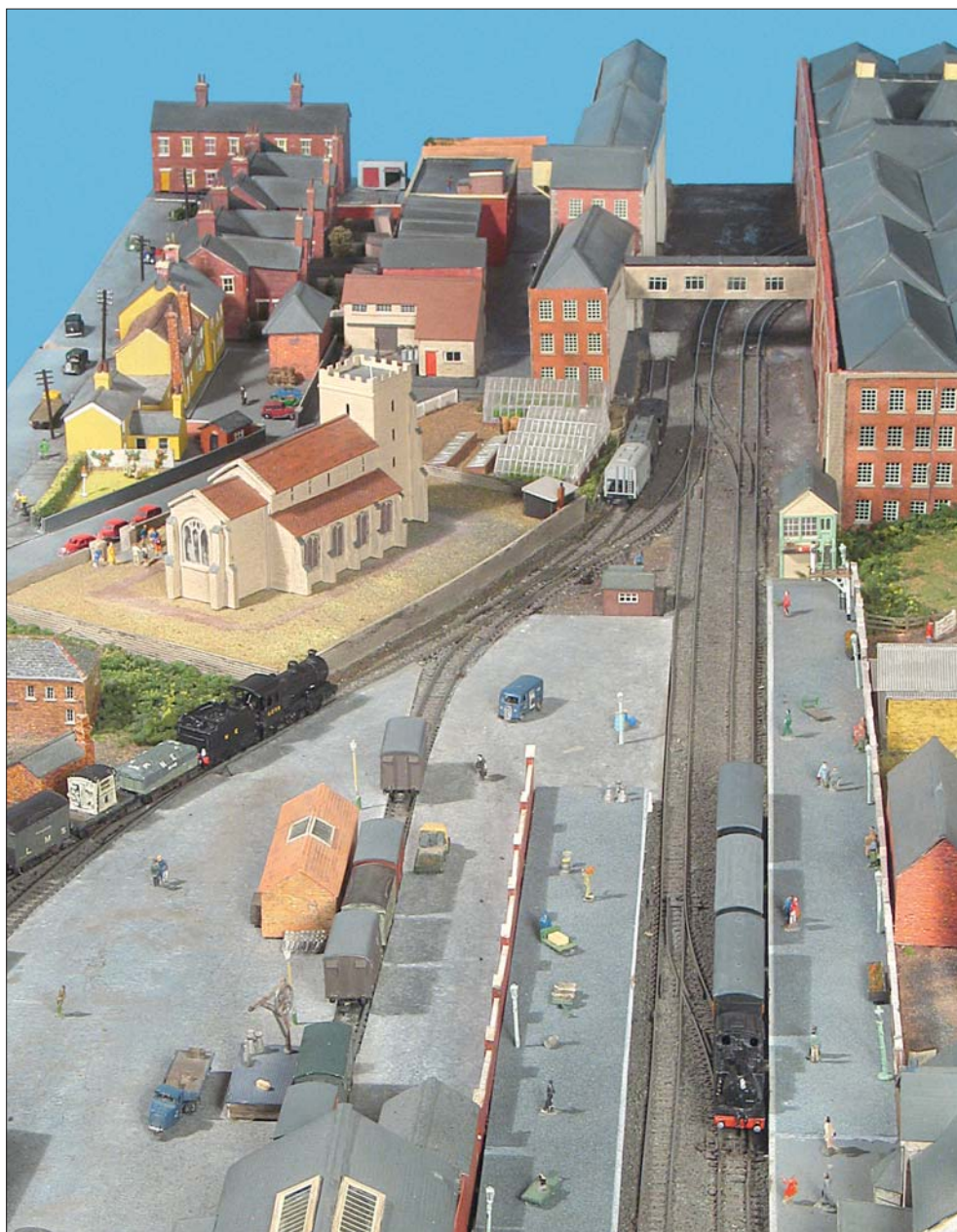
Two new pieces of board were obtained, one measuring 4' x 2', and the second measuring 4' x 1'6". The smaller board was placed at right angles to the main board forming an L shape. This then gave a frontage of 5'6" and a depth of 4'. The fiddle yard would now be at right angles to the front with much longer tracks.

The original track plan was adhered to, with the exception of providing a double slip at the entrance of the goods yard.

All the extra length enabled the platform to be doubled in length, and there was now room for a church and houses for the employees of the maltings. It also allowed me to substitute the Setrack points with medium radius ones, which in turn became a lot closer to the prototype. Whilst all this was taking place Mark I was still being exhibited, and during a break in the exhibition schedule of a few weeks, all the buildings and lineside bits and pieces were transferred from Mark I to Mark II, the extra buildings that were needed to complete the scene having already been made

Baseboard and track

Nothing new here! As a fully paid-up member of the 'Flat Earth Society', I have always taken a very traditional approach to baseboards. I have looked briefly at the geodetic beam method, and the newer featherweight display

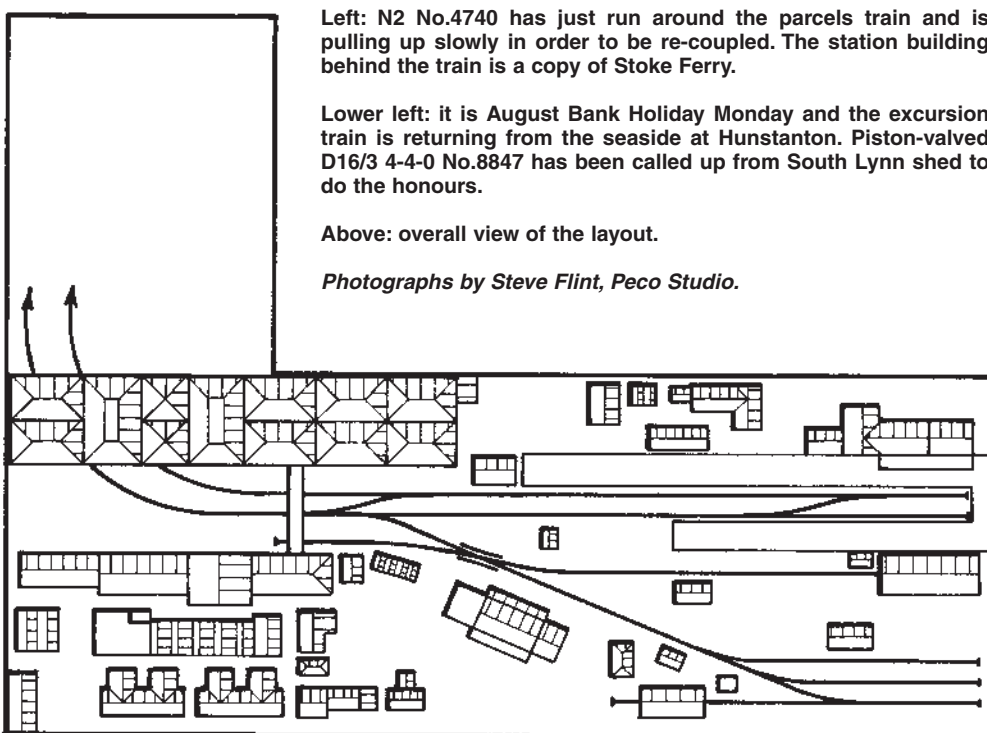


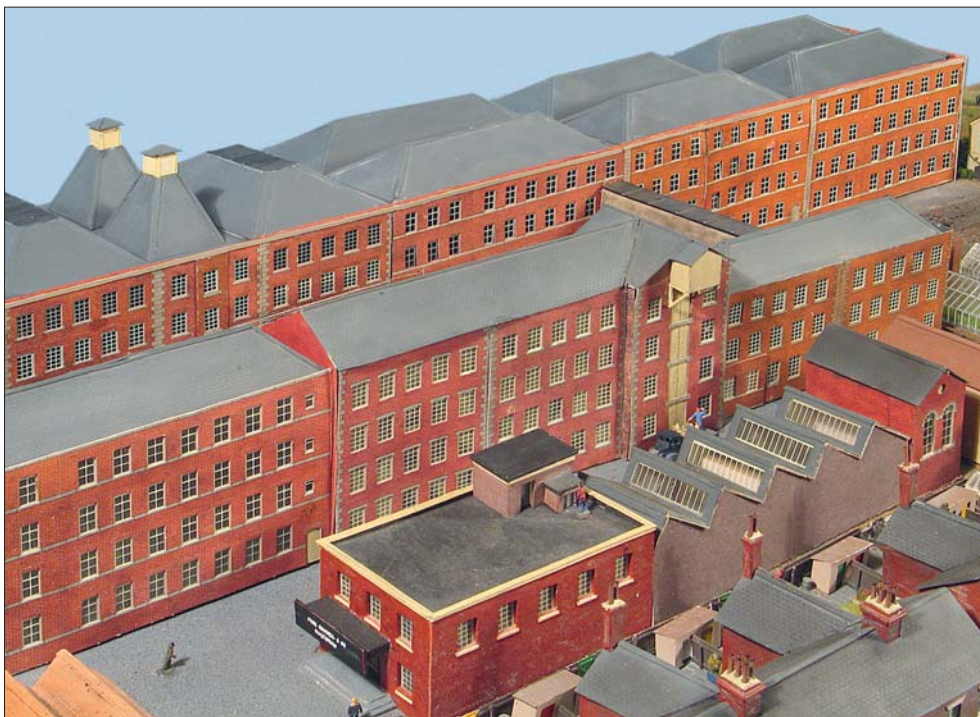
Left: N2 No.4740 has just run around the parcels train and is pulling up slowly in order to be re-coupled. The station building behind the train is a copy of Stoke Ferry.

Lower left: it is August Bank Holiday Monday and the excursion train is returning from the seaside at Hunstanton. Piston-valved D16/3 4-4-0 No.8847 has been called up from South Lynn shed to do the honours.

Above: overall view of the layout.

Photographs by Steve Flint, Peco Studio.





board method, but I have always returned to chipboard. The type I use is the white melamine board that is used extensively in furniture making. I realise that under damp adverse conditions, chipboard will suck in water like a sponge, but the melamine finish will act as a barrier, provided of course that any raw edges are treated and sealed with your favourite sealant. The boards are supported by the usual 2" x 1" PSE softwood. The final result may be on the heavy side but it has never let me down.

The track and points are all Peco standard Streamline, of which I seem to have an inexhaustible supply, mainly from recycling from

older layouts. The exception is the double slip, which is only available in fine scale, but by placing a 30 thou piece of card under the point this will then bring it up to the rail level of standard Streamline. The track is laid directly onto the board using diluted PVA glue on the straights and track pins on the curves. Ballasting is carried out using the finest grade of granite chippings, which are then subsequently painted with matt chocolate paint.

Rolling stock

Most of the locomotives are kit built, and all have Graham Farish chassis. Over the years, the running qualities of Graham Farish locos have

come in for a lot of criticism in the N gauge press. If this criticism is correct, then I must be very lucky as I have never had a bad loco. This I put down to a very strict routine of cleaning and oiling. Before every exhibition, the loco wheels are burnished with a fine glass fibre pen, as are the commutators. The motor bearings and gear wheels are given one drop each of light sewing machine oil, applied from the point of a pin (and you can't get much oil on the point of a pin). Nothing else is done unless an individual loco shows that it is in trouble. Then it is usually a strip-down job, although I am pleased to say that this happens very rarely.

Incidentally the track is also burnished to the same standard as the wheels, using 400 grit wet and dry sandpaper, wrapped around a wooden block. I am sure that at this point the purists will hold up their hands in horror but for me it works, especially at exhibitions.

Locomotive roster

<i>Class & Number</i>	<i>Source</i>
D16/3 4-4-0 No.8847	BH Enterprises kit
J17 0-6-0 No.8239	Farish 4F modified
J27 0-6-0 No.2341	kit (unknown)
J69 0-6-0T No.7083	Farish Holden Tank
J69 0-6-0T No.7271	Farish Holden Tank
N2 0-6-2T No.897	Langley kit
N2 0-6-2T No.4740	Langley kit
N7 0-6-2T No.2624	Langley kit
Y3 0-4-0T No.63	P&D Marsh kit

As to passenger stock, there are three passenger trains running. The first set consists of five Gresley teak coaches made from Cavendish kits. These kits included lithographed coach sides, which in my opinion gave the closest approximation to the prototype LNER teak that I have ever seen. Unfortunately these kits have been unavailable for many years.

The second set consists of three four-wheel coaches, which started life as a Shredded Wheat promotion. The bodies were made from a vivid yellow plastic, and the chassis had very rudimentary hook-and-eye couplings, which were quickly removed and replaced by Peco couplings. The coach bodies were sanded to remove the lettering, then given many layers of a red/brown lacquer, which I have had for many years, and this also gives an acceptable LNER teak finish.

The third set consists of a two-coach articulated pair (a Gresley lav/comp/brake 3rd) which was made from two Graham Farish standard non-corridor coaches. These had one compartment cut out of the middle of each coach. The incorrect arc roofs were replaced by elliptical roofs obtained from BH Enterprises. The innermost bogies from each coach were removed, and the bogie mounting filed flat. Small pieces of plasticard that have had a hole drilled in the centre close to the outer edge are then glued to the underneath end of each coach with these holes sticking outwards. One of the spare bogies has an appropriate short screw fixed upwards through the centre hole, and the two coaches



Left: the whole malting complex. Most of the floor space of these huge buildings was used for one purpose only, which was the partial germination of the barley grain. This was the first step in the malting process. The flat roofed building in the foreground is not contemporary with most of the others. This is a new office block which was built in the 1930s. The high level walkway above the railway lines can just be seen.

Lower left: St. Mary's Church is hosting a 1946 austerity wedding. I am often asked why all the cars are of the same colour. This is because with very little petrol available for private use, the cars have been hired from the local garage.

Right: a general view of the goods yard throat. The J17, No.8239, is about to drop its load, and the Sentinel shunter, No.63, simmers gently in the sun.

Lower right: two more wagons have arrived for the coal merchants to unload, and a covered van full of grain is awaiting transfer to the provender store. Note the 1937 style of lettering on the van.

sit with their plastic end pieces over the end of the screw. The holes should of course, be slightly larger in diameter than the screw. This is far easier to do than to describe!

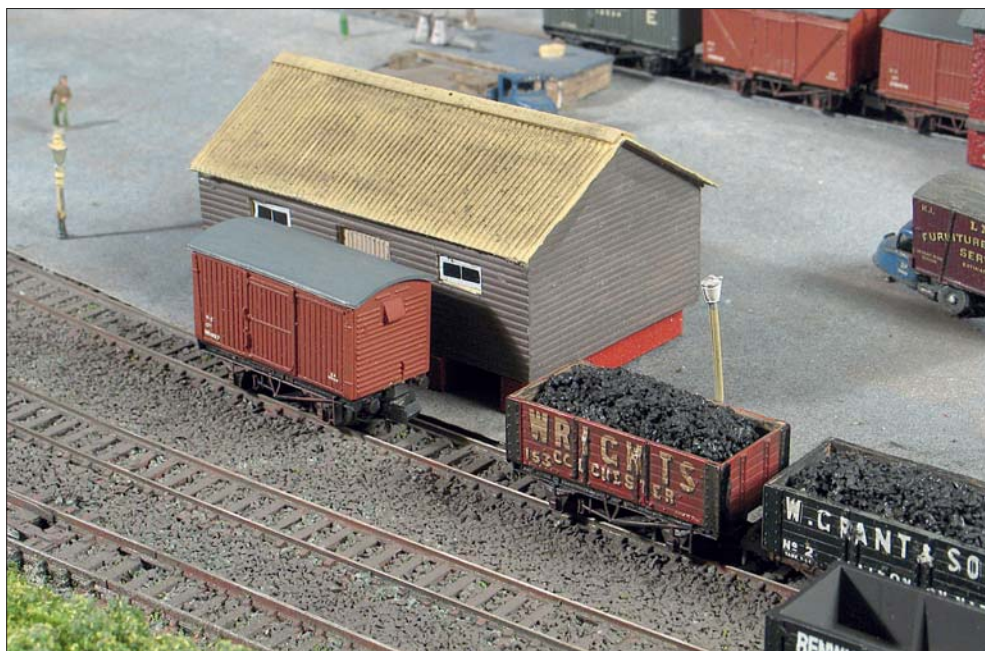
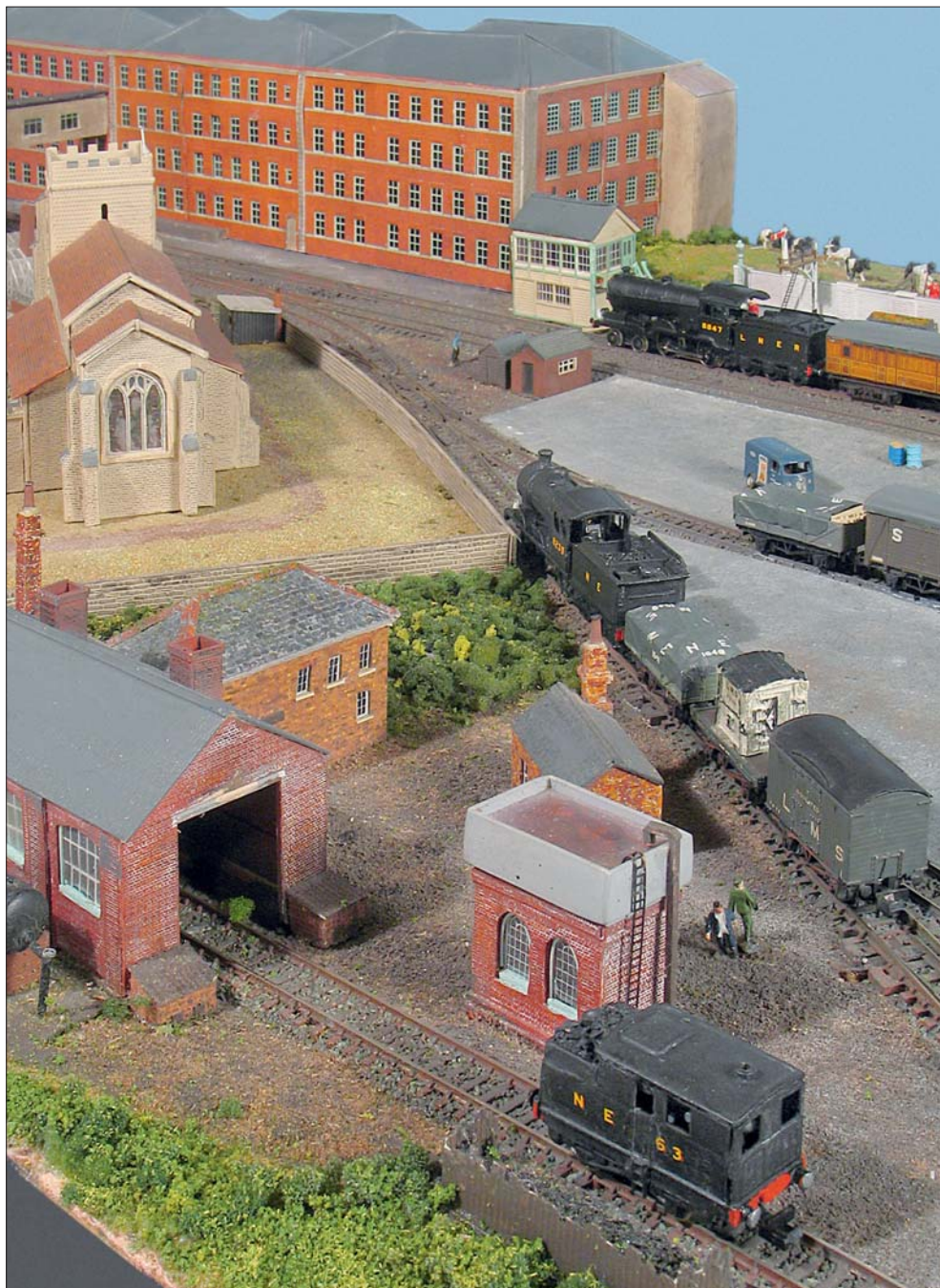
The goods stock on the layout has all been repainted and re-lettered in the 1937 style and comprises many company open wagons and vans. There are also a few special vehicles, including two grain wagons, made by cutting a section out of the middle of two Peco whisky wagons, reducing the wheelbase from 15' to 12' and then repainting them.

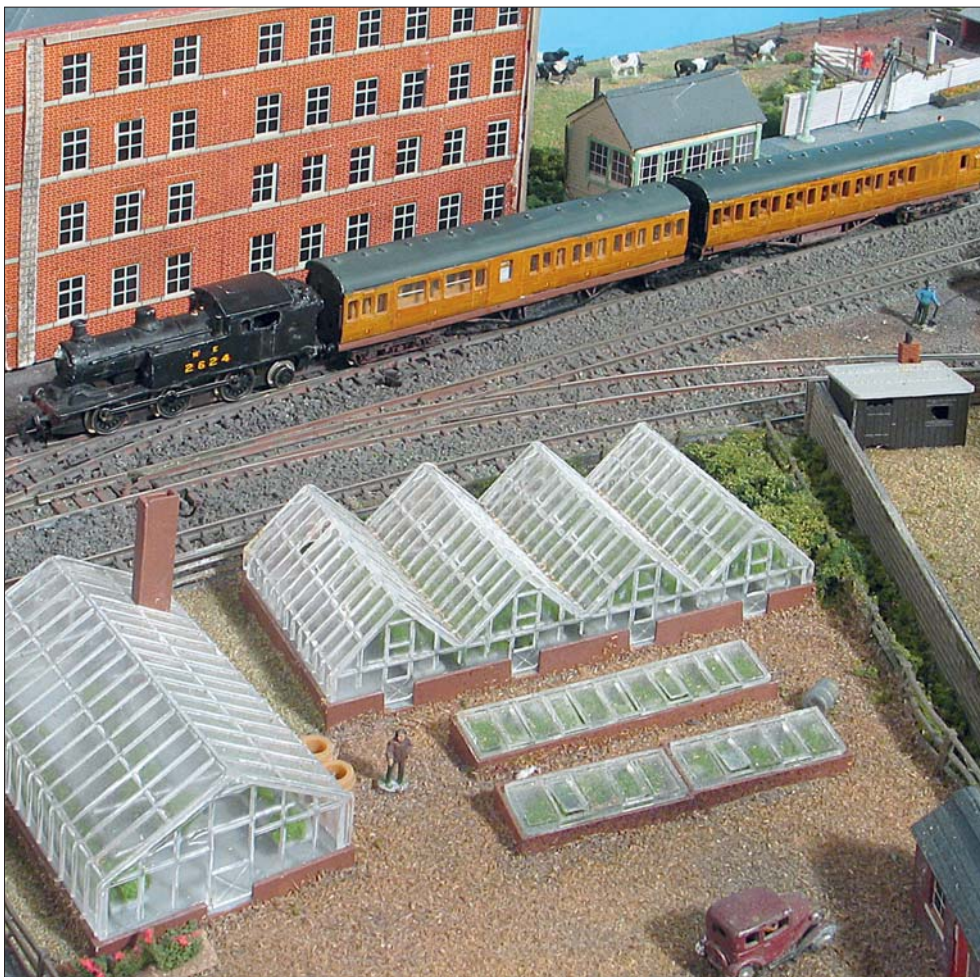
Scenics and buildings

There is not much to say about the scenics, as there is not a great deal of it, an overgrown bank at the front of the layout, a farmyard behind the station platform, and not forgetting a very well manicured churchyard. These have all been produced using scatters and diluted PVA, all of which have been well documented by other modellers.

When it comes to the buildings however, that is a completely different matter! It has long been my contention that as much time should be spent on the buildings as is spent on the railway itself. I have tried to ensure that all the railway structures are copies of actual railway buildings. The station house and signal box are taken from Stoke Ferry. The engine shed and water tower come from Thaxted in Essex and the goods shed and provender store from Lavenham in Suffolk. The church is not taken from any place in particular, but parts have been taken from several East Anglian churches, most of which do seem too large for the congregations that they were built to serve.

I tried to find a church kit that I could modify, but they were all far too small, so it was a case of another scratchbuilt building. As with all the other buildings, standard techniques were followed, but the stone window surrounds are worth a mention. These are cut-outs from Samson Models, now unfortunately no longer available. Without these cut-outs I would not have been able to achieve the effect I was seeking.





Left: N7 No.2624 is just leaving the station at the head of a two-coach cross-country articulated pair. The greenhouses are in the grounds of the maltings.

Below: J17 0-6-0 No.8239, carrying Class D headcode, assembles its train for departure. It will pull forward and pick up its brake van before leaving. The Sentinel shunter is still simmering.

The greenhouses are a product from Faller as a kit, and this is the first kit that I have put together that I felt that I could not improve upon. Well done Faller!

Last but not least is the largest building on the layout, the maltings complex. When standing in front of the layout the complex seems overwhelming, but in fact the prototype from Mistley was twice as high with eight floors and can still be seen to this day. It was so tall that the local fire brigade in 1940 had no ladders that would reach the top floor. My original intention was to scratchbuild the entire complex. The smaller buildings were no problem as I was able to use my normal methods, but when it came to the large malt house I had to think again. Counting the windows I found that I would require over 200. Metcalfe Models was able to supply the answer. From its range of industrial buildings, I found that the warehouse kit was exactly what I needed. Three kits were required to complete the building. What I did find however, was that I would need a method of construction that Mr Metcalfe never intended. Stout boxes were made from display board for each unit, and the assembled walls and windows were glued to the outside of the box units. This proved to be satisfactory, but there were no roofs. False ceilings were fitted, made from more display board, and then roofs were built to size by using a one-piece cardboard sub-roof covered with plasticard embossed roofing tiles painted blue/grey. The whole complex then looked fine but seemed a bit too bright, and this was toned down with a few coats of dirty wash.

Exhibition operating

There is only one controller, and only one loco on the move at any time. As the layout is so small it is possible to work the controller with the left hand and re-arrange the fiddle yard

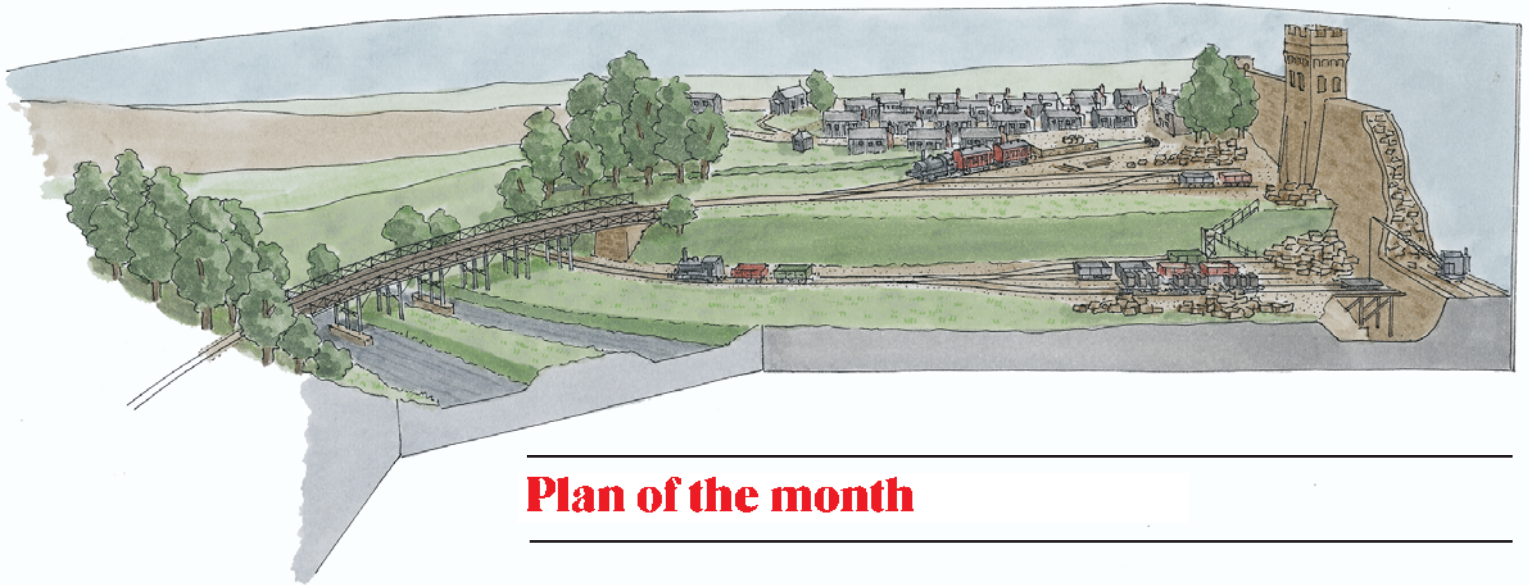
with the right hand. Adrian seems to be able to do this with his eyes shut; lesser mortals like me do one thing at a time.

As the approach to the station is only a single track, all trains arrive at the platform. The locomotive uncouples and moves forward to clear the points, then runs round the train, and recouples at the other end. If it is a passenger train then it can leave the station without further ado, but with a parcels or goods train, it will reverse into the headshunt and then into either the parcels bay or goods yard. Shunting is then carried out by either the train loco or the yard shunter which is usually a Class Y3 vertical-boilered Sentinel shunter No.63. Wagons are uncoupled by electromagnets situated under the baseboard at strategic points. Personally I do not like operating the layout at exhibitions; my favourite position is standing behind the on-lookers and listening to what they say. I have picked up several tips this way.

Further development

Kyre Forest Mark I was in a constant state of development from day one until its demise. The same thing is happening with Mark II, and our exhibition manager is now enquiring about a possible Mark III. However at the moment I am thinking that I do not wish to take the project any further, but who knows?





Plan of the month

The Tin Town Train

Inspired by the Bamford & Howden railway, for the Derwent Valley Water Board

A layout suggestion with its basis in the water industry by **PAUL A. LUNN** *and* **ANNE E. BALMER.**

Our design incorporates a number of prototype and imaginary features in a rarely modelled subject of a railway built solely for the purpose of dam building.

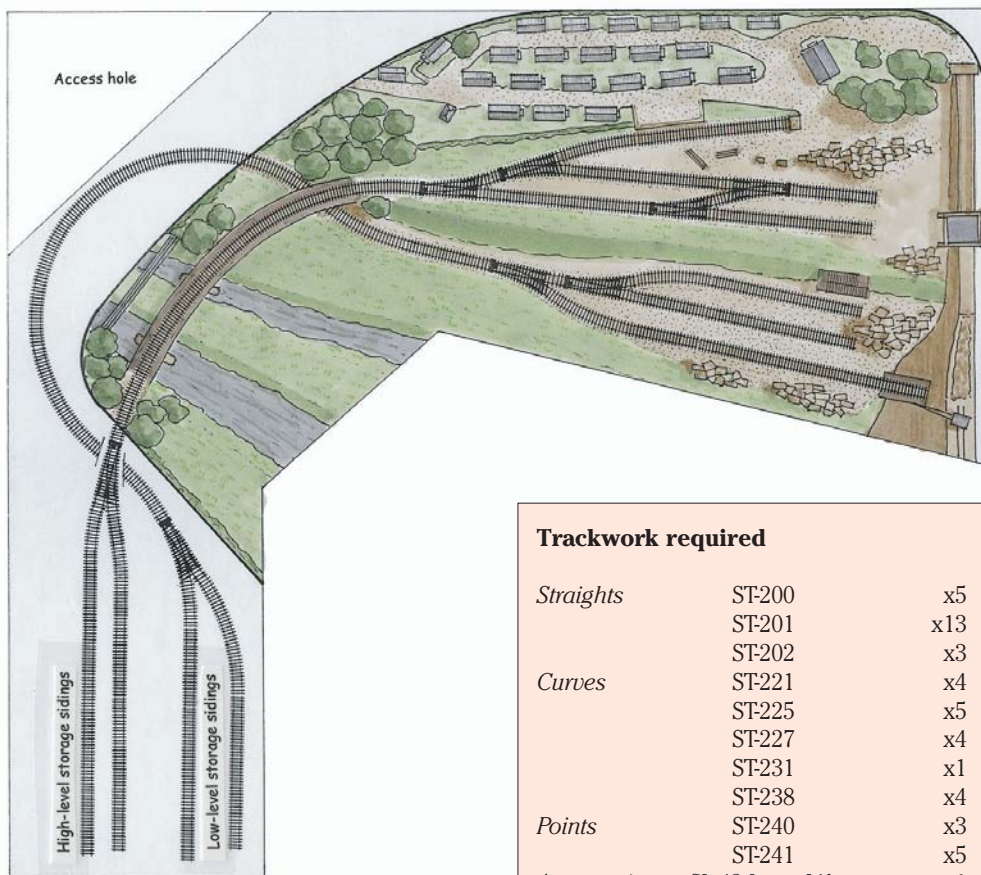
Although the multi-height baseboard and dam itself will need careful consideration in

the design and building stages, most features consist of ready-to-run products, simple kits and basic scratchbuilding. Short shunting locos and coaches together with private owner wagons are readily available from the principal manufacturers and require only

Below: a water pipeline is used on the layout to mask where the modelled rivers meet the flat backscene and is inspired by this prototype built 1935-1945 over the nearby Ladybower dam.

Photographs and artwork by the authors.





Non-scenic section

minimal modification to look plausible in the setting. The ever-reliable Peco Setrack and accessories are used throughout, though if you have Hornby track this will serve equally well.

History and description

Built in the early 1900s the approximately seven-mile-long branch had several passing loops, three trestle viaducts, sidings on different levels (to aid dam building as height progressed), four signal boxes (provided by the Midland Railway) and locomotive facilities.

All this for the purpose of transporting stone, other materials necessary for dam building and the workforce, most of whom had congregated in temporary accommodation at Birchinlee. The village of Birchinlee took its name from the farm, which stood to the far right of the temporary corrugated iron buildings, which became known as 'Tin Town' or 'Tin City'. Built in 1901 by the Derwent Valley Water Board to house its workforce of 'navvies' and their families, the story of 'Tin Town' presents a fascinating picture of a well-organised and thriving community, which flourished for just 15 years during the construction of the Howden and Derwent dams.

The Derwent Valley Water Board realised that by providing above the minimum legal standard for work and living conditions it would ensure a contented and therefore productive workforce. Nowhere is this better illustrated than in the fact that the cell in the local police station was never used.

The single storey bungalows which housed the workmen and their families were called 'huts' and had green-painted outer walls and black roofs. Other community buildings (some with ornate gables and turrets) were all made

Trackwork required

Straights	ST-200	x5
	ST-201	x13
	ST-202	x3
Curves	ST-221	x4
	ST-225	x5
	ST-227	x4
	ST-231	x1
	ST-238	x4
Points	ST-240	x3
	ST-241	x5
Accessories	SL-43 Loco-Lift	x1
	ST-270 Sleeper-built buffer stop	x1
	ST-271 decouplers (see note below)	

Notes

Non-scenic curve is 1st radius. Several ST-271 decouplers are required and should be placed on each of the sidings. Experimentation with shunting will help you find the best positions.

from corrugated iron because it was the cheapest readily available material. To assume that the accommodation was therefore basic would not be true.

The interiors were lined with wood, fitted with coal burning 'Derbyshire grates' and paraffin lighting, and would not have been out of place in any other middle-class late Victorian settlement of the era.

Extensive landscaping provided the two through roads and level terraces along which the village was strung. There were three main types of domestic accommodation: semi-detached workmen's quarters, housing from 8 to 10 single men; smaller huts in blocks of four, suitable for married workers with families, and small semi-detached huts for foremen. The terraces were lit by paraffin lamps attached to roadside buildings and – unusually so for the time – the 'huts' had water toilets in separate buildings, each row of back-to-backs sharing a toilet block between them.

By 1910 the village of Birchinlee peaked at almost 1,000 inhabitants, and although totally self-sufficient, maintained links with the outside world with pedal power and generous travel passes on the 'Tin Town Train' network. Along with comfortable housing the villagers were provided with all the facilities expected

of a small rural settlement. A wide range of shops including a grocer and green-grocer (the former having a 'fine gabled exterior'), a boot and shoe maker, a sweetshop and tobacconist, (originally used as a newspaper kiosk), a tailor and drapers, post office, and a barber/hairdresser were all available to the inhabitants of Birchinlee. Travelling traders were encouraged to visit, and these numbered four competing butchers and a mobile fish and chip shop from the nearby city of Sheffield. Village facilities and services included a school, a police station, a Christian mission, a general and separate isolation hospital, a public bathhouse and a village inspector to oversee village affairs.

The villagers enjoyed an active and varied social life, which revolved around the Recreation Hall, a large white-painted building housing a library, two billiard tables and an excellent dance floor. Some of the proceeds from the local public house, the 'Derwent Canteen' funded village social events, which included dances, concerts (put on by the schoolchildren and the amateur dramatic society known as the 'Birchinlee Minstrels'), whist drives, and hand-cranked film shows.

Other highlights of the village social calendar were the annual horticultural show, where produce grown on allotments above the village would be exhibited, and sports day, opened by a parade led by the village brass band and concluded with the girls tug of war. Also on the sporting side, the village fielded convincing football and cricket teams, the former having a respectable degree of success in the local High Peak league.

The near completion of the Howden and Derwent dams in 1913 heralded the beginning of the end for Birchinlee. Demolition of the huts began in December 1913 and by August 1914 over half of the village had been dismantled. By 1916 little was left of the once bustling and lively community in the Peak District of Derbyshire.

Commodities by rail

Besides an incredible 1.25 million tons of Derbyshire grit stone obtained locally near Grindleford, cement (in bags), coal, general goods, explosives and beer would all have been transported.

Locomotives and rolling stock

0-6-0 and 0-4-0 shunting locos, *Nogi, Togo, King, Queen, Buller* and *French* regularly worked the line and advanced modellers would do well to peruse the 'Want to know more?' section for prototype accuracy. However at entry level, the Hornby R2453 0-4-0 'Pug', R782 0-4-0 *Smokey Joe* and R2400A 0-6-0 Class J52, reliveried over all dirty black with a name from the list above would suffice. The relatively new Bachmann 'Junior' range (see RM January reviews) offers further scope.

A mixture of 1-, 3-, 5- and 6-plank private owner wagons is available from the principal manufacturers. It's worth noting that a special wagon with three containers for small stone was used (See page 18, *Howden and Derwent, The Building of the Upper Dams of the Derwent*

Right: Derwent dam in December 2005. The nearest tower is shown on the 3D illustration, note particularly the ornate stonework. Nearest the camera is the west wing wall, higher than the dam wall, between both towers, that allows water to cascade over when the level is high.

Valley Water Board). Again, entry-level modellers could replicate this by making three small containers to fit the Hornby R6241A Conflat. Two short coaches (see page 35 *Memories of Tin Town*), are required to meet the passenger needs; the Hornby R468 are ideal. In the absence of a birdcage brake van (for goods trains) one of the coaches would make an acceptable if somewhat inaccurate compromise. Perhaps a third coach could be adapted. If you choose to do this, a good reference photo appears on page 14, *Howden and Derwent, The Building of the Upper Dams of the Derwent Valley Water Board*.

Layout design

Much larger than my usual 4mm scale proposals, this is an 'L' shaped design measuring 214cm x 198cm, (7' x 6'6"). It consists of a scenic and a non-scenic section on two levels with stock being moved, in the latter, from one height to the other using the Peco SL43 Loco-Lift as a short cassette.

The dam has to be custom-made to suit the location. I have included prototype photographs though a visit to the Derwent and Howden dams is to be recommended. In all fairness my illustration is much reduced in proportion to the real thing, which at true scale size would dwarf the rest of the layout. Furthermore, I suggest that a 7mm scale stone finish is used to represent the extremely large stonework used for construction. Piles of rough-cut stone in the siding area and near to the dam are perhaps best made from the real thing. A spare bit from your own garden or a piece purchased from a garden centre or DIY superstore will do. Choose a good colour match and wear protective goggles when breaking it into small pieces. Junior modellers may wish to seek the help of an adult for this task.

The upper part of a Dapol crane C030, rail mounted, completes this part of the scene and of course will require a piece of scrap track (not included in the track component list).

At upper level, the iron chapel, left of the Tin Town village is from a Wills SS70 kit and indeed all the other structures could be modelled by customising further SS70s. That said, this will prove costly and I would recommend scratchbuilding a number of units from corrugated sheet SSMP 216 basically to the same or slightly smaller proportions as the chapel. Add brick chimneys with pots, windows, guttering etc. from the Wills and Ratio ranges. You might want to make some structures a little different, larger in size and perhaps more elaborate to represent facilities such as the school, recreation hall or public house. Note as already mentioned the structures and roadways were terraced rising from front to rear.

A Wills SS35 Pagoda Building, in front of the chapel, can be modified as the local sweet



shop. Several Hornby R8585 Corrugated Lamp Huts can be strategically placed around the village as toilet blocks and sheds. Similarly a Hornby R8605 Loading Stage and Crane can be used for the platform though any platform with stone edging would do. Harburn Hamlet FL142 and FL143 large oak casks on the platform would be a nice prototype touch as both passengers and goods used the same facility. A Peco ST-270 sleeper-built buffer stop on the platform siding only and a Hornby R8567 farmhouse extreme right complete the village scene.

Although period figures can be purchased through some of the specialist suppliers, many of the cost-effective Model Scene ones can be readily used or simply modified. Certainly sets 5077, 5115 and 5119 have considerable potential. Additional tools and wheelbarrows for the workforce are available in kit 2005 from Cooper Craft, and Shire Scenes SH601 Baggage Cart, S22 Coal Merchant's Trolley and S96 Maintenance Barrow can all be used to represent some of the travelling traders. Looking back at the History and Description section you will find lots of cameos crying out to be modelled; the marching brass band, the local policeman on his bicycle, the football or cricket team on its way to a match, the list is endless.

A staircase, scratchbuilt from Plastruct 'Fineline' stairs, handrails and rails or from the Dapol Footbridge kit C004 leads to the lower level. The main railway bridge extreme left of the scenic section is an alternative representation of the real thing. This would have been a timber trestle on stone piers similar to those found on American railways. A less complicated, though quite effective method is to use Hornby R660 Elevated Track Sidewalls, and R659 High Level Piers as shown in the main

illustration. Some additional diagonal bracing from piers to deck underside will offer greater realism.

At lower level only the wooden staithe near the dam needs to be mentioned. More scratchbuilding I fear, but a simple structure either from Wills SSMP 201 and plastic sheet or from stripwood.

Heki trees, 'Forest in a Box' and K&M flexible hedgerows spring to mind when adding vegetation to the layout. These should be placed as indicated on the plan and 3D illustration to mask corners, exits from scenic to non-scenic section or where 2D and 3D scenery meet. Backscenes for the entire layout are to be made from Peco SK-13 and SK-33 mountainous landscapes.

Want to know more?

An excellent visitor centre exists at the foot of the Derwent dam. From here the two principal books used for reference can be purchased.

✱ *Howden and Derwent, The Building of the Upper dams of the Derwent Valley Water Board*, Robinson B. Prof., J.W.Northend Ltd., ISBN 0901100498.

✱ *Memories of Tin Town, the navy village of Birchinlee and its people*, Robinson B. Prof., J.W.Northend Ltd., ISBN 0901100404.

Cycling, general and guided walks to observe remnants of the trackbed, bridge piers, Tin Town terraces, Derwent Valley Water Board Offices and the like are available for the taking. Some excellent period photographs together with information panels are housed side-by-side with a tribute to 617 Squadron (the Dambusters) in one of the Derwent dam towers, but that's another story. All-in all a visit is highly recommended and there is much to enjoy, especially for any non-railway types in your party.



Castle Rock

An 009 layout in three linked sections

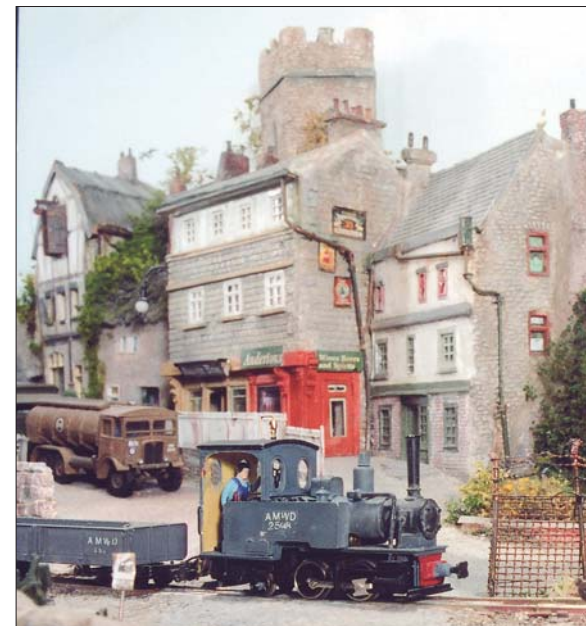
HENK WUST wanted to feature a town, a harbour, and an air force base as well as a railway.

As a beginner, several years ago now, it was my dream one day to build as well as the well-known English modellers. In 1996, through a friend, I got to know several English layouts at the *Rail* exhibition in 's-Hertogenbosch. I was so impressed that I resolved that, when I had time, I would try to make such an atmospheric layout.

Castle Rock is actually my third layout. The first, *Strien*, was inspired by the Rotterdamse

Tramweg Maatschappij (RTM) (see *CONTINENTAL MODELLER* June 2005). This once extensive Dutch narrow gauge system had its terminus in Rotterdam Rosestraat. One of its lines served my birthplace, Strijen, a village on the South Holland island of Hoeksewaard. My Dutch layout therefore is based on Strijen (popularly known as Strien) around 1930. I won a number of prizes with this layout at exhibitions. Encouraged by the positive reac-

tions, I started on a German light railway with the theme of timber handling in the mountains. This layout, *H. Bach*, had its international exhibition debut at Dortmund in 2002, and was described in the February 2004 edition of *CM*. In the meantime, I also started building a small English layout. The idea for this came from my good friend and fellow modeller, Jaap Stuurman, who gave me a book about the RAF base at Calshot and its railway.



The plan

I wanted to build a layout on which ships and aircraft as well as trains could be seen, and Calshot fulfilled this wish. Next to that I wanted a very varied layout and so I looked for three different themes. The layout would consist of three modules each 80cm long by 40cm wide, each with its own theme. That of the first module is a small English town. The second module introduces the air force theme, and the third shows the harbour. The period chosen is the summer of 1939, giving some latitude as to the vehicles and ships, because here in Holland it is not so easy to obtain the correct English models.

In order to be able to make a convincing layout in a small space, I chose 009 (1:76), unusual on here the continent where H0e (1:87) is mostly used on 9mm gauge.

To achieve a well-considered whole, I studied many photographs, drawings, and paintings of buildings and landscape features in the whole of Great Britain including the Channel Islands. Several French buildings on the channel coast were also used as inspiration. I realise that in this way, the compilation of buildings and landscape does not do justice to a specific English county or area but that is no problem for my freelance layout for which I have chosen a fictitious piece of England. Furthermore, I have also been inspired by a fantastic little book on scenic modelling by G. Iliffe Stokes and another by Dave Rowe.

Meanwhile, *Castle Rock* is largely complete. Its first exhibition was at the Dutch national narrow gauge museum at Valkenburgse Meer in 2003, and the layout won second prize, which is always a nice windfall.

The town

In order to build a convincing town scene (better described as the outer fringe of a small town) in such a small space (just 80 x 40cm), it is firstly important to build in perspective and secondly to build some parts in low relief. As far as perspective is concerned, I decided to use two sight lines. One vanishing point lies on the left-hand side of the module, seen from



the public position. The other vanishing point lies on the right-hand side, and runs over the two following modules to create a whole. The sight lines are accentuated by having the form of roads. Towards the vanishing point the roads are narrower and the houses smaller. In order to strengthen the effect, I decided to build the houses in perspective, and to use three scales together. The figures and vehicles in the foreground are at least 1:76 scale and if possible 1:72, while those in the background are mostly 1:87.

The structures in the town are all scratch-built. I use foamboard for the rough shape, after which the walls are clad with DAS clay, cement, or plaster. A number of walls are made of plaster cast in moulds from an old Linka set. This was obtained through John and Jane Jacobs and thanks to their advice the buildings concerned have come out well. Styrene is used for the windows, and sometimes also parts from Ratio and Faller kits. Most of the roofs are from plaster (Linka) or card. On others sandpaper was used or corrugated aluminium from Campbell. The façades of the

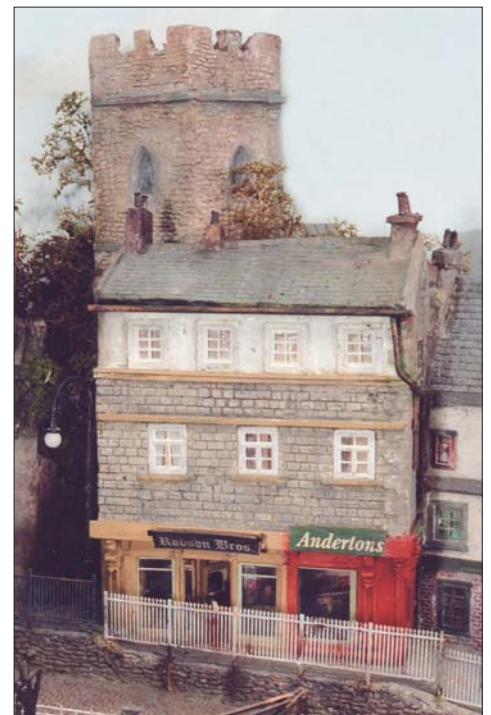
two shops are made from Metcalfe card kits which are enhanced with styrene and whitmetal details from Langley. The chimneys (for anyone from Holland the English types are very special) are partly scratchbuilt or from the Langley range.

To the right of the town scene is the entrance to the Royal Air Force seaplane base at Castle Rock. The walls which screen the base from the town are made from foamboard on which a thin layer of wood glue is applied. After this, cement powder from a builders' merchants is strewn on and smoothed out with a brush dipped in diluted wood glue with a little detergent added. After drying, the wall is sanded down and coloured. The same method was used for the houses on the edge of the base. The barbed wire round the base is from Scale Link. The sandbags by the Bofors gun emplacement are made from DAS clay.

The views on these pages show the first of the three modules, the town scene.

Photographs by Steve Flint.





The air force base

Now the layout is more or less complete, this is the middle section and is really the centre of attention – while towns and even harbours were quite common as subjects for layout scenes, an air force establishment would, I thought, be something more unusual.

The large hangar is simply made from embossed styrene sheet representing corrugated iron, while the roof came from the scrap-box (from an old Kibri loco shed, I think).

The aircraft were made with the help of proprietary plastic kits from Matchbox and Eastern Express. The Blackburn Shark II is from the latter and the propellor is driven with a small motor from a CD player. The quality of the kit left something to be desired but, thanks to my good friend Jaap Stuurman, the final result is very satisfactory.

Within the gloom of the hangar you can just make out parts of other aircraft, spares, etc. – I like placing details for the viewer to find.

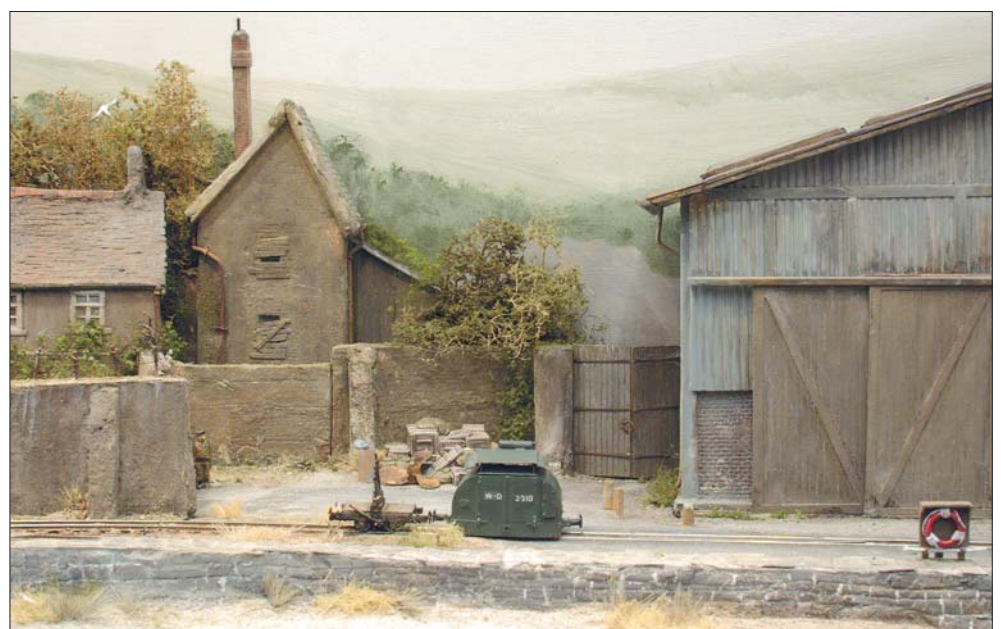
Top left: the loco depot, situated below the town, hosts an Orenstein & Koppel plantation type 0-4-0T as a Barclay 0-4-0T passes with the empty stock of the workmen's train.
Photograph: Andrew Burnham.

Top right: a closer view of the shops, which have fronts adapted from Metcalfe card kits with additional details.
Photograph: Steve Flint.

Above: the loco shed and servicing facilities are outside the perimeter. An armoured Simplex tractor is available for lighter duties. The crane is adapted from a Pola kit.
Photograph: Steve Flint.

Right: naturally a substantial wall separates the civilian settlement from the air force base.
Photograph: Andrew Burnham.

Far right: the narrow gauge tracks cross the apron in front of the seaplane hangar. Beyond, a siding serves the boiler house. This view demonstrates very well how the eye is drawn from one scene to the next.
Photograph: Andrew Burnham.





Above: the Simplex scuttles past as a sea-plane is prepared for another sortie.
Photograph: Andrew Burnham.

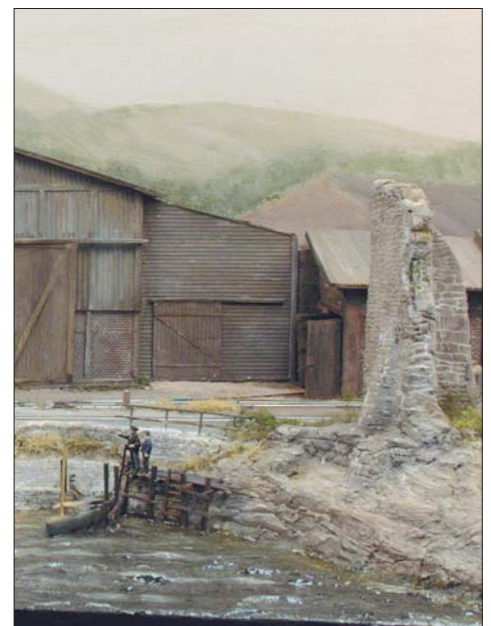
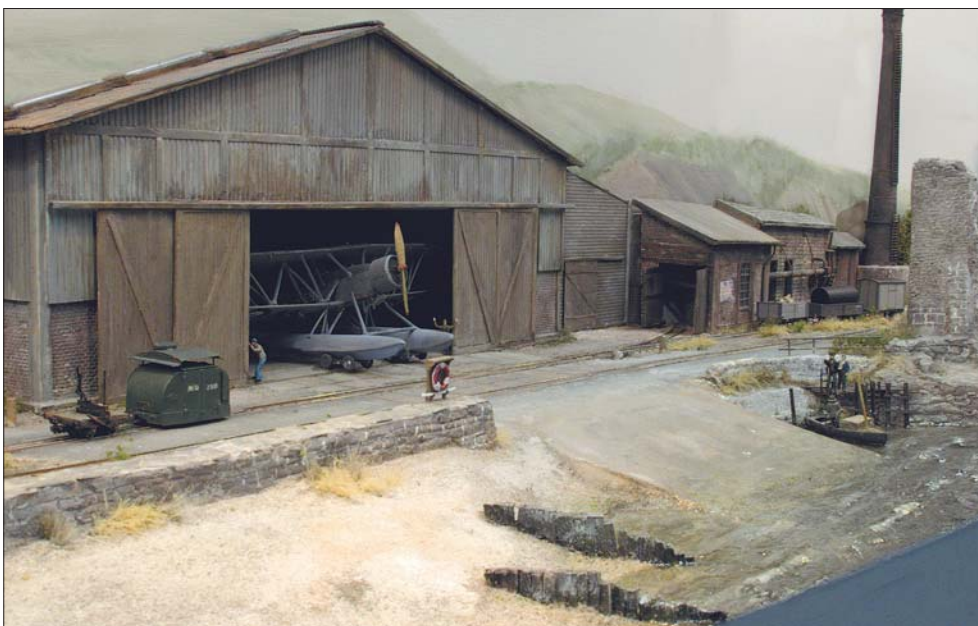
Right: the hangar doors are opened to let the aircraft out onto the slipway.
Photograph: Andrew Burnham.

Opposite the hangar is the slipway by which the aircraft enter the water or are hauled out.

Two parallel narrow gauge tracks cross the apron in front of the hangar.

In order to strengthen the sight line and enhance the coherence between the air force base (module two) and the harbour (module three), the boiler house is built directly onto the hangar but is made as a separate removable structure which stands over the join between the modules.

To avoid having water running across the join between the modules, I decided to make a spit of land over the join. The ruined castle which gives the layout its name is situated on this spit. This solution avoids a seam running across the water. Other solutions are possible but often lead to transport problems.





The harbour

When the layout was first shown, it was not completely finished. On the first module, street names, house numbers, and traffic signs still had to be made, and vehicle number plates were missing. The second module was incomplete in several respects, for example the absence of winches and cables on the slipway, and the tall chimney still needed climbing irons. The third module was the least complete. The lighthouse, for example, was originally only a temporary model intended to

make the layout more or less presentable for the Valkenburgse Meer exhibition in 2003; it was subsequently replaced before the layout appeared at *Rail* in Leiden in 2004.

The cliff forms the end of the module and gives the form of the coastline which continues on the (self-painted) backscene. The pier, just like the street in the town, is made from DAS clay in which individual stones are pressed with the help of Evergreen profiles. The small crane on the pier is, I believe, from Ratio.



The MTB which has just left the harbour – an Airfix model slightly altered – has some salvage added from a Fairey Seafox II which crashed during an exercise. Luckily both airmen were saved; the ambulance to transport them has yet to be made.

I wanted the sea to give the impression of the beginning of a storm, therefore I decided on rather higher waves (circa 50cm) and a green/grey colour. The water was made as follows. On a plywood base, a basic pattern of waves is made with hot glue from a glue gun. Every seventh wave is made a bit higher than the foregoing six. Then silk finish acrylic varnish is added over this. While the varnish is still wet, pre-coloured liquid plaster is added, modelled so that cross waves (swell) are created. Next other colours are added and provided with many layers of silk finish and high gloss varnish.

The rolling stock

You could almost forget it, but trains do run!

The blue-grey O&K plantation type loco was made by Eric de Boer and Jaap Stuurman.

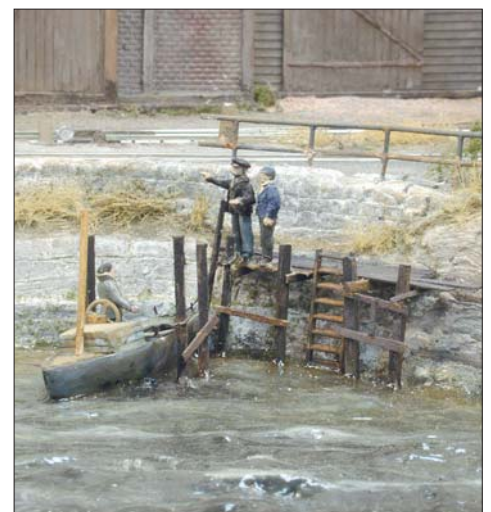
Above: the lighthouse stands on the cliff top.

Above left and left: on the rocky spit of land between the slipway and the harbour stands a ruined castle.

Below: the 'ancient mariner' gives the launch crew the benefit of his experience. It seems that a storm is brewing.

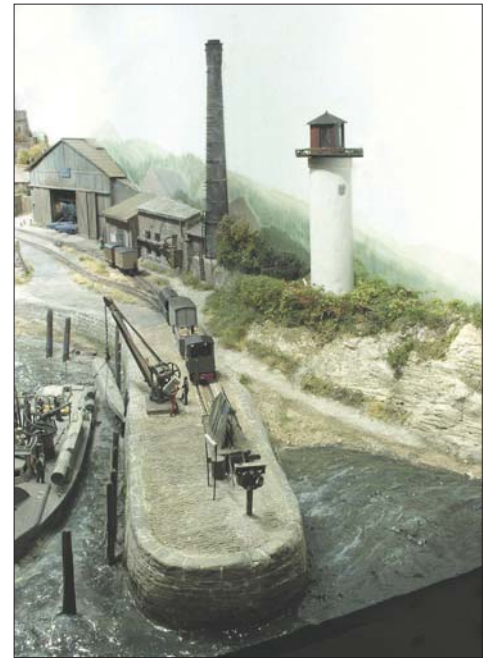
Below right: the footpath to the lighthouse; the figures and fence are further examples of details that are not immediately obvious.

Photographs: Andrew Burnham.





Above: a train of supplies stands on the pier as the crane lifts a salvaged seaplane float.



Above: salvaged parts loaded on a flat wagon. Below: the MTB moves away from the pier.

Jaap also built from kits the armoured Simplex tractor and the Barclay 0-4-0 tanks, one of which is AMWD No.2605 – the original worked on the RAF base at Calshot, and is still in service today on the Talylyn Railway as No.6 *Douglas*.

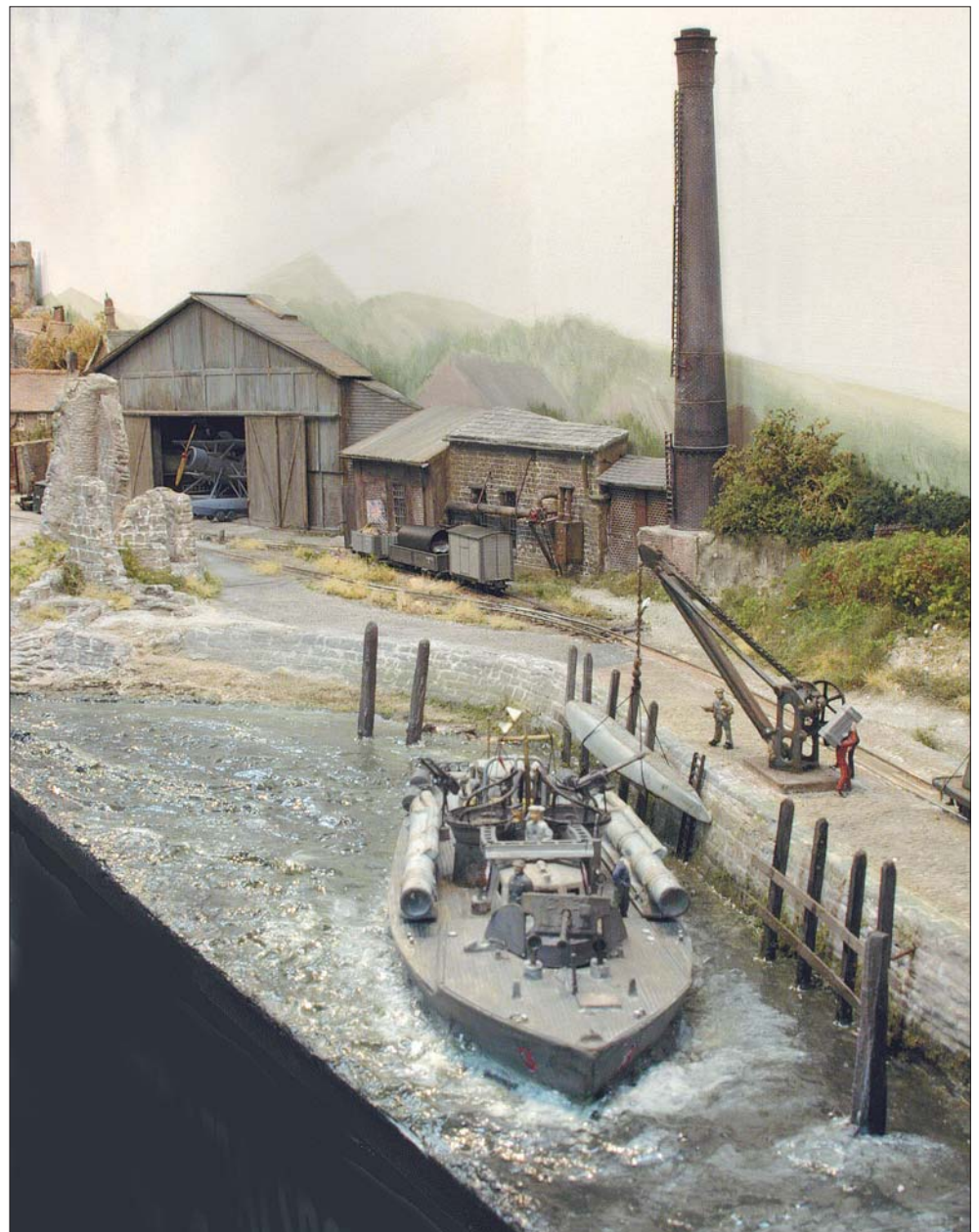
Suitable locos from my other layouts may also appear, and visitors are not unknown.

Most of the coaches and wagons are made from kits by Parkside Dundas.

Track and points (worked by pull rods) are from Peco.

Given the compliments that I have received from various English modellers at European exhibitions, I think that my attempt to build an English layout has been reasonably successful, but various things remain to be improved. That is why I am soon to begin building a new 00 English layout with a modelling friend, with the objective of avoiding all the faults made in the construction of *Castle Rock*. Undoubtedly we shall make other mistakes, and I am open to friendly comment!

Castle Rock – now more or less complete! – will be exhibited at the Chatham show on Saturday 10 and Sunday 11 June. More information in *Societies and Clubs*.



Modelling (Northern) Irish

Part 2 – Hornby Fowler to Jeep conversion with a glance at the Moguls

Two 4mm scale models of NCC WT Class 2-6-4Ts and more, created by **COLM FLANAGAN**.

Some years ago adverts began to appear for a 4mm ready to run model of one of my favourite Northern Irish locomotive types, the ex-LMS NCC 2-6-4 tank – a 'Jeep'. The prototypes were introduced in 1946 and were a tank version of tender engines built during the 1930s. These tender engines were themselves based on Fowler's design of 2-6-4 tank for the LMS. So in a sense the wheel turned full circle.

The name 'Jeep' was given these engines by a shed foreman at the York Road headquarters of the company in Belfast, who was impressed by their versatility, and remembered well the US Army vehicle of the same name! The 18 engines of the class, known officially as WT, were indeed a most successful design and No.4 is still with us, running on main lines, under the auspices of the Railway Preservation Society of Ireland.

Many years ago a friend built a model of one of these. He used the Hornby Dublo 2-6-4 chassis, which at the time was the only one available, and he scratchbuilt a heavy paper-based card (!) body. It looked very well in NCC black with straw lining, but ultimately the body shell deteriorated fatally. I had always rather fancied a Jeep for myself but had always lacked the nerve to 'have a go'.

Anyway, after waiting for a year or two, with no sign of any rtr model appearing, I decided to have a bash at doing a Jeep for myself, but using the Hornby Fowler 2-6-4T as a basis. My first effort (No.10) used the original R055 loco but a second version (No.55) used the newer Chinese-produced model, because, as I mentioned above, it was these Fowler engines which provided the initial design from which both the tender Moguls and the Jeep tanks were developed.



The chassis is nearly correct apart from the slightly small driving wheels and cylinders. If you want to do anything about these items then you may as well scratch build! I prefer if I can to use ready made chassis.

All the Irish engines had parallel boilers. Later English 2-6-4Ts had a tapered one – quite different.

I got a plan (not a very detailed one but this isn't a dead-accurate model anyway) and made some measurements and notes. One note of caution to anyone else deciding to have a go, is that although some plans and drawings do exist they are not available commercially as far as I know and in some cases are not accurate. It's true what they say, always get photographs too.

Turning now to the model superstructure, the most obvious difference is the cab and rear bunker. The NCC engines had a side window-type cab and a different design of coal bunker, rather more similar to later Fairburn and BR engines. I also discovered after mea-

suring up drawing and loco, that the cab was a different size, so a new cab rear has to be provided in your preferred medium – I use a lot of plasticard!

Providing the cab windows is a fiddly job as you have to cut away the front part of the cab, square it off and then insert new window frames and glazing. It is also a good idea not to cut the bunker down too much at the back, or you will have to fashion a new bodyshell holding screw and socket as this is inside the rear bunker. On my first locomotive I didn't do this and so if you lift No.10 by the rear bunker it comes off the chassis! The rear cab windows are quite big and I did not have a rear elevation plan so got this wrong as well on my first attempt. Photographs of the backs of engines are not as common either.

Other detail differences were that the Jeep had outside steampipes, (some Fowler tanks later had these as well) and a Stanier-type topfeed on the boiler. At the front, the main difference is that the footplate has a cutaway gap, and of course the smokebox had a hand-wheel/dart, as most Irish locos seem to have had. And you then need to remove all the clips round the edges. On the Fowler tank the whistle is mounted on top of the firebox, but on the Jeep (and Mogul) it is on the cab roof.

I did all that but the model still looked wrong – and then I realized that I had one more major job to do! On the Jeep the side tanks do not come up as far toward the smokebox as they do on the Fowler. So there was nothing for it but to get the razor saw out again and cut these back by 5mm – then fill all resulting gaps in the boiler.

Then I had an engine that was getting there. I decided on UTA black because that is the livery in which I remember these locos. The UTA 'Red Hand' symbol used until about 1961 is available from the bus and lorry transfer firm of Mabex. If you want a 'later' 1960s UTA crest



Left: UTA No.51 was one of the second batch of Jeeps which came to Northern Ireland. This model is built on a 'new' Hornby chassis. The front of the smokebox is quite different from the English Fowler tanks.

Below left: Mogul No.91 *The Bush* waits to depart while Jeep No.55 arrives in the distance on a local stopping train passing an NCC style signal box.

Right: two Jeeps, three Moguls and a Jinty at the loco shed on the author's layout. Note the number plate on the rear of the tender of one of the Moguls. The lack of a coupling on the front of the right-hand Mogul is correct; these locomotives didn't actually have a coupling there. Two LMS Jinties came to Belfast during the war and were re-gauged.

Below: No.55 was one of the Jeeps which was given a built-up coal bunker in the 1960s to allow the engines to run to Dublin and back without needing to take on coal. On the model this is removable so I can run her in either form. The UTA livery looked very smart when clean but was, of course often a filthy nondescript grey-black. But I like my engines clean. No.55 also has the later UTA crest which is how I remember her best.

Photographs by the author.

you'll have to paint one yourself as I know of no transfer.

Numberplates came from Gareth Floyd at Guilplates who has done a number of Irish ones for me. I opted for yellow lining. In reality it was yellow with a very fine red line, but in many photos the latter has disappeared due to grime anyway, even shortly after being outshopped. One thing to remember is that some of the motion was picked out in red by the works – very much a feature of these engines. During their relatively brief time in NCC livery they were also black, though with straw lining and a crimson edge round the tanks, which had the letters 'NCC'. As usual photos of the real thing are a must to consult. The only problem with this is that if you start really getting into the thing you want to start all over again!

I finally added details such as vacuum pipes, steam pipes etc., and 'strap type' steps. The last mentioned may be made by carefully cutting the existing ones, but they will be pretty delicate and if I were doing this again I would use lost wax Ivatt pattern ones made by Comet which are a lot stronger.

Scale pony truck wheels help if you're using a Mk.I chassis, though the new Hornby wheels are so much better I left them on my second Jeep. These models cannot be exactly accurate – but 'if it looks like a duck' etc. Those who have seen them at exhibitions locally include ex-railwaymen who worked on the real thing and they have said they do capture the 'look' – and that's enough for me too.

I did briefly wonder about cutting the tanks again and then altering the cab – and decided that life is too short. It would be a horrendous job and not worth it. As it is I estimate there is a good 12 hours' work in this modification so it isn't as much a 'quickie' as you might think.

It wasn't long before other railway-minded folk seeing the Jeep said, 'Have you thought about a Mogul (Class W)?' So, I did. But the



Mogul project (using the same chassis) was put on the back-burner when I was completing my book on diesels, and I then built most of the UTA railcars described in the previous article [*March issue – Ed.*].

However, I have since built a number of Moguls. They are a more difficult conversion job and although they look well, it is not for the faint-hearted, being almost scratchbuilding. And of course you need to build a tender. I built mine from a Comet Fowler chassis with Bachmann Stanier tender top cut back in length, as the Irish locomotives had a 3500-gallon tender rather than the much more common 4000-gallon one.

In fact this tender was only fitted to six later locomotives; the first nine of the 15 Moguls built in the 1930s had an even smaller tender, similar to a Fowler one but of only 2500 gallons capacity and a shorter wheelbase again. Fortunately for me, my 1960s era saw most of the surviving locomotives paired with the 'big' tenders. One unusual feature of these engines was the fitting of a third number plate on the rear of the tender. All were also fitted with tablet exchange apparatus on the cab sides as

much of the line to Londonderry was single track, and these could – and did – exchange the tablets at up to 70 mph!

The rear bogie and chassis extension of the Hornby Fowler needs to be removed – this isn't too difficult, but the body work is a major surgical operation, and you will need to arrange a new rear fixing for the body to the shortened chassis. Just about everything from the smokebox back has to be fabricated from plasticard or whatever other medium you fancy although you can re-use the cab front unmodified and the roof has the right profile, with some cutting and filing down.

Most Moguls had inside steampipes so you would save a bit of work by buying the LMS version of the new Hornby tank. The original Hornby model was of the inside-piped variety. However, the 'new' Hornby chassis is actually more difficult to use, as in this case the motor sits higher and further back than the earlier model's did. This then means that unless you are prepared to make the engine somewhat longer than scale, you will have to cut away the boiler backhead inside the cab and re-attach it 3mm further back.



Right: Mogul No.91 *The Bush*, named after a local river, passes a typically NCC style signal box with a passenger train.

Below: Mogul No.91 is turned in preparation for her next duty. Note the newly painted 'tablet snatcher' on the cabside.

Bottom: Mogul No.97 *Earl of Ulster* in ex-works condition. Although the Moguls had a coupling hook on the front buffer beam, they had no screw link.

Furthermore, the new and better-detailed valve gear uses a plastic 'strut' which is normally hidden inside the side tanks. Without these tanks it sticks up above footplate level. It's a very fine act cutting it away because too much and you will end up with a scrap chassis or you will be looking for an inside cylinder engine to model!

In fact, once you get into this kind of situation the 'conversion' really is much more than that. I very nearly gave up on the Mk.II Mogul and persevered simply because of the 'I've started so I'll finish' syndrome – I'm a bit stubborn that way, but what else can you do with a chopped up Hornby Fowler chassis and



bodyshell? I have finally done three of these locomotives and that's it!

I hear that an NCC Mogul brass kit may be

making an appearance soon and if I hadn't already done some Moguls as shown in the photographs I honestly doubt if I would bother now. But the Jeep is a relatively easy job which does result in a locomotive that has the 'look' of the real thing and runs well.

Below is a list of the jobs for the Jeep conversion. The numbers indicate how 'fiddly' on a scale of 1-3, with 1 being easy

- A: Cut away footplate under smokebox, and add triangular frame fillers 1
- B: Reposition front handrail upwards on smokebox front 1
- C: Remove moulded smokebox number-plate and add handwheel (4mm) 1
- D: Remove the moulded smokebox door clips, though not the hinges! 2
- E: Fit outside steampipes (not needed if using new R2234 body shell) 2
- F: Cut back front of bunkers by 5mm – fill boiler as necessary. 3
- G: Cut away lower side tank edge to correct profile 2
- H: Boiler topfeed (Stanier type is OK) and pipes 2
- J: Ejector pipe to smokebox (left hand side only) 1
- K: Move whistle to cab roof front 1
- L: Cut back cab rear and bunker 2
- M: New ventilator runners on roof (only needed on Mk.I body) 1
- N: Cut away side of cab – make new windows and glaze 3/2
- P: Fabricate new coal bunker and cab rear windows 3
- Q: Steps (Jeeps had the Ivatt strap type) 1
- R: Vacuum pipes etc. 1
- S: Blacken motion/red rods (blackening not needed on Mk.II) 1
- T: Coal load in bunker/crew/transfers/lining to taste 1/2

In a future article (editor permitting) I will consider how you might make up some suitable vehicles for these engines to pull, including some of the famous 'North Atlantic' coaches which had, I believe, the distinction of having the largest windows ever carried by coaches in the British Isles.



Build a PPM 50

A new modelling competition

CASPAR LUCAS outlines the history of these railcars and their manufacturer.

The subject of this competition is the Class 999 PPM 50 Light Railcar now in public service on Sundays between Stourbridge Junction and Stourbridge Town. Built by Parry People Movers Ltd in the West Midlands and operated by Pre Metro Operations Ltd, the railcar has carried fare-paying passengers since mid-December 2005.

The approach adopted by the two companies provides a means to increase the attractiveness of rail transport while keeping down the levels of subsidy required – a particular issue with rural branch lines today. Lightweight rail, as the concept is referred to, offers the prospect of high-quality public transport without much of the costs associated with the operating support, reopening or construction of railway lines and tramways.

The operation at Stourbridge is seen as a precursor to widening the provision of attractive passenger transport in many different applications, such as the provision of public services on heritage railways, freight-only lines or 'community railways' which require heavy subsidy. Following the example of Stourbridge, a short junction-to-terminus branch operation using lightweight railcars could make a fascinating and prototypical addition to many layouts, while the potential range of situations where PPM-type railcars can be used means that a model could be used on many more.

The railcar featured in this competition is



built to provide level access from standard height railway platforms and is designed to carry 20 seated and up to 30 standing passengers. It is powered by a hybrid gas/flywheel powertrain which enables a two-litre automotive engine fuelled by propane gas to provide all the energy required for operation. The 'Kinergetic' flywheel system means that energy is stored in the rotating flywheel until it is

Above: in November 2001, the initial PPM50 was rolled-out in a 'works' white & grey livery, then painted in the green & white with blue roof scheme seen in the following pages. Note the exterior form of the roof detailing: the central 'clerestory' is moulded with blank 'windows' in relief, and extends to the end destination board surrounds. (Note: the 'sawtooth' effect to the right is not part of the vehicle.)

Photographs courtesy Caspar Lucas.





needed, when it is transmitted hydrostatically to the driven axle. Even better – when slowing down or maintaining steady speed on a descending gradient, braking energy is transmitted back to the flywheel and stored for later use. Extra points will be awarded for models which include this feature!

PPM vehicles are, however, highly flexible: larger, smaller and low-floor versions are also possible and external appearance, internal layout and power source can be varied according to the requirements of the particular application.

The PPM venture itself began in the early

1990s. A first vehicle capable of transporting two passengers was quickly superseded by a succession of larger vehicles, building up to the 50-passenger Class 999. Notable achievements included the installation of temporary demonstration street tramways in Barking, Birmingham, Swansea and Brighton in the



Far left: the shape of the ends is identical.

Left: interior photo taken from No.2 End looking towards No.1 End. On the right side as seen (Side B), there are four seats in longitudinal arrangement, leaving a wheelchair space immediately to the photographer's left. Two folding seats are positioned longitudinally on Side A against the No.1 End cab bulkhead, with one folding seat opposite the driver's position facing inward (obscured by door bulkhead on left). Total seated capacity is 20.

Bottom left and right: low-platform steps deployed and retracted.

Right: passenger demonstration at the PPM works at Cradley Heath in March 2002.

mid-1990s, and the operation by Bristol Electric Railbus of a PPM 35 low-floor tram vehicle at Bristol Harbourside between 1998 and 2000, as well as operation by the PPM 50 on the Severn Valley, Great Central, Chasewater and Wensleydale Railways between 2002 and 2005.

The PPM 50 Light Railcar was given the TOPS number 999 900 as part of the approvals process for operation on the Network Rail system at Stourbridge.

The small print

Object To build a working model of a Class 999 PPM50 Light Railcar.

Scale The model may be made to any scale, providing it will run on an acknowledged track gauge.

Construction Any suitable materials will be allowed, such as metal, wood, card, plastic, etc. The judges will not be prejudiced in favour of one particular material over another.

Commercial parts Bought-in parts and components may be used with complete freedom – the judges will be impressed by the effective use or adaptation of commercial and proprietary items.



Mechanics

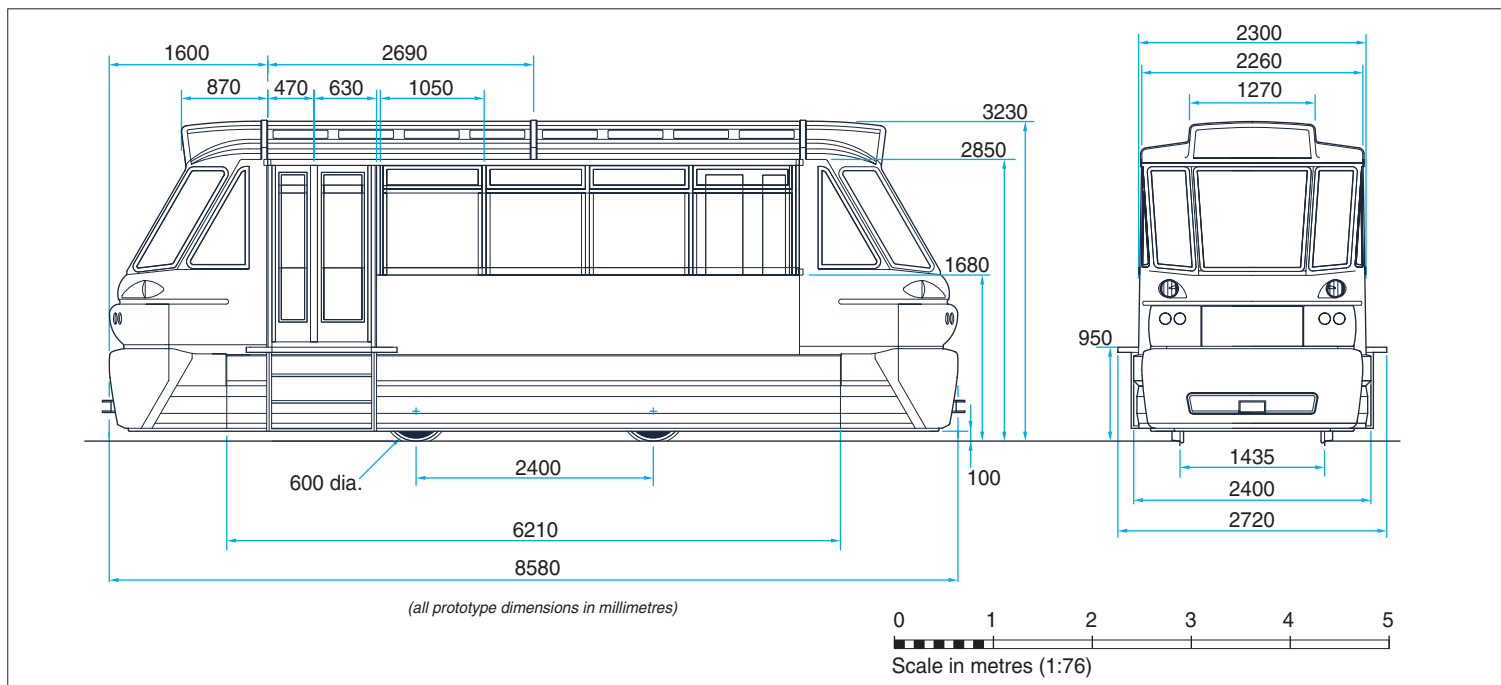
The model must work: replicating the prototype's flywheel drive is not essential but will be advantageous.

Appearance

The judges will be looking for neat construction and livery, good proportions and scale appearance, although they will not apply the scale rule to an unreasonable extent. The article in this issue will be a big help, but observation of the prototype will be of assistance.

The closing date is 31 October 2006, by which point entrants must have sent photographs of their completed model to the RAILWAY MODELLER Office, at the usual address – see p.3a. The photographs do not need to be superb, as long as the subject can be identified clearly. A shortlist will then be prepared.

The models will be judged by a panel under the direction of the Editor. Peco and associated company staff members are excluded, and the competition is not intended for professional modelmakers.



Wintringham Haven

A lingering Railfreight terminal from the 1980s

JEFF TAYLOR introduces this 4mm scale essay in Speedlink Era modelling.



The model you see here is the result of the combined efforts of a small group of finescale modellers within Hull Miniature Railway Society whose railway interests usually vary greatly in both locations and timescale. As a group we decided several years ago to combine our efforts in order to build a club project EM gauge, diesel-based layout.

Initial suggestions bounced about amongst ourselves at early planning stages ranged from Tees-based port schemes to a Midlands yard, but one factor that we all agreed on was that a well-observed and detailed layout was what we particularly desired to build. Several wide-ranging locations and subjects were discussed and many plans drawn up, but none seemed to capture exactly what we collectively wanted, until finally, it dawned on us that the ideal prototype for which we had been searching was located only a couple of miles away across the other side of the River Humber at Wintringham. This subsequently led to the period of the layout also being settled on as the mid-to-late 1980s. The choice of this period would allow us to depict British Rail freight

operations as many of us best remembered it and before it went through the changes into privatisation.

By virtue of its favourable geography with many small inlets, the southern bank of the River Humber has historically supported a number of small port facilities. Though some relating to the brick and tile industry have long gone, many others are still extant, having survived the ebbs and flows of the area's general industry by specialising in handling of

specific cargoes. The railway network of the region did indeed grow to serve a number of these facilities, a factor we exploited as the basis for our version of 'Historical Development' for the layout. In reality the railways did actually reach Wintringham (note the spelling with an 'e') in the form of an outpost of the North Lindsey Light Railway (NLLR).

However if one studies the railway systems of North Lincolnshire, it soon becomes apparent that there is a missing link between

Above and right: a key traffic flow through Wintringham is imported scrap. Here 20 201 is seen shunting 16t mineral wagons loaded with a consignment for Scunthorpe Steelworks. The loco is a Bachmann model, minerals are a mixture of kitbuilt and r-t-r items.



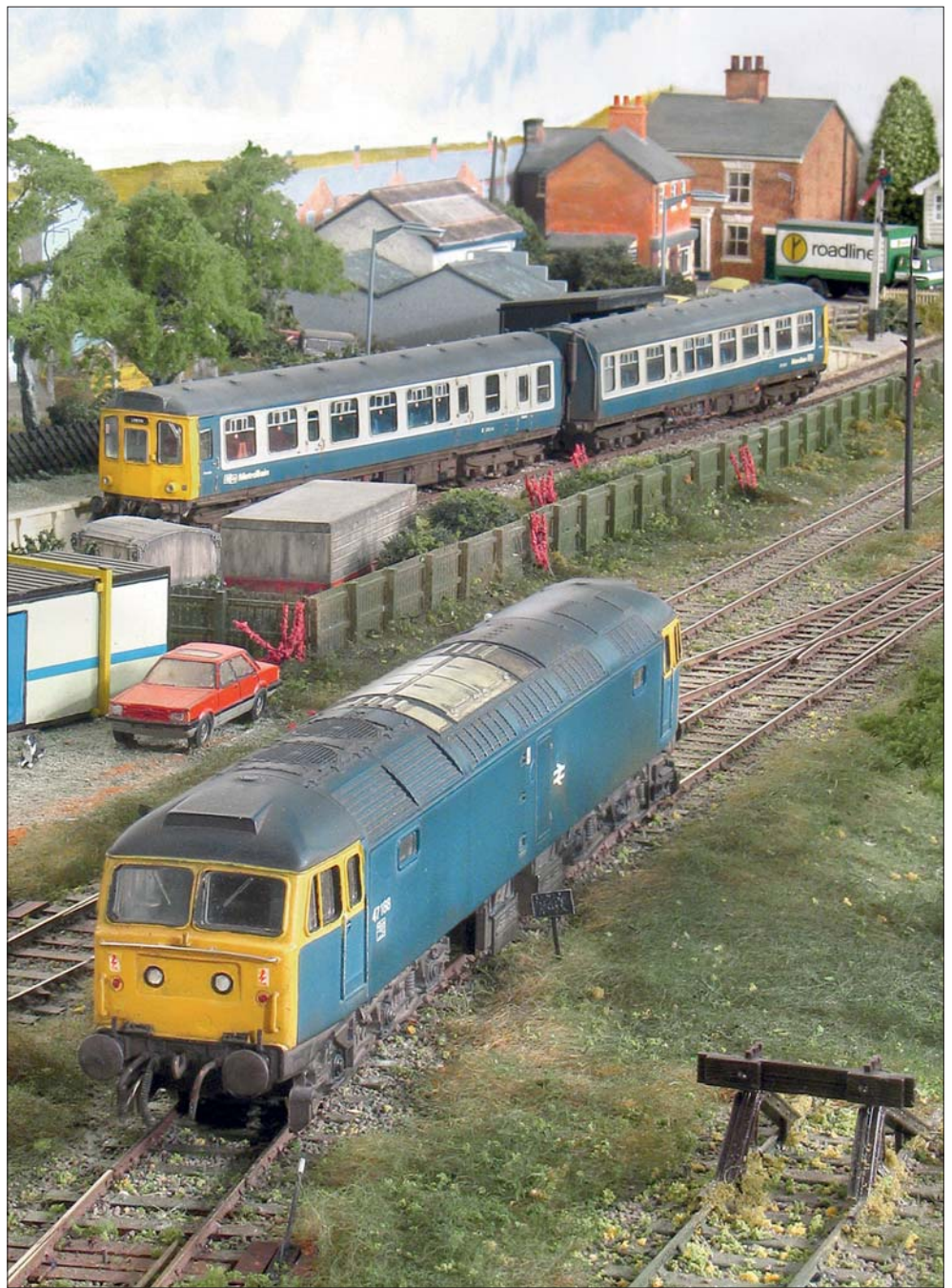
the terminus at Barton-upon-Humber and Scunthorpe. Indeed as our research subsequently found, plans did exist for some time to link the two, via our chosen location of Winterringham, and the route even reached the stage of being pegged out. However, like so many other proposed routes it ultimately came to nothing and the NLLR terminus that served Winterringham remained the only railway presence, closing in 1951. Part of the line north out of Scunthorpe did survive into the 1970s serving the ironstone workings.

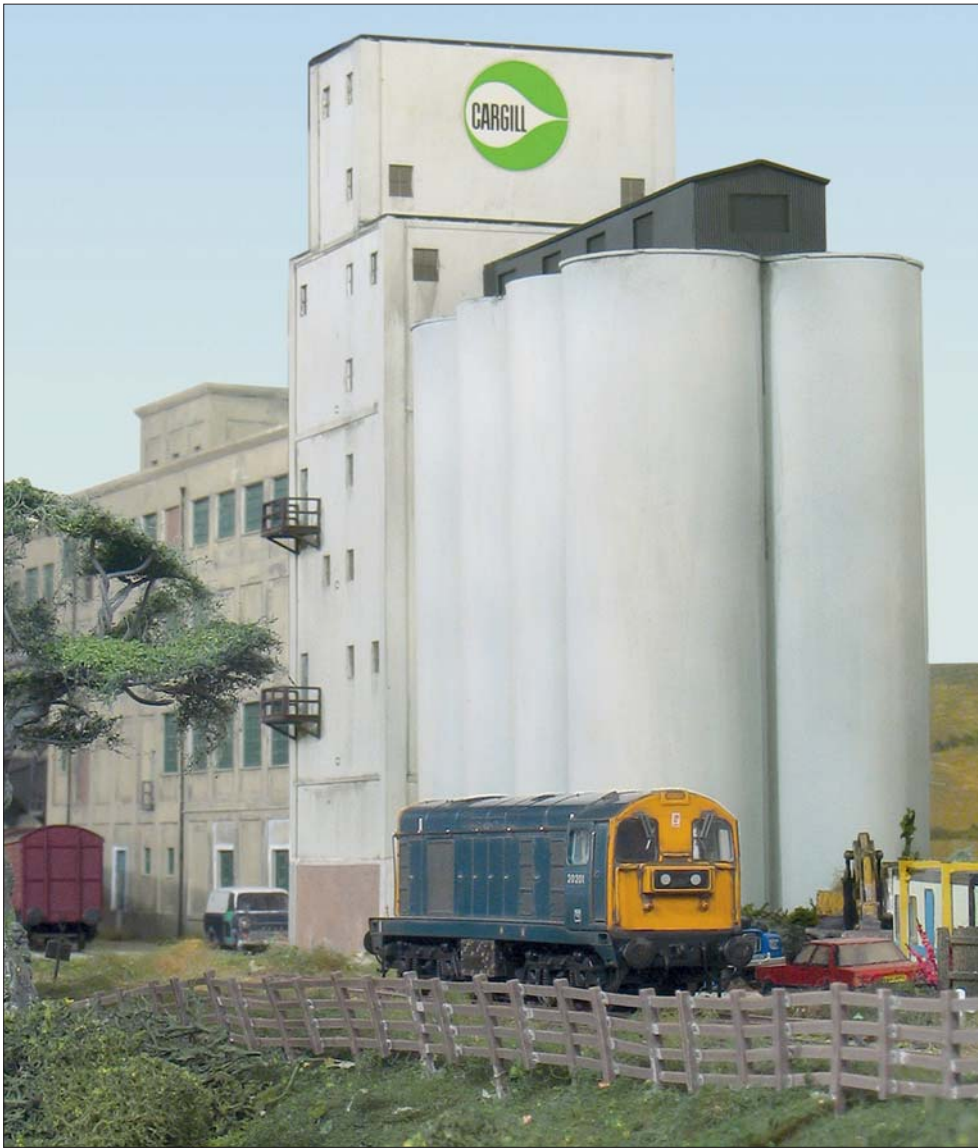
Thus, we assumed that the proposed missing link did indeed get built and Winterringham, suitably catalysed by its transport links and fortuitous riverside location, flourished as a port, in particular for handling products related to the local Scunthorpe steel works. Further, traffic of fuel oil and finished product from a nearby cement works at South Ferriby would also give another viable reason for the line to survive into the period we chose. On top of which, from a study of the population centres along the route, we calculated that there would be sufficient demand to warrant an hourly passenger service from Scunthorpe via Winterringham Haven and Barton-upon-Humber to Grimsby.

One enduring idea that had guided us from day one was that the layout was to be primarily freight based and that any traffics featured would need a proper reason to exist. Having decided on the Winterringham riverside location, the traffics and associated handling facilities were thoroughly researched, although it has to be said having an ex-shipping agent amongst our number helped here immensely, as it was not always obvious as to how or why a traffic would be handled in a certain way. We reasoned that two or three core traffics would be needed to make the layout operationally viable. The first and most obvious one was export steel, being so close to Scunthorpe and with a natural counter-flow of imported scrap for the furnaces at the same location. Added to this, a study of other nearby ports showed that New Holland handled grain, so we reasoned, why not Winterringham? The same research revealing the chosen period also allowed us to introduce a few 'spot' traffics if we needed, although in reality these were often freight flows lasting only a few weeks at a time.

Naturally, the identification of these specific freight flows also brought into consideration the types of rolling stock we would need to use. The movement of steel traffic from Scunthorpe suggested bogie bolster wagons, but assuming that some of the steel for export is of a more specialist nature, then vans would be the order of the day to protect it from the elements. The then newly-built VGAs proved

Above and right: a passenger service operates between Scunthorpe and Grimsby and is today in the hands of a BRCW Class 110 'power twin' DMU. This was usual for the area in the period prior to the introduction of Sprinters and Pacers. Meanwhile 47 188, an upgraded Lima model, shunts a train of VGA vans which have just arrived with an export load of finished steel from Scunthorpe.





ideal. Imported scrap was an altogether different beast, requiring a robust and practical wagon: what better than the enduring 16t mineral? These were nearing the end of their operating life so a little rough handling wouldn't be a problem. At that time on scrap traffic, the bigger and newer 4-wheel POAs were also being introduced, though mostly allocated elsewhere, which also gave us a realistic reasoning for portraying the transition from traditional vacuum-fitted stock to the newer air-braked types. The 16t minerals would only have to work the 15 or so miles round trip on backwater lines and not need to fit in with the high speed paths found on the main lines.

As well as freight to and from the Haven, the branch line also sees a little. As mentioned previously the cement works at South Ferriby would have been a likely sustainable traffic-generator had the line been built. Therefore we portray outbound cement traffic (our chosen time scale allowing use of either the older style Presflo or the newer air-braked PCA tanks) with an inward flow of small quantities of fuel oil to power the works. Future traffic developments also to be considered include extending the ammonia working that used to run to the Britag works at Barton-upon-Humber. After all, if we have built the missing link to Scunthorpe, then why send the tanks the longer route via Barnetby?

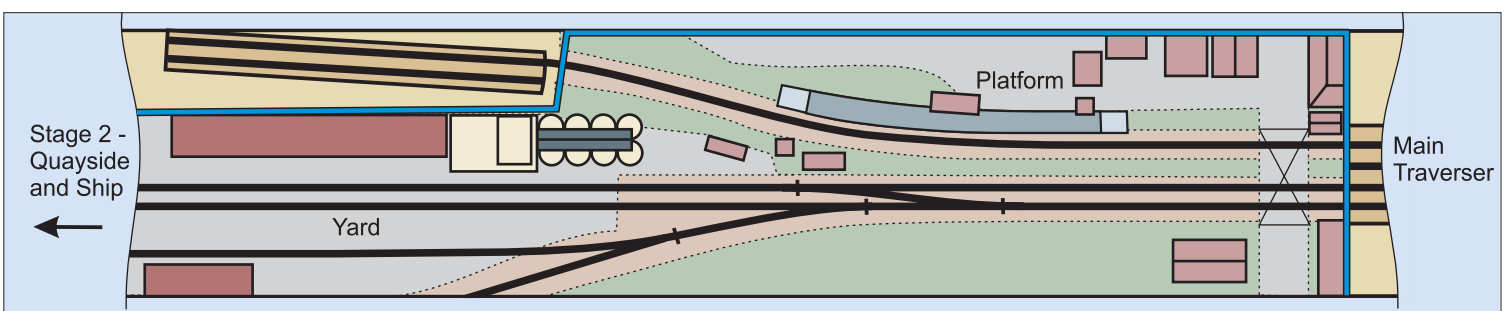
As with the wagons, the choice of locomotives for the layout was also important. We decided that a shunter (or port-owned industrial) would not be out-stationed on the quayside. Thus prototypically, the locos that worked the trains in would be used to perform shunting. We have deliberately limited our locomotive selection to Cl. 20s, 31s, 37s and 47s: large engines for short trip workings perhaps, but typical of what could have happened here.

Construction is straightforward, comprising four baseboards, measuring a total of 16' x 2'. These were built out of 50mm x 25mm softwood with 6mm plywood tops. As the gauge is EM, pointwork was hand-built (soldered copper-clad construction) with SMP ready-to-lay used for all the plain trackwork. All was laid on top of a cork base and ballasted using 2mm scale ballast secured with the usual 50/50 mixture of water and PVA glue!



Above: the Class 20 is seen running round its train of VDA vans which on this occasion are in use on the finished steel traffic. Large industrial structures dominate the landscape here, including this grain dryer and silo.

Left: wagons in use on steel export traffic await unloading in the yard.



Electrically, the layout is simplicity itself. The whole of the haven area would be operated as 'one engine in steam' so no section breaks were needed. Point actuation is provided via Tortoise motors and provision has been made to put in electromagnets at a later date for uncoupling should we choose to do so. The physically separate branch to the rear of the layout can be operated independently for additional interest, and at the time of writing, serious consideration is being given to converting the layout to DCC.

Choice of buildings was an important issue as we felt this would be another factor that would help define the location. Good use has been made of Walthers kits for the industrial and dockside buildings, and the fortuitous release of some genuine prototype Lincolnshire structures in the Hornby Skaledale range enabled quick representation of buildings in the town. All have undergone modification to some degree to suit the location. The rest of the scenery is constructed from the usual scatters and powders available and backed by a superb backdrop (complete with Humber Bridge) courtesy of artist and long standing club member Bill Tock.

Correct use of road vehicles is important and this was given as much consideration as the rolling stock. 1980s vehicles aren't as readily sourced as others from earlier or later periods, but we found suitable kits and the odd children's toy that allowed, after a small amount of work, a representative fleet of cars and lorries to be built up. One or two even reflect group members interests – note the as-new Ford Sierra in the garage.

As ever, work continues on the layout, with the quayside area next up for completion. This area will be especially challenging as it is intended to include half a coaster in the process of being loaded. Fortunately though, there is a ship modeller within the club. A lot more work is still required mainly in the detailing and stock side of things so we still have plenty to occupy us for a while yet. However we do consider it sufficiently in place to enter onto the exhibition circuit and after a few initial glitches, it has proved to perform well. It's scheduled to appear at the DEMU Showcase at Burton-upon-Trent, 3 & 4 June, and another more locally in Caistor later in the year.

Throughout this article, I have referred to 'the group' and as such it would be unfair not to mention the guilty parties: Neil Ripley, Ken Gibbons, Ian Fleming and Steve Flint have all contributed in the research, planning and construction. Several others within the Hull MRS have helped both practically and with helpful advice, notably John Wass, Bill Tock and Graham Wilson.

Above: lunchtime in the yard sees little activity now that the VGAs have been unloaded.

Centre: 31 155 drifts by on the main line with loaded Presflo wagons from South Ferriby cement works.

Right: a local tradesman runs his garage business from lock-ups in the old station yard.

Photographs by Steve Flint, Peco Studio.



Beyond Rothby

An incarnation of the narrow gauge station at Rothampton

PAUL WINDLE describes an interlude in the development of the 009 Roth Valley Tramway.



History of the Rothampton line

Beyond Rothby (see *RAILWAY MODELLER* April 1998) the Roth Valley unexpectedly opens into a large, flat, fertile area formed by a glacial lake deposit. Well sheltered by the surrounding fells, this area has long been favoured for market gardening and lush grazing.

Rothampton is the main village and the inhabitants looked forward to the Roth Valley

Tramway's arrival to increase their fortunes. However, the building of the main line and quarry branch had quite exhausted the company's resources and no progress could be made, so it was left to the valley folk to raise the capital to complete the line. This they did as the nominally separate Roth Valley Extension Railway Company (RVER).

Opened in 1894, the railway proved a

modest success and continued to produce revenue well into the 1930s when suspension of the services on the Roth Valley (RVT) section took place. Occasional livestock traffic kept the line alive, allowing a brief renaissance during World War Two. Inevitably the worn-out condition of the RVT meant rapid closure after the war. The line (and the RVER – no more line from which to extend!) finally expired in the August of 1947.



The model

This *Rothampton* is in fact the fourth model to bear the name. The first was built way back in the mid 1960s, the second as part of a much larger layout around 1970 and the third in the late 1970s. The current *Rothampton* was begun just after *Rothby* in 1998. It was part of a much larger layout that was slowly being built in the loft room over the local model shop. The plan

Above: regular branch locomotive No.9, a Hunslet 0-4-2T arrives at Rothampton on a through train.

Left: another Hunslet 0-4-2T, No.8, is shunting the goods yard. No.3 must be away for repair. The wagons look as if they need attention also! The cattle dock was built up in situ from thin stripwood.

was that this would cover the entire Roth Valley railway system and be around 50' in length. The first section extended down the line from Rothampton.

The track plan was dictated by the existence of a half-built abandoned station, originally constructed for my TT9 *Castle Patrick* project around 1990. This was based on Castlegregory on the Tralee & Dingle Railway, but bore an uncanny resemblance to the second *Rothampton*, though on a much grander scale.

Thus *Rothampton Mk.IV* rose phoenix-like from the remnants of *Castle Patrick*. Once it was set up at one end of the loft, a new, permanent *Rothby*, complete with quarry branch and main line to Moorton (a fiddle-yard) was added. Further extensions, including a standard gauge branch to which to connect, were planned. The standard gauge branch line appeared in incomplete form as well.

The construction of the scenery, logically, began at the Rothampton end. I used similar methods to *Rothby*, including old Ford Anglia underfelt for grass, and drystone walling made by scribing strips of polystyrene cut from chip trays! Most of the buildings are basic corrugated iron (Slater's sheet), with the cattle dock built in situ from stripwood. A water tower was modified from a Ratio kit. Some detail work was still needed; coal on the coal stage, plant life, station furniture and general junk here and there.

The rest of the layout got to the ballasted-and-plastered stage, awaiting for time to be found to put on the grass. Several buildings and much stone walling were completed but a great deal remained to be done.

Locomotives and stock

The principal reason for building the Rothampton-Moorton section first was the availability of *Rothby* stock. Since the *Rothby* article, more locomotives and stock have been added to allow operation up to the 1947 closure. When not in use at exhibitions, most of the stock was seen on this layout, plus a few items that did not go 'on tour' with *Rothby*.

Of course, not all appeared at once! Though all were available to cover the period 1923 to 1947, usually only two or three were in use at any one time. Several other locomotives also visited, usually running on the quarry branch.

All the *Rothby* rolling stock was used, plus several other vehicles for which there is no space in the limited length of *Rothby's* fiddle-yard. Passenger trains are usually one coach

Top right: a bird's eye view over the station showing the general layout. No.3 is in charge of the local passenger set, some coaches of which are mainly made from an old Tri-ang Caledonian brake composite – circa 1964!

Centre: No.4, a 2-6-2PT, arriving with a rare excursion train. The yellow open brake began life in the 1960s as a Playcraft 'Decauville' toast-rack coach.

Right: the 'tin shack' station building is made of scale width sections of Slater's corrugated iron with Peco windows added.

Photographs by Steve Flint, Peco Studio.





Currently available steam locomotives

- No.1. Modified Peco GVT 0-4-2T tram loco. on modified Bachmann 0-4-0 chassis.
- No.2. Kerr Stuart 'Sirdar' Class 0-4-0T, scratchbuilt on modified 0-4-0 Bachmann chassis with outside cranks.
- No.3 Hunslet 0-4-2T, chassis as No.2, scratchbuilt.
- No.4. Bagnall 2-6-2PT, scratchbuilt on modified Bachmann 0-6-0 chassis.
- No.6. Sharp Stewart 0-6-0T tram locomotive. Scratchbuilt on Bachmann Plymouth chassis.
- No.7. As No.6.
- No.8. Hunslet 0-4-2T, chassis as No.2, scratchbuilt.
- No.9. Sharp Stewart 0-6-0T tram locomotive. Scratchbuilt on Bachmann Plymouth chassis.
- No.10. Krauss 0-4-0WT tram. Eggerbahn modified.
- No.11. Hunslet 0-4-2T, chassis as No.2, scratchbuilt.

Several internal combustion locomotives also appear

- No.1. Eggerbahn Railcar cab (with Airfix Scammell bonnet grafted on!).
- No.3. Eggerbahn Electric locomotive, modified to petrol electric.
- No.7. Roco diesel, modified to resemble *Upnor Castle* as built.
- RC11. Drewry railcar, based on West Clare units. Scratchbuilt on Lima chassis.

longer, an extra Eggerbahn bogie coach or open brake third (converted Playcraft Decauville) being added to the previously described rakes. Extra bogie bolster wagons were used for timber traffic, plus several more general purpose vans and opens. Many more would have been needed had the planned extension materialised. Several Eggerbahn long wheelbase four-wheelers still remain to be rebuilt from the original layout, whilst the rest will be scratchbuilt. Items that were available for use on this layout at the time of the photographs are listed in the panel, left, and are still available for projects elsewhere.

Future plans

Since the photographs were taken there was a trans-Atlantic takeover. The Western Maryland in particular put a bid in for the trackbed for an H0 scale coal hauling line. The consequence was that what was to be a permanent version of RVT vanished from the loft! Thus, rather like looking at old photographs of a long-gone prototype, we can view the images of this layout as just a memory.

With that, this little interlude on the RVT draws to a close. All is not lost though, as beyond *Rothampton* lies another version of the RVT, under construction in the Hull MRS club rooms, plus a small diorama style shunting layout being built at home.

Watch this space...



Top: No.4 again on the excursion train, with Pickering coaches, passing the Rothampton carriage shed.

Left: A view across Rothampton shed. No.3 is taking water. The tank is Wills with scratchbuilt supports. All other buildings are scratchbuilt. Some coal is needed on the coal stage!

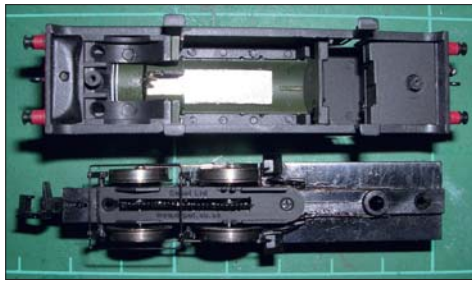
DCC for Dapol M7

Fitting a decoder in an N gauge 0-4-4T

ROGER MILLER provides another step-by-step guide to decoder installation in a popular model.

Since its release at the 2005 Warley show, it is becoming harder and harder to find a Dapol M7 because it is so popular. The loco is excellent but I have found a significant improvement in running and realism when operating under digital control.

The skills required are basic: a gentle touch sorts out most problems. Unlike the 45xx (see RM April), the M7 is much easier to take apart and with the amount of room in the cab, digital conversion must have been a design consideration.



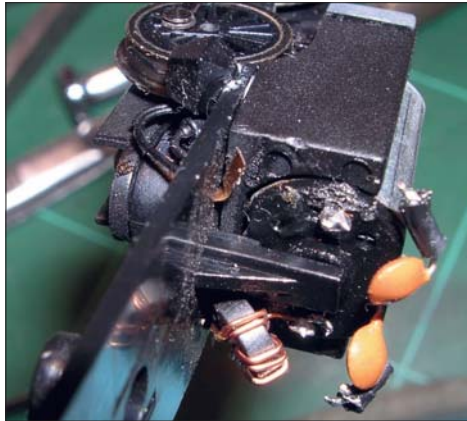
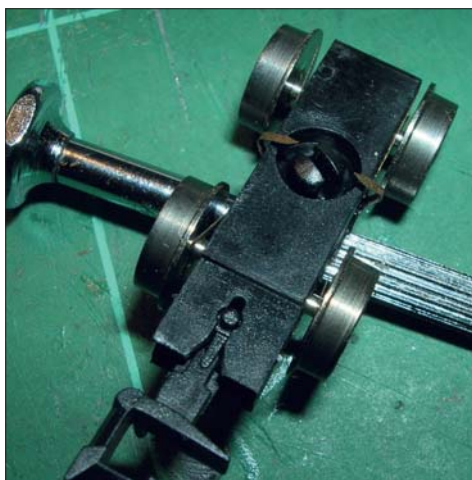
1. Removing the body

Three small screws have to be removed. The first, located down the chimney, requires a very thin screwdriver. Unlike the 14xx chimney, the M7's is not removable. Just the screw comes out.

Turn the loco upside down to get to the other screws. The first of these is directly behind the front coupling and is easy to remove but take care with the hanging brake-rods.

To get to the last screw you first need to prise out the plastic peg that holds the rear bogie on. Remove the bogie taking care not to distort the delicate, pointed pickup tabs that protrude from the top-side.

The cab backplate is loose-fitted and will probably drop out. Best to remove it anyway.



2. Removing the suppression chokes and capacitors

Position the chassis in a vice or some similar device so that both hands are free and the chassis cannot move. Use a small soldering iron (1mm bit tip) in order to get into the connections without melting the motor casing.

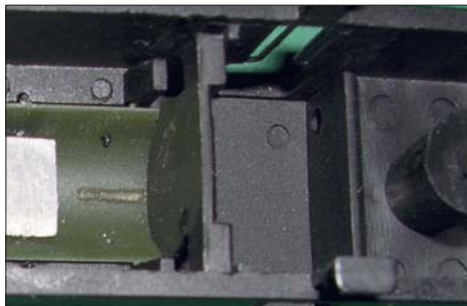
Unsolder the choke and capacitor connected to each motor terminal.

Unsolder each choke from each pickup tab – one on either side of the motor.

Finally, remove the capacitors attached to the motor casing. A small soldering iron will not easily do this and they are best removed by snipping them off close to the casing.

3. Preparing the decoder

When no lighting is required I usually remove the yellow and white leads from the decoder.



4. Locating the decoder

Upon close inspection of the body moulding you will see that the cab's front bulkhead is shorter than the body sides. This provides a gap through which to channel the wires from the motor into the cab space – Dapol's design has been most helpful here.

There is so much room in the cab that you can choose where best to fit the decoder. If you decide to stick it to the cab roof, it will make body removal difficult in the future and require extra wire-length that could be diffi-

cult to hide. The cab floor is better but the choice is up to you.

The decoder will have to be fitted transversely and this should be allowed for when cutting the decoder leads to length. All four wires can be the same length.

When cut to length, prepare the wire ends by baring 1mm and tinning the ends. Solder the chip connections as follows:-

Orange	to the left motor terminal
Grey	to the right motor terminal
Red	to the left pickup tab
Black	to the right pickup tab

Visually double-check that the Red and Orange connections do not touch. Repeat the same inspection for the Black and Grey connections. There is plenty of room to make these connections and there should be no problems.

At this point, the decoder can be tested on the programming track simply by reading the address of the chip. If all is well then re-assembly can commence.

5. Re-assembly

Re-locate the cab backplate; this step can be easily forgotten. It is a loose fit and drops out of place readily and annoyingly.

Offer up the chassis to the body and locate the decoder chip as required.

When everything is comfortably in place all three body-retaining screws can be fitted.

This leaves just the rear bogie to be re-fitted. There are two pointed pickup tabs on the rear bogie that will have to touch the pickup strips on the chassis sides. At this point there is an opportunity to check that the wheel backs are making good contact with the pickup strips.

Spring the pointed tabs over the pickup strip and press the bogie pivot stud home.



Check that the pointed tabs touch the pickup strips at all angles otherwise the loco will stall on point frogs, etc.

Now your Dapol M7 should be able to work alongside other digital locos giving the extra realism and control that only comes from this modern technology. It is probably worth experimenting with extra weight in the cab and bunker areas to improve the traction capabilities but take care that the decoder chip is insulated from any extra metallic ballast.

Three N gauge tramway modules

Models as aids for driver training

These representations of the Croydon tram system were built by **IAN HOGBEN**.

Some months ago, I was invited by my employer, Tram Operations Ltd., to construct three models of sections of the Croydon tram system, for use in driver training.

The system operates 24 Bombardier 4000C trams, built by that company at its works in Vienna. This same unit is operated by both the Köln and Stockholm systems, although in the case of the Stockholm Tvärbanen they have differently styled cab ends, and one set of doors fewer in both A and B cars. These doors have each been replaced with four additional seats.

Each completed Croydon tram was transported by low loader, from the Bombardier factory in the outskirts of the Austrian capital, north to the Channel coast. From there it was brought across, landing at Dartford for the journey round the M25. After a last overnight stop at Clacket Lane services, the final leg of the trip along the A23 was completed on a Sunday evening, with trams arriving at the Depot at Therapia Lane during late 1998 early 1999 at the rate of one a week.

Throughout 1999 and the first part of 2000 we, who had joined the company in early 1999, had the job of 'exercising' the trams whilst construction continued, followed by commissioning, with the system finally opening to fare-paying passengers in May 2000.

So much for history, but back to the present. It was decided that it might assist in training new drivers if the training team had some



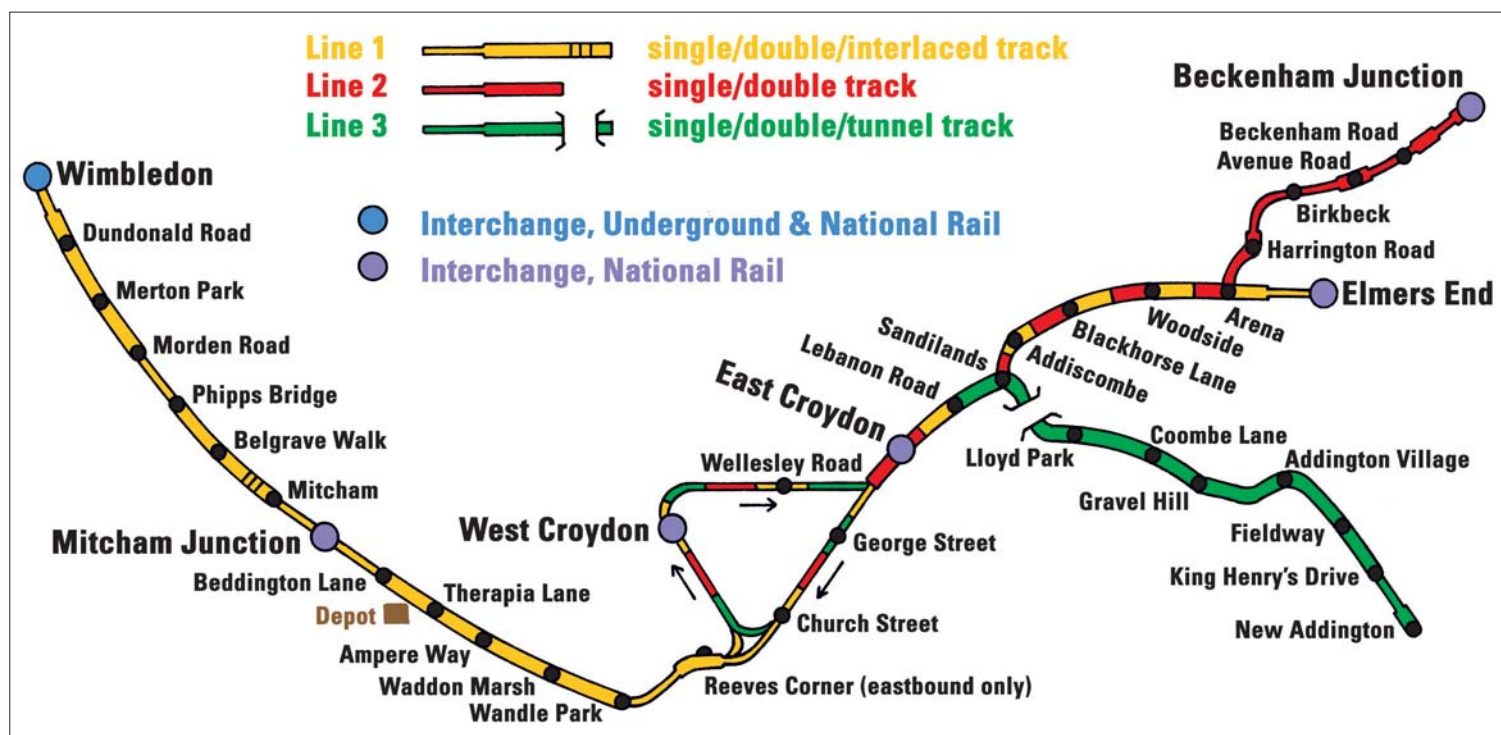
models of certain parts of the system. As I had done the odd bit of model building in the past I was asked if I would undertake the task.

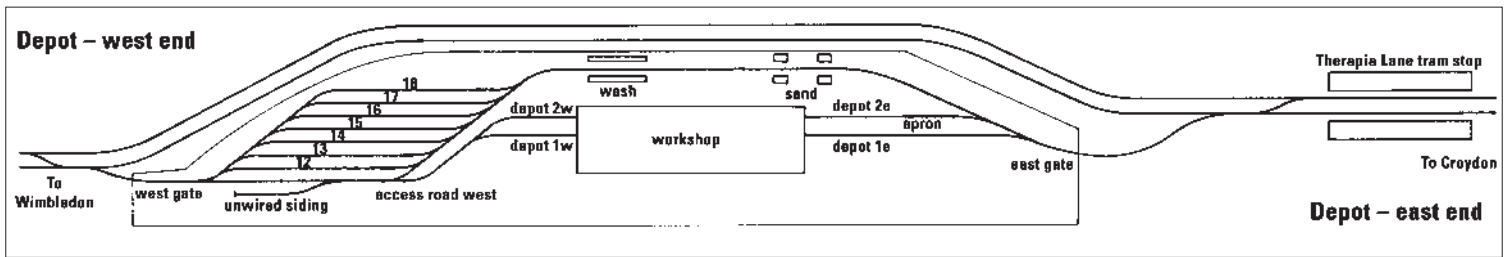
The three sections requested were:

- 1) The eastern end of the depot, including the crossovers to/from main line and Therapia Lane tram stop.
- 2) A single line section (this need not be a specific single line, but representative of the many over which the trams operate).
- 3) East Croydon tram stop (on the bridge outside the railway station). This tram stop has

three platforms/tracks with the facility for bi-directional working in the centre.

Although a model of the Sandilands junction had previously been constructed by one of the original Trainers, he had built it using H0 track. I suggested that for the three new models it might be better to use N gauge, as this would keep things to a more manageable size. With this in mind I produced a full-sized drawing of model '1' on a piece of wallpaper, presented it for approval and was given the go-ahead.





Left: East Croydon. Bochum tram crossing Cherry Orchard Road.

Right: the author posing by 2548 while waiting to use the emergency crossover in George Street opposite Safeway. At this time trams were not allowed to go beyond Dingwall Road in the background due to current leakage affecting the railway signals at East Croydon.

Below: interior view of the Depot workshops.

Photographs by the author or as credited.

The main consideration in choosing what to use as a base was rigidity. I therefore selected 18mm MDF. I wouldn't normally use this material, as for a portable layout it is far too heavy. However, for the size and type of models I was to construct it seemed ideal as it needs no additional bracing, each diorama being approximately 4' x 1' (or 1220mm x 305mm).

Model 1

I used Peco flexible code 80 track with concrete sleepers, laid directly onto the base and fixed with Bison Tix impact adhesive. The main line tracks on the reverse curves past the depot were superelevated by thin card placed under the sleepers on the outside of the bends. To maintain the exact close alignment through the prototype platforms, every sixth sleeper is wooden, with one end butted against the platform facing, and to replicate this I have replaced each sixth sleeper on the model. The sides of all rails were painted rust coloured with Humbrol enamel.

In order to construct the depot fencing I



used plain card in multiple layers to give thickness, then painted and scored with a craft knife to represent the fence panels. To hold it in place I cut a groove along the MDF base and glued the fence into the groove with PVA. The wire fencing near the east gate and the gate itself was made from fine net fabric, dyed

with green paint, and with dressmaking pins with the heads cut off, for posts.

Platforms were made from polystyrene cut to the correct thickness, topped with a layer of modelling card and finished with plasticard, lightly weathered to try to match the prototype colour. The platforms were finished with shelters made from secondary double glazing plastic glass (this is considerably overscale, but necessary for robustness), information boards from modelling card and ticket machines made from balsa and painted with green acrylic.

The lineside margins (banks and gardens etc.), are of sculpted polystyrene, covered in Set Scenes modelling plaster which I then painted in various shades of brown and green Pamastic paint. Over this I used Woodland Scenics scatter, grass and foliage.

I had some difficulty getting the right colour ballast, but on a trip to the Netherlands I obtained what I needed from Anita Decor of Roermond.

Scatter and ballast were secured to the model by one of the tried and trusted methods. For those less familiar, this involves spreading the ballast over the track, working it into the desired contours with a soft brush, then wetting the whole with a fine spray of clean water. I use a discarded hairspray bottle of my wife's (obviously well washed out) and held at a distance sufficient to prevent the



occasional large droplets from landing on the model. Then, whilst still wet, I use a pipette to drop a mixture of one part PVA, six parts water and a few drops of washing up liquid (to break the surface tension) onto the wet ballast and scatter. At this point I can almost hear the seasoned modellers among you yawning, but I once read a complaint in a magazine that, while 'the usual method' is oft referred to, the correspondent had never seen it described.

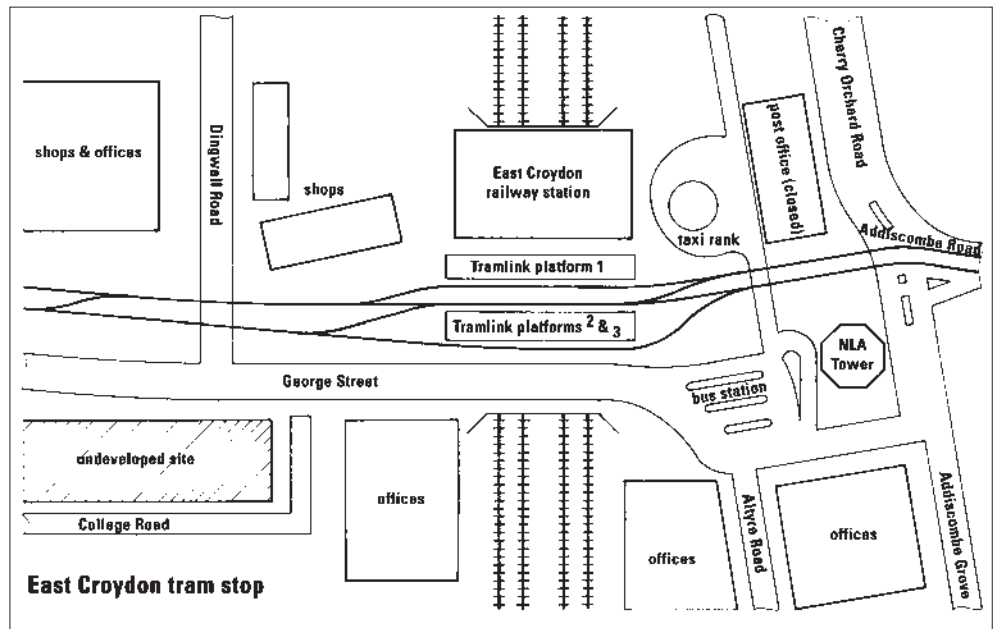
Finally I added dummy induction loops made from single strand telephone cable, and signals.

Model 2

Scenically, this was constructed in the same manner as Model 1. However, the prototype tramway has a visible safety feature on all its single track sections in the form of SPAS (signal passed at stop) lights. These are blue lamps positioned at frequent intervals which flash in the event of a tram overrunning a stop signal at either end of the section.

I replicated two of these lights, with blue grain-of-wheat bulbs, mounted on 'H' section brass, to represent the OLE (overhead line electrification) masts. The lights are controlled by a random flash unit from Express Models of Loughborough, powered by two AA batteries and activated by reed switches under the track. To conceal the switches and wiring, and to provide a cavity to house the control unit and batteries, it was necessary to rout various channels in the baseboard before tracklaying commenced. This was an extremely dusty task and, because medium density fibreboard was being used, it was imperative that a face mask was worn.

In order to demonstrate the working of the lights it would have been nice to have had a model of a Croydon/Köln/Stockholm tram. Unfortunately, no proprietary manufacturer makes one. Therefore I purchased a four-wheeled wagon with a longish wheelbase under which to mount a bar magnet. I painted this wagon in genuine tram red and white, with paint scrounged from our Bombardier colleagues in the depot workshop.



Model 3

This was a much more difficult proposition as all track here is in paved road or reserved right of way. The prototype also rises several feet from either side to the highest point outside the main entrance of East Croydon railway station.

Fortunately, as the model is for training purposes, it wasn't necessary to model all the adjacent buildings in detail, so I represented these buildings with MDF blocks, or areas painted black and labelled accordingly.

First I sketched the rough layout of the roads (the tramway is crossed by three in the vicinity and runs along a fourth). Then I laid out the track until I had more or less the right configuration. Once this was all settled, I put the track to one side and routed out the line of the 'swept path' from one end of the board to the other, to a depth that would put the railhead just above the surface of the board. This routing wasn't straightforward, as the track doesn't run straight all the way through, but snakes around the NLA Tower, an office block at one end, before rising over the bridge.

I formed the hump of the bridge with MDF riser blocks of varying thickness and then bent a long piece of 5mm plywood the width of three tracks and two platforms over them, screwing and gluing it at each end.

Next I laid the track in the routed out grooves at each end and across the plywood hump, pinning the rails in place in case I needed to adjust them. Once I was satisfied that I had it right I began the job of building up the road surface, using Cuprinol wood filler. I built it up in layers until it was level with the railhead. I had hoped to imprint the pattern of stone blocks in this but after a number of tries I had to admit defeat and sand the whole down, filling in with Fine Surface Polyfilla as necessary. To give the impression of grooved rail I went round the inside of each line with a slitting disc in a mini drill.

After considerable experimentation with mixing paints I came up with what I thought was a reasonable representation of the colours of the stone of the reserved area, although on reflection I am a little disappointed with the results.



Opposite page left: trams on routes 2 and 3 meet in East Croydon. The view is looking towards George Street, on 7 March 2005.
 Photograph: Alan Pike.

Opposite page right: the front end of No.2533 outside East Croydon station.

Right: East Croydon. Arnold N gauge Bochum tram crossing Cherry Orchard Road into Addiscombe Road eastbound. The blue rectangles indicate location of induction loops.

Below: the East Croydon stop in model form with the Bochum tram again.

This page bottom left: No.2538 working a Line 1 service for Elmers End at East Croydon station on 9 October 2004.
 Photograph: Ian Futers.

Bottom right: East Croydon tram stop with station on the left and the NLA Tower in the background. No.2541 is at Platform 3 with a Line 3 service for West Croydon.
 Photograph: Alan Pike.

Pavements made of modelling card, platforms, ticket machines and information boards were added, as were road markings. I omitted the platform canopies as these will be too fragile for a training model. For the same reason I omitted the railings on all dioramas.



Obviously one of the most important things on any training model must be the signals. There are only two aspects on purely tramway signals. A vertical bar of five bulbs, 'proceed' or a horizontal bar, 'stop'. Additionally, where there is a roadway/tramway interface there is a centre cluster, equivalent to an amber on roadway signals.

To model scale working signals in N gauge would be impossible, as it would be in H0, so I

had to settle for printed representations of these. One of our Controllers kindly produced these for me on his computer, as his printer can produce much finer results than mine. Similarly, he produced the various speed restriction boards for me. Signals and speed boards were all mounted on poles made of brass strip.

As will be obvious from the photographs, one most important thing is missing. The OLE masts and wires. Another deliberate omission as these would get in the way when training. It is after all, the track layout and tram movements that are the purpose of these dioramas.

As an afterthought, and at the suggestion of one of the other Trainers, I produced five dummy trams from a block of balsa, to use during training sessions. The rail grooves in the paved sections are not deep enough to take the coarse wheels on proprietary rolling stock.

What next? Well I believe my next job is the repair/reconstruction, in brass, of an existing model of the OLE in 0 gauge. Then I can get down to building the model railway that my grandson has been pestering me for, and after that I have plans for a freelance model of a six or seven track station somewhere in Germany. As the saying goes, 'a modeller's work is never done'.



Compton Basin

Modelled in 16mm scale

PETER JONES looks at an awkward corner of his garden railway.

Tricky things, corners. They can be difficult to reach, especially out of doors. In the case of this one: horribly difficult. So the plan was to build ruggedly and then leave it to its own devices down the years. I settled on making a model of a small industrial basin, backed by very solid warehouses. These were cast plain, in sharp sand and cement, with the detail scribed in, just as the setting was at the cheddar cheese stage. PVA glue was applied and then some masonry paint. This technique has been described before but, in the case of these warehouses, I made up some triangular section roofs in timber and then covered them with slates made of my favoured grey board, soaked in more glue and painted.

The dock itself was cast in concrete and was originally intended to be a shallow pool of real water (usually tinted to a suitably disgusting colour). But problems of leaves, evaporation and thirsty birds created more maintenance problems than I wanted in this hard-to-reach area. So the real stuff was replaced by a thick piece of Perspex. I like to use the genuine material because it is much less prone to going milky over the years, than cheaper transparent plastics. An alternative would have been plate glass but, a couple of times a year, I have to stand on this area to do house maintenance.

Right, having set the scene, we can now move on to some of the techniques for realism. I have written before, *ad nauseum*, about my hobbyhorse of using scale colour. Rest assured, the poor beast will not be exercised further on this occasion. However, in the past I have described using the muted colours of masonry paint ranges, augmented by water-proof acrylic bathroom paints in matchpots. Since then I have discovered the delights of artist's acrylic paints. They seem to be durable



out of doors and are available in a wide range of colours. Moreover, bought in chunky bottles or giant toothpaste tubes, it is quite a cheap resource: particularly if bought from High Street chains rather than specialist art shops whose need for higher quality paint is wasted on applications like this.

You will have seen the adverts for real rust finishes on models. They offer tremendous scope for realism. In a dock environment there is scope for modelling very heavy rusting, like a piled-up chain that has virtually welded into an abstract shape. For those that haven't tried it, the principle is that of applying an adhesive

Above: Compton Basin, being a piece of background, is particularly underwhelming. Colour is very restrained.

Left: naturally patinated wood. Lovely! It makes life so easy.

Below left: The mantra is 'colour, shape and texture' repeated regularly.

Below: the side of a timber-built boat shed, made from old sleepers.





layer to a model and then dusting on iron flour. When this has set hard, a mild acid is applied to kick-start the oxidation process. It is then left for a few days or weeks, to turn into a superb patina. I usually put a bit of powder on a tobacco tin lid and then blow it onto the glued surface with a piece of flexible plastic tube. Different thicknesses of layers give different effects. Nodules of damp powder turn into rust accretions.

With experience this application can be refined to differential amounts of oxidation, so that older rust can be found in just the right areas. I suggest sticking to the packs advertised in the model press, and *following the safety instructions scrupulously!* However, I can offer you one sneaky dodge. If you want to model iron oxide staining on buildings or on rock faces, use cast iron dust. There is a lot of it to be had from around any lathe where model loco wheels and the like have been turned. For an accelerating agent, just use vinegar.

For modelling weathered timber out of doors, there is nothing like...weathered timber. I save every scrap of old stripwood, as well as redundant sleepers. I go into ecstasies at the sight of a nice bit of patination. My wife says I really should get out more. Such wood is treated with clear preservative, so as to protect that aged finish and I delight in the fact that it is free. Structures made of this material tend to be assembled by pinning with steel brads, veneer pins or panel pins. They will rust and cause streaking. But more importantly, that rusting means that the pin expands slightly and grips in place. I have found that brass pins can work loose over many years of the timber expanding and contracting in a continually changing environment.

Although I promised that I wouldn't repeat thoughts on scale colour, there is one further refinement to think about. An area like Compton Basin is a complete landscape picture in itself. We have added lots of details and we may have used many different materials. In order to help the realism along, we can use the artist's trick of employing a limited range of

Above: this hopper car started life as a plain black plastic model by Bachmann. No paint was used. Everything was done with differential rusting techniques.

Above left: the interior of the hopper car has heavier rust modelled. Flicking thicker iron flour onto an area gives a build-up of crud.

Below: morning sunlight streams into the boat shed.

Photographs by the author.

colours. This seems to tie everything in together to form a complete whole. No matter how beautifully something has been made, if it isn't sympathetically blended in to an otherwise muted image, it will just look plain wrong.

We who model out of doors can enjoy our realism under all sorts of light conditions. Nothing has to be complicated. All it needs is getting a kind of harmony in the overall impression, and nature does the rest for us.



Computer-printed signs

Although signs printed on a computer don't keep their colour for long out of doors, they are so cheap and easy to do that we can forgive ourselves this one indulgence. The principle of printing on photographic paper to get an effect of an enamel sign is well known. But we can take it a stage further.

Print out the sign first and then take a scalpel and scrape off the colour at suitable places around the edges in particular. This leaves plain white areas. Next, take the scalpel again and scrape only portions of the newly whitened areas. Scrape so deeply that you are through to the paper itself – and you are starting to shred the surface. You might even tear small gashes in the edges.

Keeping a piece of wet tissue to hand, paint some dark brown acrylic paint around the distressed areas and then wipe off with the damp tissue. The brown paint will remain in place on the shredded areas. When this is dry, just give a whiff over with a spray of clear matt fixative.

Provided that the colours of the original image are kept subdued, the resultant battered enamel sign looks most convincing.



Above left: typical enamel sign artwork, done in Photoshop, and...

...that same sign (right), now well aged and distressed, much like the author, really.



...an exchange of railway modelling ideas for beginners of all ages

Pitt Lane

My first attempt

TERRY TASKER built a compact 00 layout inspired by Common Lane Wharf.

Pitt Lane is an imaginary branch line set in my mind or yours. It has no specific period and is my first attempt at modelling which it took me 38 hours to build from baseboard to completion. However, the inspiration for this little model came from a layout called *Common Lane Wharf* (RM Sept 04) and without seeing it I would never have taken to modelling.

My interest in railways started at the early age of 8 years old. In 1956 when my grandfather passed away, my parents moved to live with grandma. At the end of the street where she lived was the Southport to Manchester railway line and station called Meols Cop. A small, but busy coal yard ran adjacent to the station. Being new to the area I did not know anybody or where to go to make friends, but did notice at about 6.50 each night a small group of boys climbing on to the top of the large fence that separated the road from the railway. One night I plucked up courage to go and talk to them

and asked why and what they were doing? 'We are waiting for the 7 o'clock namer coming in'.

'What's that?' I asked. They explained, as *Oliver Cromwell* a Britannia class, thundered past. Wow, I was hooked, and could not wait for the next night. I never missed a night for months. I spent all my school holidays watching trains from the top of that fence, coming and going. Trains shunting coal wagons into the yard, brake men with poles running alongside wagons. I was in a world of my own only to come out of it when I heard mother calling me in for dinner. The 1950s to mid-1960s were happy days for me.

As the years passed, leaving school, getting a job, being married and raising a family put my model railway on a back burner until 15 years ago when we moved to our present home. On clearing out some magazines, which were left from the previous owner, I discovered some

old RAILWAY MODELLERS which I read from cover to cover. I then made a point to go to as many model railway shows as possible to get some ideas. Over the years from these shows I bought a bit of rolling stock, buildings and locos all in 00, just in case one day I might have the opportunity, the skill and confidence to build a model. As the years passed all I could find at shows were club layouts that were too big for the little space I had. Falling into the trap of compromise by trying to fit a 10' x 10' plan into 8' x 8' only added to my disappointment. However I was impressed by the out-and-back layouts such as *Walker Marine* and *Rhosnewydd Junction* but even those never looked right or were too big for my railway room. Constantly frustrated, I decided to sell all my trains and use the room for something else, but fate stepped in. I was on holiday in the Lake District in our caravan. In a shop near to the site I noticed a copy of RAILWAY MODELLER September 2004 for sale which I bought. In this issue was the model of *Common Lane Wharf*. It was perfect for my needs. The whole week at the caravan was spent in drawing my little plans. I could not wait to return home to make a start.

I had to make some changes. For instance whereas *CLW* was 4' x 2' the baseboard I was going to use was 5' x 18". This size would fit my needs better.

To all you modellers, please bear in mind that this is my very first attempt in modelling any scenery and laying track.

The baseboard was built using 3" x 1" planed timber using butt joints glued and screwed and cross members fitted at 1' intervals. I used 5/8" thickness MDF for the base ending in a completed size of 5' x 18". I then painted the whole of the board with dark grey water-based paint. This will have its benefits later in the scenery work.

I decided at this point that my modelling skills (of which I had none) could not do water as in *CLW's* jetty. So a small change had to be made, but the basic track plan remained intact.



Lower left: looking from the goods shed towards the tunnel mouth to the fiddle-yard.

Right: looking towards the goods shed and the headshunt.

Below right: diesel-hauled freight emerges from the tunnel into the yard at Pitt Lane.

Photographs by Robert Yelland.

Trackwork is Peco fine scale throughout, with electrofrog points all pinned down with Peco track pins. The points are operated by using the 'Slippery Sid' wire-in-tube. With the inner wire glued to the tiebar with Araldite and the outer casing fixed with gaffer tape, it works well. Each point is then colour-coded for operation. As yet they are not electrified because I did not know how to. I did however have the foresight to drill holes in the baseboard to take a point motor in the future!

The track was laid, painted rust colour, ballasted and glued with water and PVA mixed 50/50. If any part of the ballast was missed the grey paint which was applied earlier to the baseboard disguised it well.

Scenery

There again the basic design was taken from *CLW*. The retaining wall was made from layers of polystyrene shaped with a hot wire and painted with two coats of the dark grey paint giving a good effect of soil when the scatter materials are applied using Wills plastic stone walling, fixed at a slight angle to give the illusion of a strong wall holding back land. The buttresses are cut using the same stone and like the walls are painted with dark brown wood dye until it looks natural and pleasing. The single tunnel entrance is made by Peco, re-shaped to the desired effect.

Using scenic modelling materials the landscape was built up with different colours starting off with light grey, moving on to light green and finishing with dark green. I found that looking at different textures and shades of grass in fields and on embankments helps in getting the surrounding scenery right and will add depth to the model. How many times have you seen a model let down by poor scenery?

The trees are small and not to scale but by putting smaller trees in the background this gives the illusion of depth and distance. The field fencing was cut down from four-bar to two which also gave the illusion of distance.

I decided to place as many figures on the model as visually possible, again to create the illusion of movement and interest. The goods shed, cattle dock, coal dock and platform were rescued from a dealer's oddments box, re-shaped, glued and painted. The signal I picked up for £1 ready made and like the points, works with a 'Slippery Sid' wire.

I am now attempting weathering my rolling stock which I find satisfying.

I first exhibited *Pitt Lane* at Southport in September 2005. I was pleased to hear praise from the public but what I did not expect was to be put next to the Hull MRS, which was exhibiting *Walker Marine* at the show and exhibits *CLW* at others. They identified the trackplan straight away and took it as a com-



pliment, giving me a lot of advice. One tip was to fit Sprat & Winkle couplings, a must for show work, which I have now fitted to all my stock.

The model depicts a small farming community which relies on the railway to move sheep/cattle to and from the market. A small coal dock supplies two local coal merchants who are kept busy on a daily basis filling their sacks for delivery. The goods depot is mostly for incoming freight to light industry and shops on which the town depends.

A gas works still two years off completion will boost the economy as will a brewery. The town, like the railway will grow. The passenger

station is on the other side of the hill where the main signal box is situated. This means that one of the yard men has to switch points for the driver and inform the box by phone when the train is ready to move off the yard.

Unlike *CLW*, with the help of my good friend Neil, who now helps me with electrics, I built a four-track fiddle-yard at the rear which is attached using metal bolts. *Pitt Lane* and fiddle-yard are exhibited on four adjustable trestles, all fitting neatly onto a small trolley making it easy to assemble and break down.

Rolling stock

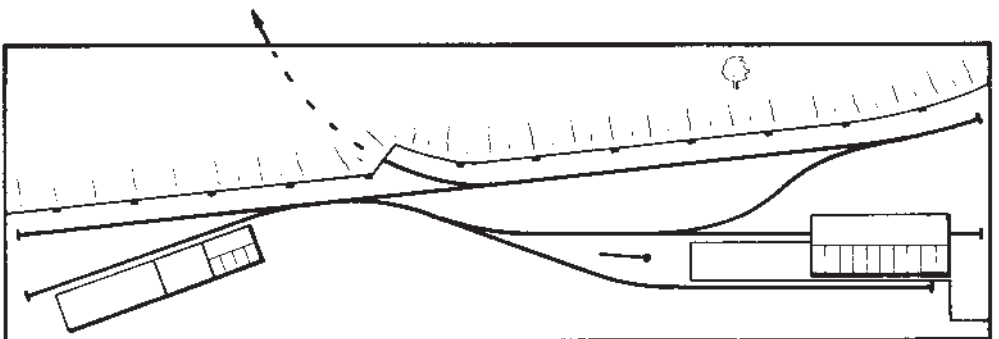
All rolling stock is ready to run. Three locos are operated on the layout: Terrier *Earlswood* (Hornby), a 'Jinty' (Mainline) and Class 03 diesel 0-6-0 (Bachmann).

Freight stock comprises 4 x coal wagons, 2 x Toad GWR 16 ton Brake Vans, 2 x 20 ton Pig iron wagons, 5 x standard box vans, and 3 x cattle wagons.

The operation of the rolling stock at the moment consists of 41 separate movements and I felt there could be more. The layout's name was taken from Pitt Street where my grandma use to live.

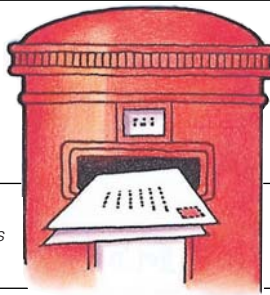
My next project is to fit a small station to *Pitt Lane* on the other side of the hill. I'm now looking for small 5' x 18" plans of stations.

On a personal note I would like to see more articles of layouts of this size. They are more house friendly, according to my wife. I hope this article will inspire readers to have a go as I did when I saw *Common Lane Wharf*.



READERS LETTERS

We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.



SKALEDALE NER SIGNAL BOX

With reference to your reviewer's remarks on the above structure in the May issue of RM, I would respectfully point out that it is probably based on the box at Goathland (a.k.a. Aidsensfield). The rear wall has a brick buttress attached to it: I have been informed this is to stop the building sinking backwards! Does anyone know the story behind this?

The signal box at Levisham is similar, but is conjoined to the booking office, and there are no outside entrances, access being through the booking office.

PETER TANNER

SR ROLLING STOCK MATTERS

I read with interest the letter from Dr. James A. Ford in the April 2006 issue and as a modeller of the Southern myself, in 4mm, would like to point out that there are more Southern items available than might appear from looking at the catalogues of the three main manufacturers of 00 gauge rolling stock.

Some time ago I also was looking for SR goods brake vans and with help from both my local model shop and the advertisement pages of the RAILWAY MODELLER, came up with the following.

Hornby SR (ex-LBSC) 20 Ton 'Dance Hall' with small initials, issued regularly, with four different running numbers, still in the current catalogue. A version with the large initials is due out later this year.

Bachmann SR 25 Ton bogie 'Queen Mary', issued from time to time in SR livery, still in the current catalogue.

M. Rayner/Smallbrook Studios SR (ex-LSWR) 10 Ton 'Road Van', currently available.

Cambrian SR 25 Ton 'Pill Box', currently available.

Although the latter two are kits they do have the advantage in that they can be made up to represent different versions of the prototype. Due to pressure of work I had mine completed by Simon Greenwood, also found from the advertisement pages of this magazine, so what I ended up with was, in effect, ready to run. Simon has done various jobs for me, including substantial improvements to older SR and other locomotives. As a satisfied customer I am very happy to recommend his work to others.

With regard to SR wagons specifically, there are kits available from ABS Models, Cambrian, David Geen and Ratio. The first three all produce open wagons, covering both the SR and pre-grouping companies.

The choice of wagons for SR goods trains can be extended with wagons from the GWR, LMS and LNER, both on transfer freights and under the common user policy. There are also private owner wagons, a subject which I have



Above: as seen in Skaledale as well as on TV – Goathland signal box on the North York Moors Railway. See Peter Tanner's letter alongside.

Photograph: Peter Tanner.

just been researching. Besides the standard ready to run items there are also regular issues of limited edition ready to run wagons from various retailers, transfers and pre-lettered kits, giving a choice of around 300 prototypes. Many of the pre-lettered kits can be supplied as ready to run by arrangement. The prototypes represented were all either based on and registered with the SR or its constituent companies, or else were based/registered elsewhere, but ran over Southern metals in the course of their travels.

With regard to coaches there are the products of Phoenix/Southern Railways Group, Roxey Mouldings and now North Star Design/Larry Goddard, this last being ready to run.

With regard to Southern locomotives there is a considerable choice of kits including both the T9 by South Eastern Finecast, and the Adams Radial by Craftsman, which is advertised, with kit building service if required, in the same issue as Dr. Ford's letter. There are also the SR locomotives available ready to run from The OO Works.

I hope that Dr. Ford finds the rolling stock he is looking for and that the above mentioned notes will be of help. If he or any other modeller would like further information from myself then please write in to the Editor, or contact the sources listed directly.

D.K. SZTENCEL

SEATON JUNCTION & COUNTY DONEGAL

May I say how much I enjoyed perusing the feature on the excellent *Seaton Junction* layout (RAILWAY MODELLER April 2006). The model, built by Brian Wheeliker and Kevin Rayworth, very effectively captured the 'feel' of this

well-known junction station on the SR West of England main line. Both the trackwork and the scenery offered a very good representation of the prototype, and the compromises made to fit what is by any standards a large main line junction into only 18' x 14' worked very well indeed. Most notably, the modellers did not try to force too much detail into too small a space, and the sweeping stretches of track and platforms, and the open and uncluttered landscape, were particularly well done. As a result, it really did both look and feel like East Devon in the 1960s.

I was also very interested to see the feature on the Irish narrow gauge (*Finnegan's Crossing*). Over the decades, I have read a number of Irish narrow-gauge features in RAILWAY MODELLER, going right back to the mid-1960s. And this raises a puzzle. Why is there still no ready-to-run Irish narrow gauge stock, most notably of the famous County Donegal system? Surely there would be sufficient demand for at least a very modest range of, say, a railcar, a tank locomotive, a couple of types of carriage and (say) three types of wagon? The lines of north-west and west Ireland had such immense modelling potential, and such wonderful character, and now of course we have the various high-quality colour albums that have been published to inspire us. I am sure there are many hundreds, and perhaps even thousands, of modellers who could find the space for an Irish narrow-gauge shelf layout. But we do need some RTR equipment to get us moving!

DAVID THROWER

WHAT IS A MODEL RAILWAY?

It was interesting to read the letters (April) about what is a model railway?

To borrow words from an issue of *Model Railways* in 1973 by a Mr Damarque in his recount of his long-lived railway, 'Imagination is the main-

stay of the modeller, without it he would not have indulged in the hobby'. Mr Damarque goes on to say, 'In spite of derisive remarks about trains chasing their own tails, rather than point to point, or from a to b, a train chasing its own tail affords more interest to me than an a fast express locomotive travelling less distance than the scale length of Brighton Pier'.

I couldn't agree more: I built my layout following the ideas from his plans, the best article I have ever read, but I had it easy: I used Peco track, points and underlay, Mr D. had to make his own track from rail and copper-clad sleepers and like Mr D, I am the superintendent, shed master, loco driver, shunter, loco fitter, also the train announcer saying 'the train arriving on platform one, two, and three is coming in sideways', I am the big hand from the sky that makes it right. What is a model railway? Whatever you conceive it to be in your imagination, have fun.

JOHN LARGE

I was so pleased to read John Allison's letter in the April RM which described railway modelling as an art form, I felt compelled to write.

I have long been aware that some modellers are able to achieve artistic excellence with their skills. Moreover, the historical research and meticulous attention to detail which is essential for creating accurate models must put this form of art way beyond the misconception of 'playing with toy trains' or merely indulging a hobby.

One of my great pleasures at model railway exhibitions is to seek out those layouts which demonstrate the thorough knowledge required to create a historic railway scene. The icing on the cake is watching them working at eye level and imagine I am there in the miniature streets which beckon like gateways into a lost world.

I visit model railway exhibitions in the same spirit as I frequent art galleries. Many of my friends have backgrounds in art and design and tend to approach railway modelling from an artistic viewpoint. Because of this I delight in work which sets out to recreate 'a little bit of England' and I'm sure I am not alone in this.

So, what is a model railway? Well, to me at least, one where the line is portrayed as part of an overall scene can often be a true work of art.

JEAN CRITCHLEY

KINGSWAY SUBWAY

With reference to the article on London's tram subway (RAILWAY MODELLER February 2006), there was a view of the subway as originally built, before it was enlarged in 1931, with a LCC F-type single-deck tram ascending the ramp. It appeared in *Edwardian Tramcars*, published by The Oakwood Press (July 1968). What would the London tram scene have been if the LCC of the day had followed continental practice and used single-deck cars, possibly with trailers, on all its routes? Using tunnels where required, it just might have secured the rightful place of trams to move large numbers of people, and to augment the use of the capital's Underground system.

In large cities and towns buses have their place on low and medium density routes and as a support to rail-based vehicles along trunk roads. But they

certainly are not suitable for the high density of travelling public using the ever increasingly-crowded trunk roads.

Thanks for maintaining an informative and interesting magazine.

W.S. HANDS

THAT 'DAM' RAILWAY

My grandmother was raised in the valley north of the railway built to serve the Grwyne Fawr Reservoir and dam in the Black Mountains. The Chelmsford Model Railway Club has built a fascinating little layout (April issue) using considerable artistic license that is the essence of our hobby. The facts are a little different!

The line was built and operated by the Abertillery & District Water Board. The railway was 3' gauge. Curves were very sharp and gradients very steep with one stretch of 1 in 12 and much of it below 1 in 55. Locomotives were very powerful. They were at least 9'6" high and 8' or 9' wide. There is tantalizingly little on the wagons. They were standard contractors four wheel and bogie side tipplers. Straight-sided four wheelers were used for bagged cement. All stock was made of wood.

The railway operated passenger services for employees and their families using converted wagons, although there were two special coaches, one an ambulance and another for important officials. The author (see reference) states that one coach is preserved on the Tal-y-Llyn Railway.

The railway was intensively worked with several locomotives and three engine sheds. There were 12 route miles and eight miles of sidings and other tracks making 20 miles total. The line connected with the Great Western at Llanfihangel, the next station north of Abergavenny Junction, at the summit of a steep incline on the busy North to West route.

The railway was dismantled by 1928/1929 when the dam was completed.

Source: Tipper, David, *Stone & Steam in the Black Mountains* Abergavenny: Blorenge. New Edition 1985. Personal copy.

HUGH SPENCER

John Lee's 009 Layout *That Dam Railway* (April RM) is an excellent example of the fine detail possible with narrow gauge these days. As a Welsh exile in the US, I always enjoy Welsh-themed railways.

Unfortunately, the Chelmsford crew didn't have a Welsh-speaker on hand to help with their translation of the name. One can't simply look words up in a dictionary and write them down in the same order as English! The correct Welsh for 'That Dam Railway' requires 'railway' to go first, 'that' to come last, and a definite article to link them all together: 'Rheilffordd yr Argae Hwnnw'; the original attempt also had the plural form of 'dam', and the word for 'this' rather than 'that'.

MARTIN J. BALL

GRESLEY PACIFICS – MORE INFO

Following your article on Gresley Pacifics (April), herewith some fuller information.

Following the development on the Great Northern Railway of Ivatt's large Atlantics (Class C1) in 1902, Gresley became aware of the advantages of

the wide-bottom firebox, and by scaling down a boiler which had been successfully used on the Pennsylvania Railroad Class K4 Pacific to suit the British loading gauge, the Class A1 Pacific was developed with a boiler pressure of 180 lbs/sq.in. Where the Ivatt Atlantic could handle 400-ton trains on the East Coast Main Line, Gresley designed the A1 to handle 600-ton trains.

Following the 1924 Exhibition at Wembley, where the GWR displayed No.4073 *Caerphilly Castle* (claiming it to be the most powerful passenger locomotive in the British Isles) alongside No.4472 *Flying Scotsman*, subsequently trials were held on both GWR and EC main lines. It was established that the 'Castle' was more economic. After trial and error, it was concluded that by using long-lap valves, a better use was made of the steam in the cylinders, thus increasing the loco's efficiency.

Later in 1927, Gresley ordered five new boilers, with the working pressure increased to 225 lbs/sq.in., and No.2544 *Lemberg* and No.4480 *Enterprise* were fitted with two of these boilers. No.4480 had 20" dia. cylinders whilst those on No.2544 were lined to 18 1/4" dia. Following these trials it was concluded that 19" dia. was the most satisfactory for the class, and subsequently these cylinders were fitted as standard to the Class A3s.

When the first A3s were constructed during 1928/29, all locos used the high-pressure boilers, left-hand drive and 19" cylinders. The original Class A1s were fitted with either 94A or 94HP boilers. 110 were built, 38 with round-dome 94HP boilers and 72 with the banjo-dome 94A type. All locos carried a banjo-dome boiler but only Nos.60040/2 never carried a round-dome boiler.

The remainder of the Class A1 (by now A10) were rebuilt between 1941 and 1948 – conversion of these locos occurred between 1952 and 1954.

Dia.107 (Class A4) boilers with reduced working pressure were also used on the class after 1954, 36 utilising them for the remainder of their service lives.

As Nos.4470-81 were built to the generous GNR loading gauge, they were not permitted to run north of York, and when required for running on the non-stop *Flying Scotsman* through to Edinburgh in May 1928 it was necessary to reduce the boiler mountings and cab sheets in order to fit the tighter North Eastern and North British loading gauges.

Nos.2576/80 were used to test ACFI feedwater heaters after initial trials on the former Great Eastern between 1929 and 1939 – this was not deemed successful.

No.2747 was modified during 1931 to assess smoke lifting arrangements – this was not considered successful and was removed in 1933. However, in the meantime Gresley was carrying out further experiments using No.2751 with a double chimney during 1932 with further modifications in 1933: these too were unsuccessful and the loco returned to original condition in 1934.

The application of double blast-pipes had been raised on the continent, and Gresley showed interest in the Kylälä-Chapelon arrangement

(abbreviated to Kylchap) and No.2751 was again selected for trials commencing in July 1937. Early in 1938, due to smoke beating down (due to reduced blast), the lips were removed from the double chimney and small wing-type deflectors each side of it. A larger smoke deflector was added in May 1947, and beading was reapplied to the chimney.

Tenders varied: initially the GN eight-wheel type was used; for the non-stop services eight-wheel corridor tenders were constructed; for those built as A3s a new high-sided corridor tender was introduced; and 10 of the class including Nos.46 and 103 had streamlined non-corridor tenders.

When introduced the GN coal-rail tenders had a lever-operated scoop to lift water from troughs – operation of which compressed air in a cylinder to assist in raising the scoop against the force of the water.

Darlington developed a screw-operated scoop for the early Class K3 Moguls in 1924. The orders for the tenders for Nos.2743-52 originally specified lever-operated scoops, but this was amended to the screw type in September 1930.

Meanwhile Gresley ordered a steam-operated system to be investigated, similar to the air-operated on the GER locos. No.4473 was equipped in October 1929, and No.4471 in August 1930; the equipment was ultimately removed in 1939. Gresley, following several other incidents (at least one of which was fatal) agreed to the fitting of screw-operated gear from December 1933.

Double chimneys were subsequently added to all A3s between 1958-60. Initially Nos.60048/55/61/112 were fitted with wing-type deflectors during late 1959, which proved unsuccessful – hence the fitting of German-pattern trough smoke deflectors, initially to No.60049 in October 1960, which was successful. Due to withdrawal, a total of 23 locomotives (including those shedded at Carlisle Canal) did not receive these attachments.

Information for the above comes from *Locomotives of the LNER Part 2A (RCTS)*, *The Book of the A3 Pacifics* by Peter J. Carter (Irwel Press) and *Yeadon's Register of LNER Locomotives Volume 1* (Book Law).

L.V. WOOD,

Chairman, LNER Study Group.

GW COACH LINING

With regard to the comment attached to the photograph on page 227 of the April edition of RAILWAY MODELLER '...on

the real thing the brown was actually feathered...'. I believe that Jack Slinn in his publication *Great Western Way* mistook shadow for 'feathering' (see page 59 of that book).

For some time I believed the information given, which is repeated in other tomes, to be correct. When I came to do some painting the light dawned. Close examination of all photographs I have come across does not provide evidence of shading from brown to cream, but does show on occasion shadows cast by the louvres on each other. I believe there is no evidence in the photographs in *Great Western Way* of such feathering from brown to cream.

As to the thin chocolate line, possibly, but again in *Great Western Way* I do not believe the photographs confirm such a finish. If it was used, the line would be at the bottom edge of each louvre possibly showing as the inside colour, painting at the top edge of the louvre would have been an interesting exercise and quite likely not seen.

Going back to Digital Command Control, I do appreciate your wish now to close this well-aired subject but I wish to make further comment. I believe all that is told to me concerning what can be done with DCC, but I believe the main problem is in the operation of exhibition layouts, in particular those similar to our Club's N Gauge layout of *Basingstoke* (as shown in Railway Modeller October and November 1998).

I have helped in the operation of this layout many times both as 'front of house' and fiddle-yard operators. Operating the fiddle-yard means a maximum of seven trains out of your yard at any one time: remembering where they all go back to is one thing, identifying and remembering which code the locomotive on that particular train has when it is over 20' away from you is something else! (I also operate our 0 gauge layout *Weydon Road*). Operating front of house means you are given trains which are concealed from you until released; another interesting problem. Yes, with DCC we could probably operate the whole thing by computer but I want to play trains not be a typist.

By the way, if we can operate DCC by computer, that means only one operator. Great, cuts down the expenses, but who is going to pick up a 28' x 8' layout and move it in and out of Club/store rooms, transportation vans and exhibition halls?

ROBIN BAKER

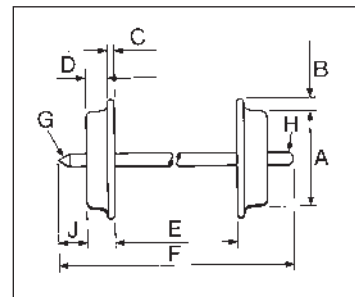
Gresley A3 Pacifics

No.	Built	1946 Nos.	BR Nos.
1470-71*	Doncaster 1922, as A1	102	60102
1472-79*	Doncaster 1923, as A1	103-110	60103-110
1480-81*	Doncaster 1923, as A1	111-112	60111-112
2543-52	Doncaster 1924, as A1	44-53	60044-53
2553-62	Doncaster 1924/5, as A1	54-63	60054-63
2563-82	North British (Hyde Park works), as A1	64-83	60064-83
2743-52	Doncaster 1928/9, as A3	89-98	60089-98
2595-99	Doncaster 1930, as A3	84-86, 87-88	60084-88
2795-97	Doncaster 1930, as A3	99-101	60099-101
2500-08	Doncaster 1934/5, as A3	35-43	60035-43

Notes. *add 3000 for LNER Nos. No.1470 (4470) rebuilt to Thompson A1 Class September 1945 (became No.113, BR 60113). All of class except 4470 allocated Nos.501-78 in 1946 but only 20 numbers were applied, longest period for five months only.

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BR Mk.II TSO brand new in 00 from Bachmann



The first of a fleet of BR Mk.II coaching stock in 00 has been released from Bachmann: appropriately enough it is of an early-built type, the Mk.II Tourist Second Open (TSO).

Over 150 of the type were built, between 1965 and 1967, and allocated to the Western, Eastern, London Midland, and Scottish Regions. Like the Mk.I TSOs they seated 64, but were a ton per coach lighter (at 32 tons) and 18" longer (66'0"). They could be distinguished from their outwardly very similar Mk.IIa sisters by the type of vestibule doors, one-piece sliding on the Mk.II, and two-leaf folding on the Mk.IIa. Originally the fleet was vacuum-brake only, although 22 were converted to air-braking for use with the 'Type-2-locos-top-and-tail' sets used on the Edinburgh-Glasgow workings. All were dual-heated.

Our sample is of M5082, one of the early batch. (All the Mk.IIs, of whatever variety, were BR Derby-built). Comparison with photographs shows it to be spot-on to our eyes; the subtle curvature, especially in several directions at the end of the vehicle being very well executed. Glazing is flush, and through it can be seen the neatly-moulded interior. Access to this, in order to add passengers, is as follows. Unclip one of the corridor connections (the non-toilet end will be the better one to choose) and push in the vestibule door to detach it. The roof can then be pushed off the body by virtue of gentle screwdriver force. When the figures are installed, re-clip the vestibule door in place *before* re-attaching the roof.

Commode handles and grab rails on the ends are formed from fine wire,

and stand proud of the superstructure as they should. Door handles are neat, and the model has representations of the rubber door bangers moulded in place.

Printing is very fine: we can learn the inspection and overhaul dates with a glass.

Slimline tension lock couplers are fitted in NEM pockets on self-centring sprung mounts, which extend on curvature to prevent buffer-lock. The semi-permanent bar coupling is supplied with the packaging if needed. The B4 bogies are well detailed, with excellent coil springs, and have brake shoes in line with the wheels. The coach tips the scales at 150g, and runs smoothly and without wobble. Underframe equipment – battery boxes, vacuum cylinders etc – is moulded crisply and full-depth.

Well-finished and clearly the product of intelligent design (e.g. the separation of the roof at the colour demarcation line), this is a Mk.II for the 21st century. More types are to follow, including brake firsts and brake seconds, and versions in Network SouthEast finish.

For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
ref.39-350, £22.45

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



More BR/Sulzer Type 4 'Peaks' in N from Graham Farish



Hot on the heels of the Class 44 (last month), Graham Farish has added representatives of classes 45 and 46 to its range.

Following the success of the initial 10 'Peaks' – which became Class 44 under TOPS – BR decided to order 127 production machines (Nos.D11-D137), which were fitted with the then-new Sulzer 12LDA28B engine, developing 2500hp. Construction was shared between the BR works at Derby and Crewe, and spanned the period autumn 1960-late 1961. Later in their careers, and by now classified 45 under TOPS, a batch of 50 was fitted with electric train heating equipment (during 1973-75, and classified 45/1; the others were renumbered into a 45/0 series), the original steam heat boilers becoming by now redundant. Upon displacement from its Midland main line heartland by HSTs in 1982, the class was scattered and often demoted to freight duty until the final examples were withdrawn in 1988. Several have been preserved.

The outwardly similar Class 46 variety numbered 56 examples, all built at Derby between October 1961 and January 1963. Mechanical and electrical specifications caused the separate TOPS classification. The remnants of these 1Co-Co1s were taken out of use in 1984 (including 46 009, memorably and controversially so, in a demonstration collision in July that year) but a handful survives today.

External differences between the classes are quite varied and were not 'cast in stone'. For example, the presence (or absence) of the supplementary angular grille beneath the main



bodyside panels does not provide a reliable distinguishing mark, and nor does the presence or absence of the narrow vertical grilles at the No.2 (boiler compartment) end. Similarly, the first batch of 46s (Nos.D138-D166) were built with twin central headcode panels, in concert with 45s D32-D67 and D108-D137: the GF model of the sole named Class 46, D163 *Leicestershire and Derbyshire Yeomanry*, represents as-built to refurbishment condition, roughly 1962-end of that decade at the latest, by when the machine was running with a single-piece four-character headcode panel.

Likewise, the model of 45 114 represents a Toton 'pet' of the very late 1970s – 45 121 was similarly embellished – but by September 1980 the two sealed beam headlights in a plain yellow

low nose had been fitted. The model correctly displays the ribbed battery box covers that 45s had, and 46s didn't, and a representation of the air reservoirs fitted to 45/1 locomotives in place of the boiler water tank. The body on 45 114 features plated-in access steps and covered roof filler area; the bogie sideframes are correctly missing the corresponding set of footholds at this end of the locomotive too.

Painting and finishing are very good, with the regimental crest on D163 being especially well done. Perhaps inevitably, the over-wide bogies – to allow for sideplay far in excess of that needed by real things – are made more prominent by the bright red bufferbeams on each model. Performance is on a par with the 44.

Graham Farish is also listing Class 45 No.D67 *The Royal Artilleryman* in green and No.46 053 in blue. Doubtless other bodysells will be produced in the fullness of time to cover the other varieties of 'Peak'.

For N

SAMPLES SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICES

Class 45 (ref.371-576), £76.95
Class 46 (ref.371-585), £76.95

WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



Gresley stock with corrected grain and more in 00 from Hornby



Hornby has revisited its Gresley teak stock, and addressed a problem evident in earlier batches, namely the direction of the graining effect. Now, as displayed by the brake composite vehicle No.42872 (ref.R4170B), the grain is vertical on the upper panels, as before, but now runs horizontally on the lower panels. The overall result is very good indeed.

The brake composite is also available in early British Railways carmine & cream, but now with fleet number E10077E (ref.R4178B).

Finally, Hornby has used its Gresley coaches, again in carmine & cream, as a homage to one of the Great Central section's named expresses, *The Master Cutler*. The coach pack comprises buffet E9144E, corridor third E12620E, corridor first E11012E, and brake composite E10099E. It is designed to augment the ref.R1074 premier boxed set of three coaches and early BR express blue A3 Pacific No.60052 *Prince Palatine*.

The train name was a last-gasp LNER one, applied in 1947 to the 07.40

Up train from the Steel City to London Marylebone, and the 18.25 from the capital back to Sheffield. In 1958 *The Master Cutler* became a Type 4-hauled Pullman train to Kings Cross, and the main expresses were diverted away from the GC in 1960 – the beginning of the end for this route. Happily the name lives on, both on the national network and in preservation.

The Hornby models come complete with roof-mounted carriage boards, firmly fixed in place. It would be a pity to try and remove them in any case.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES

Gresley teak brake compo – £36.50
Carmine & cream version – £29.99
Master Cutler pack – £79.99

WHEEL DATA

B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



More A1 buffers for 4mm scale



Four new sets of locomotive buffers have been added to the A1 Models range of components.

The 18" buffers are available in sets of four, unassembled (ref.A64, £3.99)



and assembled (ref.A84, £5.50). The buffer collars are neat brass turnings, but may need a little cleaning prior to assembly. Instructions are given with the components. Oleo type buffers are also offered, unassembled (ref.A61) and assembled (ref.A81) at the same prices as for the 18" variety.

For 4mm scale

AVAILABLE FROM
M.G. Sharp Models, 712 Attercliffe
Road, Sheffield S9 3RP

PRICES in text.

More PO wagon specials in 00



1E Promotionals has commissioned a couple of Dapol 5-plank wagons in the liveries of Bletchley Co-Op and Godden & Rudd of Luton. 250 certified examples are available, price £7.50 each plus £1.00 postage from the joint distributors, KRS Model Railways of Leighton Buzzard, and GE Models of Sheringham.

KRS Model Railways, 14 Brickhill
Road, Heath & Reach, Leighton
Buzzard, Beds LU7 0BA.

G.E.Models, Platform 2, North Norfolk
Railway, Sheringham Station,
Sheringham, Norfolk NR26 8RA.

The Bristol Model Railway Exhibition was sponsored by Dapol, and



there are still stocks of last year's commission, 200 examples of fireworks manufacturer Crane & Co. Price £7.50 plus £1.50 P&P.

David Baverstock, 18 Meadowsweet
Avenue, Filton, Bristol BS12 7AL.
Cheques/POs payable to 'Association
of Model Railway Clubs Wales & the
West of England' please.

Anhydrous ammonia tanker and barrier in 4mm scale from MIR

Model Irish Railways has kindly sent samples of its new modern Irish bogie wagon kits, made-up samples of which were seen in our report from the 2005 Warley NEC Exhibition (RM February, p.133).

The anhydrous ammonia tanker (ref.WF8) is a model of one of the fleet of 20 wagons, introduced in 1978 by Fauvet Girel for the movement of the hazardous substance between Cork and Co. Wicklow. The workings ceased in 2002. The kit has as its centrepiece a weighty (250g) one-piece resin body, which exhibits good rivet detail. Whitmetal detail parts, metal wheelsets (to 16.5mm gauge), brass bearing cups, parts and full instructions are provided, as are tinlets of paint – to the correct shade, mixed by Phoenix Precision Paints – and water-side transfers. Painting and lettering diagrams in full colour, by Stephen Johnson, are also provided.

Accompanying the tanker is the mandatory barrier wagon (ref.WF9), six of which were constructed to run at either end of each rake of six tankers. The tank-container carried water, for use in the event of spillage. The kit

combines an S Kits resin-and-brass combination ISO container kit with whitmetal frame extensions, bogies and other small parts. Metal wheels and brass bearings are supplied, as are the tinlets of paint, transfers and instructions/painting guide as above.

Power for the ensemble, incidentally, was normally 071 or 201 Class diesels, kits for both of which are also in the Model Irish Railways range.

For 4mm scale

SAMPLES SUPPLIED BY
Model Irish Railways, 12 Lymedale Grange, Portadown, Craigavon, Northern Ireland BT63 5XB

PRICES

Anhydrous ammonia tanker – £30.00
Barrier wagon – £25.00
UK P&P 10% of order value,
min £4.00 max £7.00;
Rep. Ireland & rest of EU 20%,
min £6.00 max £15.00

WHEEL DATA

A. 10.5mm, B. 0.5mm, C. 0.5mm,
D. 2mm, E. 14.5mm.



Rerailer in 00 from Peco



A new accessory to the Peco range of items for 00 gauge layouts is this new re-railer. The unit, at 312mm long over 'tongue', has a recess moulded into the base at the rear end to accept all profiles (100, 83 and 75) of 16.5mm gauge track: it is long enough to carry even scale-length Mk.III coaches.

For 00

MANUFACTURED BY
Pritchard Patent Product Co.,
Underleys, Beer, Seaton, Devon
EX12 3NA.

PRICE ref.SL-37, £2.95ea.

Harburn firs



New to the Harburn Hamlet range of stonecast scenic accessories for 4mm scale is this pair of fir trees. The ever-greens are 47mm high each, and look the part well.

Harburn Hobbies items are distributed to the trade by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.

For 4mm scale

MANUFACTURED BY
Harburn Hobbies, 67 Elm Row,
Edinburgh EH7 4AQ

PRICE
ref.CG275, £4.95.

Hornby GWR clerestory coaches in 00

Hornby has reprised its Great Western corridor clerestory-roof models, and reissued them as all-third No.3163 (ref.R4222A) and brake third No.3380 (ref.R4223). There is also listed another brake third (ref.R4223A) with a different fleet number to complete a 3-coach set.

Although the models are not brand new (we reviewed them first in our October 1982 edition) and do not have the finery of current production, the models are still worth the care Hornby has invested in picking out the com-mode handles and door T-handles in brass. The livery is the plain lined GW scheme, rather than the fully-panelled version of their first release (and the printed-on 'panelling' is therefore lost), but they still look reasonably smart.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE £19.50ea

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



First Scotrail-liveried 158 DMU in 00 from Bachmann

Following the recent takeover of the Scotrail franchise by the First Group, rolling stock north of the Border is gradually receiving a new colour scheme. Bachmann has been quick off the mark in applying the new livery to its Class 158 DMU in 00, representing No.158 739 in this new garb.

The finish is excellent, with the revised 'whoosh' carried effortlessly over the window areas. There is very fine separation of shades, and no 'fuzziness' on our sample at all.



For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
ref.31-508, £75.50

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

More Skaledale NER structures

Hornby has added another two North Eastern-inspired structures to its 4mm scale 'Skaledale' range.

The single-road engine shed with doors (ref.R8636, £19.99) has a 202mm x 96mm footprint, and is 127mm tall to the roof ridge. The roof carries a realistic 'rusted' effect to its corrugated surface. The doors can be opened – our sample's pair were on awkwardly-formed wire hinges, giving them a comedy appearance when ajar – to allow locos in, but the interior walls carry no stone detail.

The goods shed (ref.R8635, £21.00)

is 205mm long x 95mm wide, and is 105mm from base to top of chimney. It too has 'comedy doors', which are loose enough in the interior slots to be able to slide freely and a long way past the road vehicle access, and which are best secured, open or shut.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES in text.



High power digital central unit and handset from Massoth



Massoth as a name may not be well known in its own right, but for some time the company has been advising LGB™ on electronics, and maintains a close relationship.

The firm's DIMAX® 1200Z high power digital command station has been specially designed for the larger scales, with high current requirements: it can deliver up to 15 amps total, and has an adjustable maximum output of 4, 7, or 12 amps. For additional capacity it can be linked to a booster.

Another capability that may interest those working outdoors is that it can either be run off the mains or from an external 16 to 24 volts DC supply (e.g. batteries).

It will handle 23 loco addresses, 16 address reading sensors, 128 points, and 128 contact or feedback devices. It supports direct on-track decoder programming, and can run an analogue loco on address 00. Motor control is 14-step, and it recognises nine functions (lights plus eight accessories). The turn-off time on short cir-

cuit can be adjusted, and the unit incorporates an RS232 port for connection to a PC (running Windows 95, 98, ME, XP, 2K, etc.) for software updates and remote control.

The LCD display on the front panel reports status and activity, and is used for programming.

There are separate two-wire outputs for track and programming, and six sockets for the control bus (i.e. for connecting handsets). As well as the firm's own products, such as the DIMAX® Navigator 400H, the command station can be used with the LGB™ *Lokomotive Handy* or the *Universal Handy* or the LGB™ remote control handheld controllers.

The unit is supplied with an illustrated 26-page A5 landscape format instruction booklet, in German and English; the translation is good.

A very capable unit for those with high power requirements.

The DIMAX® Navigator 400H handheld controller has an ergonomic design that should suit both right- and

left-handed users. The main control knob with its handy knurled edge can be worked by the thumb, and rotates through 135 degrees.

A unique feature of the Navigator is that a second loco can be addressed simultaneously and controlled by the direction arrows under the rotary knob.

The large liquid crystal display is bright and clear, good contrast making it easy to read. It conveys a wealth of information, so much so that despite its size some of the characters are quite small. It shows loco(s) being controlled (the first identified by symbol as well as name and number), direction, speed, and function status – up to 16 for the first loco and eight for the second (though the functions are identified only by number, which is less useful).

The library of stored loco symbols is related to the LGB™, Aster, and Bachmann ranges – appropriately for a device aimed at large scale garden railway users.

The handset will memorise up to 16 multiple unit consists of up to four locos each.

Function control can be by either parallel or serial mode (selectable in the configuration menu) to suit the different standards found in large scale models.

The device also offers a second level of control for switching accessories and points, addressed using the keypad. The last eight addresses used remain in the memory and can be triggered by a single key press, which could simplify shunting, for example. 16 routes of up to 15 points each can also be set and memorised.

Naturally all decoder programming, loco and accessory, can be accom-

plished through the controller's menus.

The unit can be converted to wireless operation by the addition of a supplementary circuit board. The appropriate receiver module will work on either LocoNet or XpressNet, thus will interface the handset not only with Massoth's own products but also to central units by Lenz or Uhlenbrock, Fleischmann, Digitrax, and others. The receiver will handle up to four handsets.

Compared to the considerable capability of the device, the supplied instructions are basic: there seems to be an assumption that if more information is required, the website can be consulted. This is not always feasible at the critical moment! The changing purpose of the various buttons at different levels of operation and programming is not too well explained. (We understand a revised and expanded manual is in preparation.) The user will require some practice to familiarise themselves with the handset, as operation is not always as intuitive as the layout of the handset might suggest.

That said, this is a very well made and capable control system which combines both brain and brawn, and is worth serious consideration by the large scale operator wanting a premium product.

For large scales

AVAILABLE FROM
Model Masters, 50a Clifton Road,
Weston-super-Mare, BS23 1BW.

PRICE
central unit £670.00.
handheld controller £138.00.

Book Reviews

Rails to the People's Palace

and The Parkland Walk

Reg Davies and David Bevan
Hornsey Historical Society,
The Old Schoolhouse,
136 Tottenham Lane,
London N8 7EL.

210mm x 145mm 36pp
Softback £4.95
ISBN 0905794117

In this booklet Reg Davies gives an illustrated potted history of the famous North London branch line (closed 1954) and its services. There is also an account by David Bevan of The Parkland Walk, the 'longest nature reserve in the capital', built partly on the old branch and other ex-railway land between Finsbury Park and Alexandra Palace. There are maps of the branch and its neighbouring and connecting railways, plus one of the Parkland Walk showing its relationship to streets, stations, buses, cafés and pubs.

The booklet also contains a nice selection of b/w photographs of the branch, ranging in date from pre-grouping, through prewar days to post-closure.

Author Bevan's description of the Walk includes its flora and fauna and the surprising diversity of wildlife supported by this attractive, linear and nominally urban nature reserve.

This is a good little book for all who are interested in urban branch railways and the ways in which they can be used if they close to traffic.

The Power of the 8Fs

Jeff Ryan, David McIntosh,
George Moon
Oxford Publishing Co.
4 Watling Drive, Hinckley,
Leicestershire LE10 3EY.

280mm x 220mm 112pp
Hardback £19.99
ISBN 0860935947

Following the success of the authors' previous book, *Working Steam; Stanier 8Fs*, the publisher invited them to provide a similar contribution to the 'Power' series, and this is the result. This, like others in the popular series, is not a technical account, but provides a pictorial record of this interesting and outstanding class through archive photographs and extended captions.

The photographs are arranged geographically, eg Peak District, East Midlands, Somerset & Dorset etc and, appropriately for this far-travelled class, War Department and Overseas Service, the latter including Iran, Egypt, Israel, Iraq and Italy. Notwithstanding these exotic locations, the photograph which most fascinated your reviewer was taken at Bushey c1937, depicting northbound Willesden-Toton coal empties double-headed by 8F and ex-LNWR 0-8-0. The train contained ten 40-ton hoppers



Left: Regional Railways Class 37 No.37 414 eases off the Ashchurch branch with an MOD train on 9 November 1999.

Photograph: John Chalcraft.

of German type, giving the scene an unreal 'time-warp' or 'location-warp' feel.

For readers who would like to know more about these versatile Stanier locomotives, the authors give a useful bibliography and contact details of the Stanier 8F Locomotive Society.

Railways Restored 2006

27th edition

Edited by Alan C. Butcher
Ian Allan Publishing,
4 Watling Drive, Hinckley,
Leicestershire LE10 3EY.

235mm x 165mm 240pp
Softback £14.99
ISBN 0711031223

The very fact that this is the 27th edition of this guide to railway preservation (first published 1980!) should be all the assurance that prospective users require as to its usefulness and reliability. This edition sees a number of new entries, colour illustrations and a convenient 20-page timetable supplement.

The listing includes both preserved railways and railway and transport museums, and this year miniature lines have been 'promoted' to the main section, together with the addition of a few more.

The entries give much information, including length of line, dates of special events, telephone numbers, OS map reference, access by public transport, facilities for the disabled, ticketing, and often a locomotive roster.

Now an institution, *Railways Restored* is an attractive and useful aid for those planning a 'preserved railway' weekend or holiday.

The Channel Tunnel

and its High Speed Links

Nicholas Comfort
The Oakwood Press, P.O.Box
13, Usk, Monmouth, NP15 1YS.
208mm x 140mm 254pp
Softback £19.95
ISBN 0853616442

It is difficult to list all the aspects of this enormous subject which are covered in this comprehensive account, but essentially they are historical, political, social, technical, geological, geographical, financial and economic.

Chapter 1, which describes the 'century of false starts', makes compelling reading even before the eventual approval and construction and commissioning of the tunnel are reached. Complete chapters are given to operation and signalling, motive power and rolling stock, and the new tunnel-related lines and improvements on both sides of the channel.

The book is well illustrated, largely in colour, and many photographs show the constructional phases. The all-important maps are present, including a fold-out of the whole route to the South of France, plus a spectacular aerial photograph, taken by satellite, of the Channel Tunnel Rail Link in Essex.

It is a pity that the Tunnel, undoubtedly one of the transport wonders of the modern world, should be seen as mundane in the eyes of many, and this book can only help to improve that situation.

The account concludes with a chapter considering the operational and economic future of the tunnel, and a comprehensive index.

Bromsgrove to Gloucester

including Ashchurch to Great Malvern

Vic Mitchell and Keith Smith,
Middleton Press, Easebourne
Lane, Midhurst, West Sussex
GU29 9AZ.
240mm x 165mm 96pp
Hardback £14.95
ISBN 190447473X

This is the latest in the publishers' *Midland Main Line* series. In the now traditional Middleton style, the illustrated account concentrates on the main line south of Bromsgrove as far as Gloucester. This takes in many interesting stations and locations, not least being Cheltenham Spa and Gloucester itself. The Bromsgrove pictures include tantalizing glimpses of the 1 in 37 Lickey incline but, as we are travelling south, we do not traverse the famous bank in this book. There is, however, a picture of *Big Bertha* waiting in readiness by the coaling stage at Bromsgrove.

There are several OS map extracts, including of the complex railway installations at Stoke Works Junction and Ashchurch.

The dates of the photographs range from pre-grouping times to the present day and the captions in the main are informative and dated. Introductory chapters deal with the geographical

setting and historical background of the route and there is a useful section of the RCH map for 1947. A gradient profile also shows mileages from the MR headquarters at Derby. A short chapter analyses the minimal passenger services enjoyed by the route over the years.

This is a useful pictorial addition to the Midland literature which includes many views of stations, signalling etc as well as trains.

The Torrington & Marland Light Railway

Rod Garner
Kestrel Railway Books,
P.O.Box 269, Southampton,
Hants. SO30 4XR.
273mm x 210mm 104pp
Softback £14.00
ISBN 0954485971

The rural 3' gauge industrial line described here is overdue for a full account, and this book is therefore particularly welcome.

The line was developed to move products from the Marland Brick and Clay Company's works at Peters Marland to the LSWR railhead at Torrington station for onward distribution to Barnstaple and beyond.

The Torrington & Marland Light Railway was renowned for its wooden viaducts and the book contains photographs and scale drawings of these which will be of great use for adventurous modellers.

The line's original promoter was the engineer John Barraclough Fell and his idiosyncratic locomotives and trestles are featured together with other machinery of great character including the little Stephen Lewin 0-4-0T *Peter* and the Bagnall 0-6-0T *Marland*.

The fine selection of photographs is accompanied by maps and track-plans, including one of the clay works.

The book opens with a map of Devon showing the development of railways in the county at about the time the Torrington & Marland line was built.

A comprehensive bibliography directs the readers to many useful publications on mineral and clay railways in the West Country and John Barraclough Fell himself

After the narrow gauge, came the 20¹/₂-mile standard gauge North Devon & Cornwall Junction Light Railway linking Torrington with Halwill Junction and using parts of the wayleave of the old line. Despite the 'Light' in its title, construction of the ND&CJLR involved a number of new bridges and there are photographs of the work in progress.

The demise of the ND&CJLR and many railway facilities west of Exeter after the fateful 1 January 1963 is well known, as is the fact that even greater freight loads have since been forced back on to the largely unchanged local roads which were deemed not capable of handling the traffic of the area even one hundred years ago.

Pecorama DCC programme announced

Arrangements are well advanced for the third *Digital – As Easy as DCC* weekend at Peco on Saturday 10 and Sunday 11 June. It will be packed with stimulating new ideas and presentations by experts from the top companies, in the marquee and lecture theatre here at Pecorama.

The two days are open to all. This is a great opportunity for both enthusiasts and members of the trade to mix and exchange ideas.

The *Introduction to DCC* presentation and talks on DCC developments and practical demonstrations on installing and managing decoders will take place over the weekend.

The line-up of expert speakers includes John Hills from Fleischmann, David Nicholson from ZTC, Peter Rapp of Lenz, and Jon Jewitt from Sunningwell Command Controls.

James Dewar, author of the Peco 'Shows you how' booklet on decoder installation, will conduct two practical sessions on decoder installation and programming.

Daily schedule

- | | |
|-------|--|
| 11.00 | Introduction to DCC
Saturday –
John Hills, Fleischmann.
Sunday –
David Nicholson, ZTC. |
| 13.00 | DCC special features
Saturday – Peter Rapp, Lenz.
Sunday –
Jon Jewitt, Sunningwell. |
| 14.30 | Decoder installation
A 'shows you how' demonstration by James Dewar. |

All sessions will include time for questions and discussion.

Mackay Models (for Lenz and Roco), George Riley from Digitrax, Peter Ziegler of Zimo, Bachmann Europe (with its E-Z DCC system), and Gaugemaster (with the new Prodigy Advance range) will also be present, and Hornby hopes to be able to demonstrate working pre-production samples of its new digital controllers.

Layouts will operate to demonstrate the capabilities and advantages of DCC, including Peter Martin's H0 *Bahnbetriebswerk Mayfeld*, which uses a PC to control the points via a track diagram display. The track occupancy detectors in key locations now report the actual loco identity to the display. Clever stuff!

Normal Pecorama admission charges apply, but there is no extra charge for any of the DCC events.

The attractions of Pecorama, with its permanent exhibition of model railways and model shop provide an ideal setting. There is also the Beer Heights Light Railway, a delightful 7 1/4" line that carries visitors through the superb and extensive gardens, and the Garden Room Restaurant.

If you would like to stay in the area, the Tourist Information Centre in Harbour Road, Seaton, offers advice regarding accommodation. Telephone 01297 21660.

For any further information about the DCC weekend, you can contact Peco on 01297 21542. Full details are also on the website at www.peco-uk.com

Presentations at the York Show

At the York Model Railway Show, held as is traditional over the Easter weekend, several presentations were made; they were captured on film by the Peco Mobile Studio.

The RAILWAY MODELLER Cup for 2005 was presented to two members of the Barnhill Model Railway Club for *Kingsfield* (May 2005), the club's extensive steam/diesel crossover 00 layout. The Editor handed the cup to Eddie Michel (right) on the Saturday morning.

There was also a centenary to report: David and Robert Waller's 009 model of *Dduallt*, the exhibition layout that features the Ffestiniog deviation, notched up its 100th show at York. The faithful recreation (see RM October 1996) of the unique spiral, that gained the essential extra height to carry the preserved FR around the Tanygrisiau Reservoir, has been regularly displayed throughout the UK and northern Europe.

The photograph shows (left to right) Richard Neil, Anthony Mead, Francis Gomme and David Waller.

The layout is now part of the Cooper Hire Model Railway Club stable which includes *New Mills*, *Aylesbury Town* and the Don Boreham Collection.

David has embarked on the construction of a successor to *Dduallt*, an



009 project to recreate Beddgelert and the dramatic horseshoe curves on the Welsh Highland Railway route north to Rhyd Ddu.

Bachmann distributes OTT-LITE

Bachmann Europe has been appointed as the distributor to the UK model trade for the range of high quality lighting products supplied by OTT-LITE. The March issue of RAILWAY MODELLER featured some of the firm's products.

A range of four lights suitable for modellers will be available between £37.95 and £79.99.

Further details of their specifications can be obtained from your Bachmann stockist.

MSC LBSC six-wheel coach kit

The tenth 7mm scale kit in the MSC Models range is a Billinton six-wheel composite. 63 of these five-compartment coaches were introduced by the LB&SCR in 1891, to Diagram 72. The First Class compartments are on either side of the central Second Class compartment, the outer compartments being Third Class.

The kit is produced from new artwork based on the original drawing. It has separate body and chassis assemblies. The interior is fully fitted out complete with resin castings for the

different types of seats.

Over the next few months, the other nine kits will be reissued with new parts and revised instructions.

The kit is complete except for wheels; 3 7/8" Mansell wheels are needed plus paint and transfers which are available from MSC Models.

The kit, priced at £67.50, is available at 7mm shows or by mail order (£5.50 p+p) from:

MSC Models, 48a Ditton Hill Road, Long Ditton, Surrey KT6 5JD. Telephone 0208 398 2415.



Brunel 200 tours

April 9 was the anniversary of the birth of Isambard Kingdom Brunel in 1806. We are familiar with many of his achievements and to help mark the occasion, Kingdom Tours is organising a special tour from London to Bristol between Sunday August 13 and Wednesday August 16.

The tour will be led by Andrew Hook, Chairman of the Bristol Group of the Great Western Society. Brief details of

the tour are viewable on www.kingdomtours.co.uk and a descriptive leaflet available by calling **01296 433999**. Kingdom Tours was founded in 1983 by Brian and Velma Kirton who had been involved in Brunel Study Tours run in conjunction with the Western Region of BR.

Kingdom Tours, 29 Kingsbury, Aylesbury, Buckinghamshire HP20 2JA.

Castle Cary to Durston centenary

Between late May and the end of July there will be a number of events and exhibitions to commemorate the centenary of the Castle Cary to Durston line in Somerset.

A committee was set up and organised a website, and received a healthy grant from the Heritage Lottery.

An exhibition in Somerton from 28

June-1 July will feature *Castle Cary* by Andrew and Simon Tucker (see RM August 1993) with displays of photographs and memorabilia. Displays will be on show at local parishes, a book will be produced and information stored on a CD.

To find out more visit the website www.railwaycentenary.org.uk

SHOP NEWS

OPEN

MackKay Models, Paisley

We have news that Jeanette MacKay has decided to retire, and sell her very respected retail and wholesale business. MacKay Models is a well-known European specialist stockist, and is the UK distributor of the Lenz digital command control system.

The new owners, since March 31, are Alan Murray and his wife Sarah. Alan has been the Manager for many years and will continue the business in the same spirit of honesty and commitment

established by him and the late Ken MacKay.

We wish good luck to Alan and Sarah, and if you would like to meet them both first-hand come along to the Peco DCC event as mentioned on the opposite page. We also send very best wishes to Jeanette in her retirement.

MackKay Models, Studio 56/57, Embroidery Mill, Abbey Mill Centre, Seedhill, Paisley PA1 1TL. Telephone 0141 887 9766. www.mackaymodels.co.uk

Taunton Craft & Model Centre

The shop has relocated and now has extended ranges and even better displays. The new address is **Taunton Craft & Model Centre, 29 North Street, Taunton, Somerset TA1 1LP. Telephone 01823 251999.**



Model Junction, Slough

Dedicated to importing American model trains and railroad equipment, Model Junction has moved from Bourne End in Buckinghamshire to Slough. The Slough Trading Estate is accessible from international and local transport

networks. This helps Model Junction to work well as a mail order company. The new address is: **Model Junction, 916 Yeovil Road, Slough Trading Estate, Slough, SL1 4JG. Telephone 01753 528360.**

Ashcom Electronics, Addlestone

Ashcom Electronics started in Epsom but Ian Weller acquired a recently-closed business called Addlestone Models.

The Epsom shop is now closed and the business trades from

premises in Addlestone.

Contact Ian at the new address: **Ashcom Electronics, t/a Addlestone Models, 130 Station Road, Addlestone, Surrey KT15 2BE. Telephone 0870 909 5440.**

Morris Models, North Lancing

In the May issue we included an item titled Models and Hobbies, Steyning in Shop News. Unfortunately the telephone/fax number was incorrect. It should be **01903 754850.**

The Steyning shop is now

closed and the new trading name will be Morris Models. The address is as stated in May, 80 Manor Road, North Lancing, West Sussex BN15 0HD.

Would all those affected please accept our sincere apologies.

Sandown Model Symposium

After a break of fifteen years, model railways will be back at The Sandown Model Symposium. It will be held at Sandown Park Racecourse, Esher, Surrey on May 20-21.

The event is organised jointly by Elmbridge Model Club and Traplet Publications Ltd. and is best known for model aircraft, boats and cars. Members of Twickenham & District Model Railway Club will oversee the model railway hall.

Layouts will include *Romsey* by the Southampton MRS (00, see RM June

2000), *Alton* by the REC Farnborough (00, see RM September 1991), *Glyn Valley Tramway* (009) and *Watersfield* by the Twickenham club itself (0, see RM March 1999).

The theme is to attract new recruits to the hobby and show a new audience who might not normally attend a traditional model railway show.

Full details can be found on the website:

www.sandownmodelsymposium.com or by calling **020 8560 4966** after 8pm or at weekends.

Viessmann motor from MSE

Andrew Hartshorne of Model Signal Engineering tells us that he is now stocking a rather neat little signal motor by Viessmann of Germany.

Pictured right, it comprises a 65mm long twin solenoid with damping, giving a smooth motion in both directions of travel, the speed of which is adjustable. The signal to be operated is mounted on top of the motor, with the resulting unit being 'planted' in a 13mm diameter hole in the baseboard. A locking collar is supplied to hold the motor in place.

The fitted operating wire is of the correct diameter for the holes already formed in MSE's 7mm scale balance levers; users in the smaller scales will need to solder on a length of a suitable diameter wire. The motor will operate from a 12V dc or ac supply, via an SDPT switch. The motor includes a built-in SPST switch for the operation of indicator lights or track feeds. Current consumption is 600mA, but this is



drawn only whilst the signal arm is moving. The price is £11.25 each, with P&P being £1.50 per order.

Contact: Model Signal Engineering, PO Box 70, Barton-upon-Humber DN18 5XY. Telephone 01652 635885.

Comet Coronation conversion

The last two Coronation class engines showed several significant differences in appearance compared with the earlier versions. The most noticeable were the cut-down cab side-sheets and the cast steel trailing truck. Comet's kit is designed to fit the current Hornby Coronation body and chassis. The lower cab sides have to be removed in order to fit the shorter cab sides. No changes are required to the chassis; the new inner frames and trailing truck are direct replacements. The kit contains an extension piece to take the loco-to-tender electrical connection.

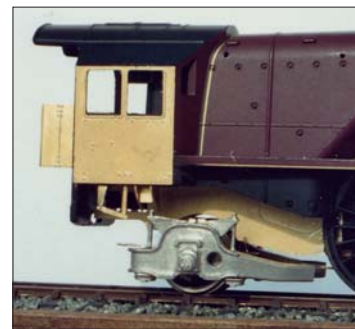
Also supplied is a replacement inside cylinder cover, AWS gear, cab doors and fallplate plus a selection of turned parts such as the smokebox door handle and handrail knobs. Copper wire is included to represent the exposed pipework below the cab. The conversion kit for Coronations 46256/7 is £25.00 and the tender kit is £27.00.

Comet also has a new partner, Geoff Brewin who is now a familiar face behind the counter at show stands. Geoff is providing a new service, pre-soldering any of the 200+ range of

Comet coaches. This means that the customer only has to fit and detail the roof, assemble the plastic interior, glue on the white metal detail, paint and glaze the finished coach.

The cost for the service is between £30.00 and £50.00 depending on the complexity of the coach. For details, send an SAE to Geoff Brewin, 'Charnwood', Firs Road, Ross on Wye, HR9 5BH or visit the Comet website.

Comet Models, 105 Mossfield Road, Kings Heath, Birmingham B14 7JE. Telephone 0121 242 2233. www.cometmodels.co.uk



Porthmadog news

The Cooper Hire Model Railway Club is to bring its 16mm scale *Merioneth* layout to the Porthmadog Model Railway Exhibition on Saturday and Sunday August 5 and 6 2006.

The layout will feature locomotives and stock built by the late Don Boreham whose superb models are rarely seen. There will also be a display of earlier, smaller scale models including some made from card prior to World War 2. If you are interested in narrow gauge, try to obtain a second-hand copy of Don's book *Narrow Gauge Railway Modelling*; unfortunately it is currently out of print.

At the exhibition there will be a selection of narrow and standard gauge layouts in 7mm, 4mm and 2mm, plus trade support.

The Porthmadog Railway Group has decided that from 2007, the

Porthmadog Railway Exhibition will take place at the beginning of May. Next year it will be on May 5 and 6.

The theme of the exhibition will be narrow gauge, industrial or light railways. The group is interested in making contact with owners of good standard layouts who might consider exhibiting. If you would like to exhibit, send a specification with photocopies of pictures to Paul Towers, 2 Llys Glyn-dwr, Porthmadog, Gwynedd LL49 9HN.

As this year's show will be at the height of the season, plan your trip and book your accommodation soon.

Contact **Vaughan Glynn Jones, Exhibition Manager, Porthmadog Model Railway Exhibition, 1 Stad Waenhelyg, Criccieth, Gwynedd LL52 0BJ. e-mail: Glynn6@glynn6.force9.co.uk**



Sweet success at Mevagissey

In the February RAILWAY MODELLER we announced a competition organised by 'The World of Model Railways' at Mevagissey and *Locomotives International* magazine.

The Mevagissey Railway Modelling Competition asked entrants to build a model railway scene in a Ferrero Rocher chocolate sweets box. Any size or shape of box could be used, providing the lid could be closed. The scene could include figures, kits, or parts of kits.

There were five categories – Junior (under 11), Secondary (under 16), Senior (under 21), Adult, and Professional – and the original intention was to award a winner and runner-up prize for each, plus an overall winner and runner-up chosen from the first four categories. Prizes were vouchers to be spent at the Mevagissey model shop, worth £50 for the winner and £25 for the runner up in each category, with £100 for the overall winner and £75 for the overall runner-up.

As it turned out, there were few entries from youngsters, and none classified as professional.

Themes depicted, scales selected, and the size of Ferrero Rocher box used varied considerably. Several of the designs made ingenious use of the space in three dimensions rather than simply seeing the box as a constraint or a container. Several used what had been the base vertically. However, none offered any form of operation or animation!

Closing date was set at 31 March, and shortly afterwards Paul Catchpole of 'The World of Model Railways' contacted us to ask if we would assist with the judging. He reported that the number of entries was relatively few but all were of encouragingly high quality. He was right! Picking the winners proved problematic, and there was much discussion here in the office about the merits of each entry. There was very little between them, but eventually a decision had to be made.

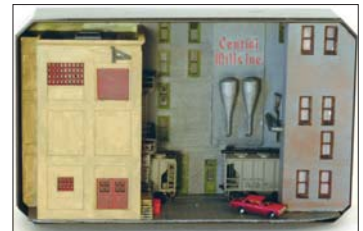
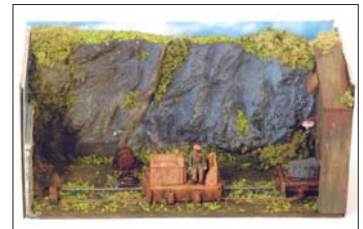
Above: the overall winner, a large scale diorama by John Hill.

Right: a selection of highly commended entries (from top) – scene with a boat, by John Parry; battery electric by a rock face, by Peter Moyle; and 'Sunday at the mill', a scene in N by Barry Harvey.

The winners were as follows:
Overall: John Hill of Long Eaton.
Adult: Jon Heslop of Callington.
Runner-up: Irene Wittich of Llanelli.
Secondary, and overall runner-up: Andrew Dunn of Shoreham-by-Sea.

Congratulations to all.
All these winning scenes and selected other entries will be on display at 'The World of Model Railways' for the whole of this season.

Paul thinks the venture proved well worth while, and is very likely to run a similar competition again next year. He hopes that if longer notice is given, more entrants will have time to respond. Details will be announced in the model railway press in due course.

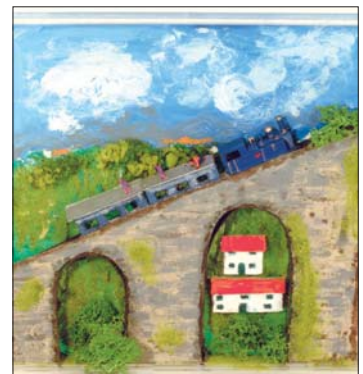


Above: adult winner, Jon Heslop.

Below: secondary (11-16) winner, and overall runner-up, Andrew Dunn.

Above: adult runner-up, Irene Wittich.

Above: highly commended, Irene Wittich. Below: J.M.Charnock.



London Road D23/G1 kit

New from London Road Models is a 4mm scale etched kit for North Eastern Railway G1 (LNER Class D23). The kit can be built as the original 2-4-0 version or the later 4-4-0 with saturated or superheated boiler.

The frames are etched in nickel silver with the body in solid brass. The boiler/smokebox and footplate/cab have been designed as two separate units for ease of construction and painting. The distinctive brass splash-er beading can be attached once the painting is complete. Frame and bogie spacers for 00, EM and P4 gauges are provided.

Other features include a sprung bogie on the 4-4-0 and a sliding cab window option.

Lost wax brass castings are supplied for the majority of other detail components, in addition to turned handrails, whistles and buffer springs.

The kit includes the NER 3038-gallon tender. Wheels, motor and gears are required to complete the model. The design suits a Mashima 10, 12 or 14 series motor, LRM GB4 motor mount and 38:1 or 50:1 gears.

The price is £89.50. Contact: **London Road Models, PO Box 643, Watford WD2 5ZJ.**

Tower Models GWR/BR Railcars



The latest additions to the Tower Brass range of 0 gauge items will be the GWR/BR 'razor edge' railcars in both passenger and parcels versions. They will be supplied fully assembled in unpainted brass and ready to run.

They are powered by a 7-pole Canon motor fitted with a flywheel. The railcars have sprung buffers and screwlink couplings. Detailed cabs complete with controls, seat and interior partitions are already fitted.

Supplied but not fitted with both railcars is a pair of driveshafts, fitted when the prototypes were built but removed before passing to BR. Also supplied

are the necessary parts to depict the opening driver's windows fitted after the War, plus both types of windscreen wipers. This will allow the railcars to be depicted at any time during their lifespan. The models require paint, lettering, lining, glazing and where applicable passenger car seats.

The railcars are priced £450.00 each unpainted: Tower Models offers a painting service, full details of which are on the Tower website.

Contact: **Tower Models & Co., 44 Cookson Street, Blackpool, Lancs FY1 3ED. Telephone 01253 623797. www.tower-models.com**

Western MRS 70th anniversary

March this year was the 70th anniversary of the Western Model Railway Society in west London.

It started in Acton when some schoolboys formed a small model railway group in March 1936. Branch Number 308 of the Hornby Railway Company (Acton) was created. The Branch survived the Second World War and in the 1950s changed its name to the Western Model Railway Society. Since then, it has had club-rooms in several locations, mainly in the Acton area.

It is a little way ahead, but an exhibition will be staged on Saturday September 30 and Sunday October 1, 10.30-17.00 and 10.00-16.30 respectively. The new venue will be the Queensmead Sports Centre, Victoria Road, South Ruislip, Middlesex. The venue offers a greater selection of layouts and traders so that everyone will benefit. Those interested in joining the Society may wish to contact **The Secretary, The Western Model Railway Society, 37 Milton Road, Hanwell, London W7 1LQ.**

Lochgorm kits price

In the May issue we announced a range of new Highland Railway products from Lochgorm Kits. Unfortunately, we were incorrectly advised of one of the prices. The Duke chassis is £45.00, not £35.00 as quoted.

More information on the 4mm and 7mm ranges is available, on receipt of an SAE, from **Andrew Copp, Lochgorm Kits, 3 Broomhill Court, Keith, Banffshire, AB55 5EL.** or see the website **www.lochgormkits.co.uk**

7000 dreams come true

The Great Central Railway has just sold its 7000th 'Drive A Locomotive' experience package. Enthusiasts can grab hold of a locomotive regulator and feel just what it is like to take control of a living, breathing steam engine.

The 7000th package was sold to a man who wanted to try something a little more modern, driving a diesel locomotive. The Great Central has a fine fleet of heritage diesels, some of which were built locally at the Brush works in Loughborough.

Last year the GCR won an award for the quality of the 'Drive A Locomotive' experience, which is the only one in the country where visitors can drive on a double-track former main line.

As new engines come to the railway after restoration and repair, lucky participants often get the chance to try their hand on real legends from the steam age. Locomotives which have visited the railway include *Flying Scotsman* and *Duchess of Hamilton*.

Further general information, details about the above and all forthcoming events can be found on the Great Central Railway's extensive website: **www.greatcentralrailway.com**

Additional information can also be obtained from:

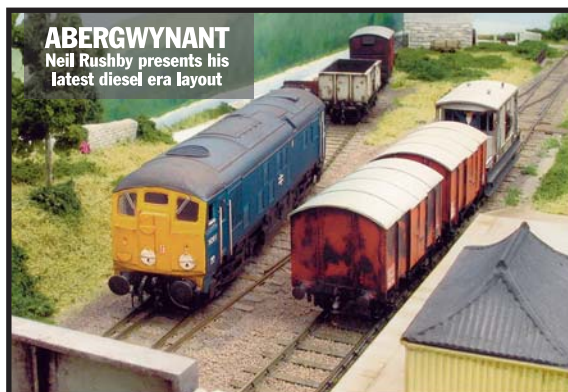
The Booking Office, Loughborough Central Station (daily 09.00-17.30) on 01509 230726.

Kemsley Down Museum walk

The display of historic vehicles at the Sittingbourne Steam Railway Museum Walk has all been refurbished. Each vehicle has its own brief history; many of them come from the former Bowaters Railway.

The new season, which began early in April, features an increased number of exhibits which have been revised and repainted.

There is no extra charge to visit the Museum Walk or the small exhibits museum and model railways that exist around it. These are open whenever the railway is open. Trains run every Sunday and Bank Holiday until the end of September and on other special event days. For full information, call **07944 135033** to receive a timetable or visit **www.sklr.net**



ABERGWNANT
Neil Rushby presents his latest diesel era layout



A LOCO STUD IN 00n3
Derek Naylor describes his fleet



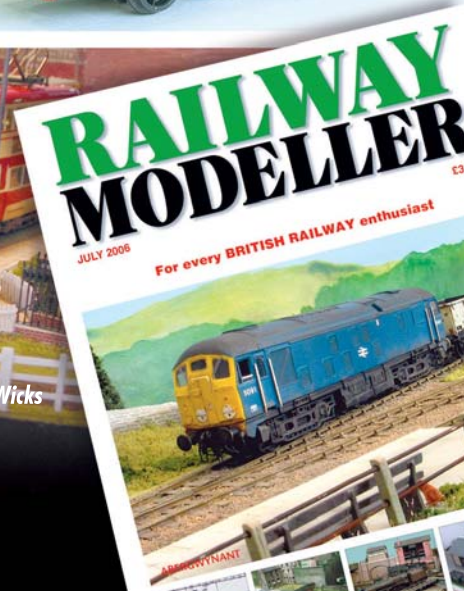
SEALANE
Wearside trams in 4mm scale, by George Wilkinson

Coming next month

- **CITY OF TRURO** *The famous machine in 4mm scale, by Martin Wicks*
- **LSWR 700 CLASS 0-6-0** *Drawn and described by Ian Tattersall*
- **SANTON** *A Manx layout suggestion, by Robin Winter*

plus all the regular features

July Issue - Out Thursday 15 June



RAILWAY MODELLER

JULY 2006

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ABERGWYNANT
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SEALANE
Sunderland Trams in 7mm Scale



FERNDALE Lt. Ry.
SM-32 Garden Railway



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Scale Drawings & Photographs

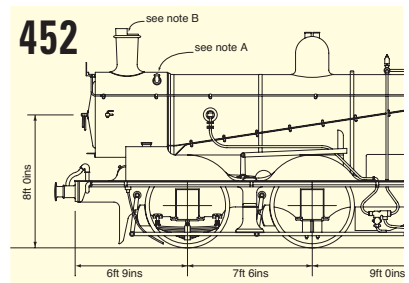




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Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

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Unsung heroes...

In the manner of things, some aspects of railway modelling have to take a bit-part role.

Rolling stock provides the main players, and locomotives are the divas, but in this issue we take time out to recognise a couple of the 'chorus' roles in traditional railway modelling: the telegraph line equipment and the headlamp.

The telegraph pole run was an essential part of the pre-electronic railway signalling arrangement, but was a bit-player in even this small scene to the signals themselves and the boxes from which they were controlled. They were also, to this writer at least, a feature of long train journeys, where to his young eyes the mesmeric procession of poles, with wires dipping lower into view at the mid-point of their span, then rising again to meet the insulating pots, were part and parcel of travelling by train. Of course he did not realise that they crossed from side to side of the line as required; they were just hiding from, and re-appearing for, him...

Occasionally, a particular style of pole provision enables a railway company to be identified in photographs if no trains are present: a case in point is the Midland, with its distinctive double-pole style, as was modelled by Jamie Guest on *Long Preston*. The layout was described in the December 2005 edition, and there is a closer look at how the pole runs were constructed on pp.418-421 herein.

Similarly unsung is the traditional oil-burning headlamp, as seen for decades on steam engines and the early diesel classes, prior to the introduction of the four-character headcodes. The placement of lamp(s) to denote the class (or, where applicable, route) of train may have been learned by rote for most of our readership, so our apologies if the feature in this issue seems a little 'old hat'. Yet it is approaching 45-odd years since the roller-blinds began to take prominence over the lamps, and for today's modeller the specifics may not be that familiar. So we decided to trawl our model locomotive 'storage pool' for suitable candidates to sport some Bachmann 4mm scale lamps which arrived for review recently. The results are on pp.435-437.

Loco Week on the BHLR

As noted above, locomotives are the divas of the steel wheel on steel rail world, and if you'd like to see our collection plus some visiting machines, then the week beginning Sunday 30 July is the one to circle in your diary. It is the 2006 Peco Loco Week, when the Beer Heights Light Railway will be running its most intensive service of the season, with most trains double-headed. Other special events will be put on, so see next month's issue for a full rundown.

Photographs – please do not embed!

Echoing the traditional card-backed envelopes, a plea to the ever-increasing army of modellers submitting articles for our consideration using digital photographs. Please ensure we have the actual image files, separately filed on the CD *in addition* to any copy with the photographs embedded in them in documents such as those created by Microsoft Word. We do not have the technology to extract them, and frequently have to write requesting the images from the would-be author. This is not to say, of course, that we do not welcome prints from a 'traditional' film camera – sometimes we prefer them.

Now that the summer months are here, it's a good time to take whichever type of camera you prefer outside, especially if you have a garden railway at which to point it! Although the atmospheric wintry shots, perhaps of a model snowplough clearing the permanent way with just the same panache as the 'big' railway's, are evocative, it would be fair to say that a garden railway looks best in the summertime, with plants in full bloom and so on. If this summer tempts you outside – which judging by the forecast for the week these words are being typed, it might not – then we'd be happy to consider them for possible publication. But please: *don't* embed them in a text document!

Cover: 9640 arriving at Watlington.
More about Bill Brown's 4mm scale model
overleaf.

Photograph: Andrew Burnham.

Watlington

A Great Western terminus in finescale 00

BILL BROWN has modelled a rural Oxfordshire station exactly to scale.

'Here's your magazine' said my wife one day in 1999, dropping the RAILWAY MODELLER into my lap; she had just returned from a shopping stint, better known in our house as 'heavy goods'! I naturally gave it my full attention for the next hour or two, winding up with the book reviews. I always have a look at that page and on this occasion my attention was caught and held. I had stumbled, to my way of thinking, on a veritable goldmine, to use an old cliché.

I read thus – *Country Branch Line: an intimate portrait of the Watlington branch, Volume 1. The story of the line from 1872 to 1961.* Paul Karau and Chris Turner. A Wild Swan publication.

I am something of a branch line addict, so of course I read on. The following review was very complimentary. There was to be a Volume 2 following. Both books described the history, route, and surrounding area, stations, motive power and rolling stock, and also provided information regarding the people who worked the line and those who travelled on it. If one wished to build an authentic model of a Great Western branch terminus, then here, in these two quite substantial volumes, was all the information needed! I subsequently ordered both volumes from our local bookshop and was very soon in possession of two of the most detailed and profusely illustrated books devoted to one small branch line that I had ever seen. Even detailed descriptions of goods and shunting movements were included. A model of Watlington station was now my next project.

All my life I have had a great love of railways and railway modelling. As a boy I had the usual 0 gauge clockwork train set. As an adult I graduated to 00 in the garden, as a room in our house was not to be had for love nor money!

'You'll never run 00 out-of-doors', I was warned. I told them to come and see for themselves that it could be done. They came, they saw, they concurred!

A few years later I opted for 45mm narrow gauge, still in the garden, of course. This was the outcome of a holiday in North Wales and visits to the Festiniog and Tal-y-llyn railways.

Photographs by Andrew Burnham.

Pannier tank and auto coach wait at the platform, ready to depart. Note the 'pep' pipe hanging from the cab.



▲ Waiting for the first passenger train of the day. Station master Reg Pocock checks his watch, porter Tom Tunnicliffe sweeps up, and guard Frank Hyde looks on. The cycle shed is at the left.

▶ The station forecourt.

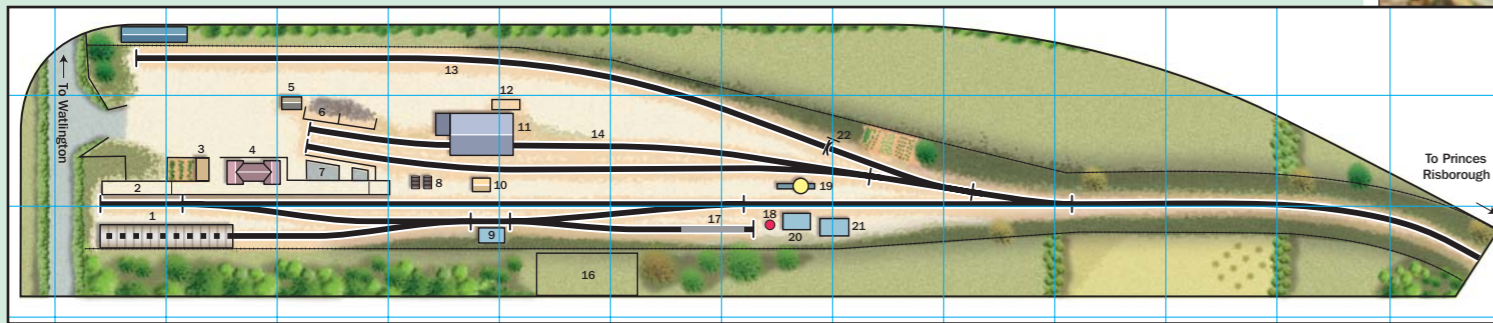
Then there was the move to North Wales where circumstances precluded any further adventures in 45mm, or any modelling at all! Thirteen years passed and another new home and a room! A short interlude with N and then it was back to 00 again. I was not at all happy with this layout. It sort of grew: there was no real planning, it just spread rather haphazardly like dry rot.

Then came that fateful day in 1999 and the advent of those two books, already mentioned. I felt like Oliver Cromwell with that bauble. The old layout had to go. So it was 'taken away', and work on Watlington station was begun.

But before describing the building of the new layout, a few words about the real Watlington might be appropriate.

History

In the year 1863 the people of Watlington, a small market town in Oxfordshire, rallied to the idea of building a railway. The meeting was held at the *Hare and Hounds* hotel in the said town and a proposal for linking Watlington with Cholsey on the GWR London to Bristol line, incorporating Wallingford, was agreed. Nothing came of the scheme, but interestingly enough a line was built from Cholsey to Wallingford and still



WATLINGTON

Overall size of layout 13'3 by 2'5
(each square represents 1ft)

Key to layout plan:

- | | | | |
|------------------|----------------------|-----------------|-------------------------|
| 1. Carriage Shed | 6. Coal staithes | 11. Goods shed | 16. Control panel |
| 2. Milk platform | 7. Cattle dock | 12. Weighbridge | 17. Loco inspection pit |
| 3. Cycle shed | 8. Lamp and oil huts | 13. Back road | 18. Well cover |
| 4. Station house | 9. Coal stage | 14. Shed road | 19. Pillar tank |
| 5. Coal office | 10. Signal cabin | 15. Spare road | 20. Grounded horsebox |

exists today as a preserved line. Watlington won through in the end though, having its own line from a junction at Princes Risborough on the Great Western and Great Central joint line.

So the Watlington and Princes Risborough railway was born. Much was made of the benefits to the area and the profits that would accrue by investment in this project, but it was the old sad story, so familiar to students of railway history. Misplaced optimism, blind enthusiasm, and wishful thinking that remind me of something that David Lloyd George once described as 'joyous arithmetic'.

The line opened for traffic in 1872, after the usual birth pangs that accompany such events. In many ways it was a strange affair, worthy of a Colonel Stephens venture. By all accounts it was a ramshackle business. The track was very lightweight, 58lbs/yd Vignoles flat bottom rail in 23' lengths following, with very few earthworks, the rolling lie of the land (rather like a switchback) and ballasted, not with granite chippings, but chalk of all things! At least there was plenty of that in the Chilterns.

The locomotives and rolling stock were of poor quality and continually broke down. I think even the Colonel would have thrown in the towel.

Like so many small lines, the W&PRR ran at a loss from day one, until in 1883 the Great Western took the line under its wing. The GW scrapped all the existing stock and laid new bullhead chaired track, firmly anchored in proper ballast. However, in spite of all these improvements, the switchback nature of the line remained to the end.

4617 on shed about to pump water from the well and top up the pillar tank. The well cover can be seen between the loco and the grounded horsebox. Note the facing point lock.

This two-storey timber barn belonged to Chiltern House, next to the station. The enamel advertisements protected shallow windows under the eaves.

The station, with auto coach and brake van waiting in the platform road, and private owner wagons in the back siding.



The route described

The line left Princes Risborough running alongside the branch to Oxford for about three-quarters of a mile and then curved away in a south-westerly direction leaving Buckinghamshire and entering Oxfordshire, passing Bledlow Bridge halt, Wainhill crossing halt, Chinnor station, Kingston Crossing halt, Aston Rowant station, Lewknor Bridge halt and terminated at Watlington station after a run of nearly nine miles. From Wainhill Crossing the track ran for several miles alongside the Icknield Way at the foot of the Chilterns. Views from these hills are spectacular. This is an agricultural landscape of hedged fields and woods, of tiny lanes wandering to sheltered hamlets and farms, stretching away to distant blue horizons, all bathed in sunlight and the cooler strands of cloud shadows. That is, of course, if the weather holds up!

Only small tank engines were employed on the line under Great Western management. They were mainly 0-4-2T 517s, 2-4-0T Metros, 201 0-6-0T Panniers, and during and after the Second World War 57xx Panniers appeared, easily coping with those switchbacks. I can imagine the sharp staccato bark of their exhausts echoing back from those Chilterns hills.

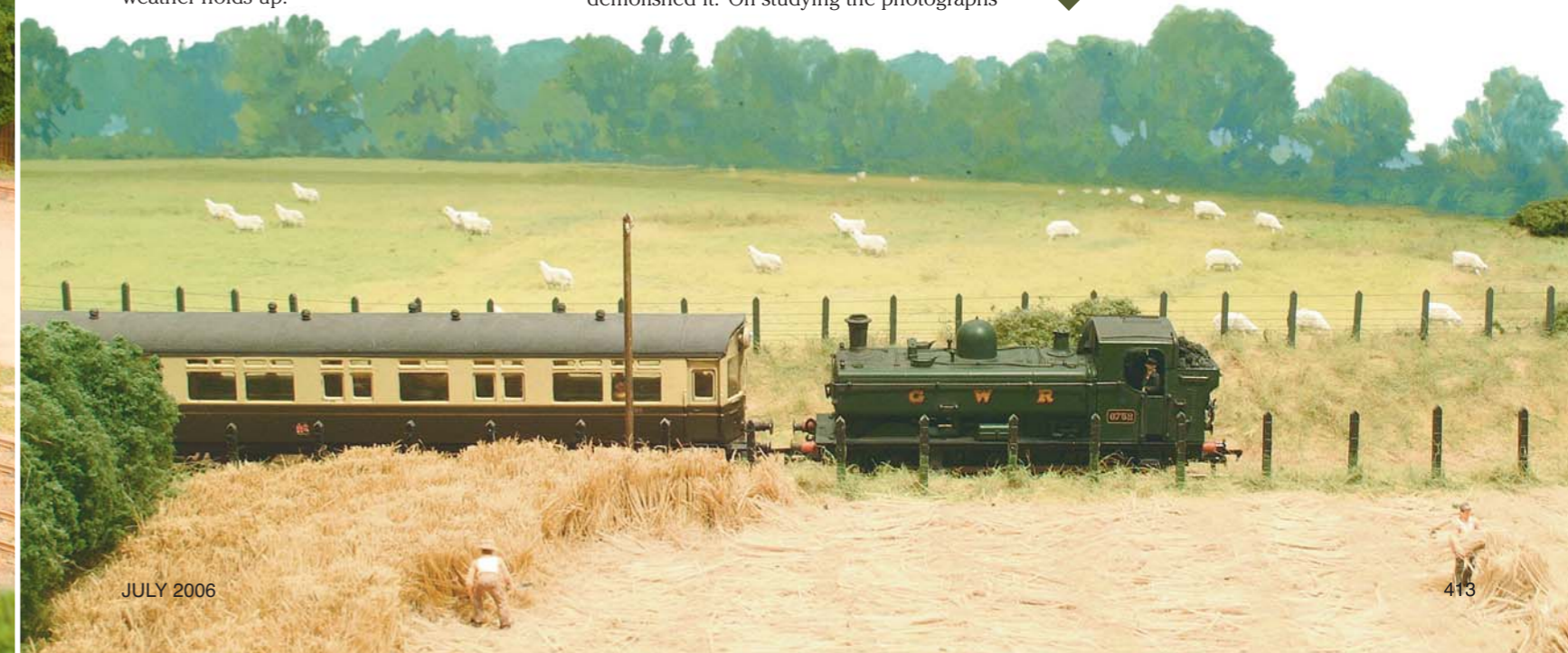
Passenger stock consisted of a single auto coach, though never used on push-pull basis, locomotives always running round their trains at Watlington and Princes Risborough, the reason being that there was always shunting or other duties to perform. One task required at Watlington was that the locomotive was used to pump water from a well up to the pillar tank, after someone shunted into the pump house at end of the old locomotive shed siding and totally demolished it. On studying the photographs

you might well exclaim 'What shed?' Well, the fact is that this part of the station site was a disaster area over the years. I have just mentioned the ruin of the pump house as one event. In 1906 the locomotive shed burnt to the ground while supposedly sheltering two tank engines. Just to the rear of the shed site was a grounded horsebox. In later years that and the platelayer's hut were also consumed in a like manner. At least these last two structures were still intact in 1946, the year represented by my layout.

To commemorate, as it were, these fire raising activities, I have modelled a bonfire by the platelayer's hut – a hint of things to come!

In 1922 a new stationmaster arrived. Reg Pocock took over and remained in that post

Out in the country, a passenger train bound for Princes Risborough.



for 24 years, retiring in 1946 (just in time to have him in the model, looking at his watch). During those years he proved a conscientious servant of the GWR and brought stability to the staff. One of his innovations was the erection of the sleeper-built milk dock at the terminal end of the main platform. This proved useful, not only for the loading of milk churns, but also as a lookout point used by Reg to watch for late-coming passengers from town. Trains were sometimes held back for their benefit. Those were the days!

The milk traffic eventually came to an end, but Reg's platform remained almost until the break-up of the line.

The autocoach was supplemented at times by a standby, stored in the carriage shed opposite the platform. In the early days this vehicle was an old four-wheeler. During the Second World War, due to a large increase in passenger traffic (many people at Watlington did war work in Princes Risborough), an extra coach was laid on for the first train of the day and again for the evening return trip. Whatever this coach was, it certainly was not the old four-wheeler!

There was considerable military traffic on the line at this time, so much so that the old rope-worked hand crane in the goods shed was replaced by an overhead runway. Witness the vertical support girder on the side of the goods shed.

The small garden near the milk platform was made even smaller during the war, when an asbestos cycle-shed was erected for the use of war workers travelling to Princes Risborough or London.

When the war ended, traffic began to fall off considerably. Reg Pocock retired in 1946 and the line began to take on a neglected look. Passenger traffic was withdrawn in 1957. There was still some goods traffic but that ceased and the line from Chinnor to Watlington closed in 1961.

The route between Princes Risborough and Chinnor remained in use due to the lime works at Chinnor, and is now a preserved line, the Chinnor and Princes Risborough Railway, formed in 1989).

There were no signals on the line, at least



◀ Pannier and auto coach arriving at Watlington. The timber goods shed, seen in the background, was a nice model to make.

Coal staites and office feature in the goods yard. ▶



▶ 4617 shunting wagons in the back siding.

◀ Weedon Bros. coal office.

not after 1926 when they were removed as a 'saving'. There was only one engine in steam anyway, although in early days some double-heading must have occurred (remember the two roasted locos in the burnt-out shed). However, there were the two obligatory ground signals controlling the run-round loop at Watlington, and of course a fixed distant.

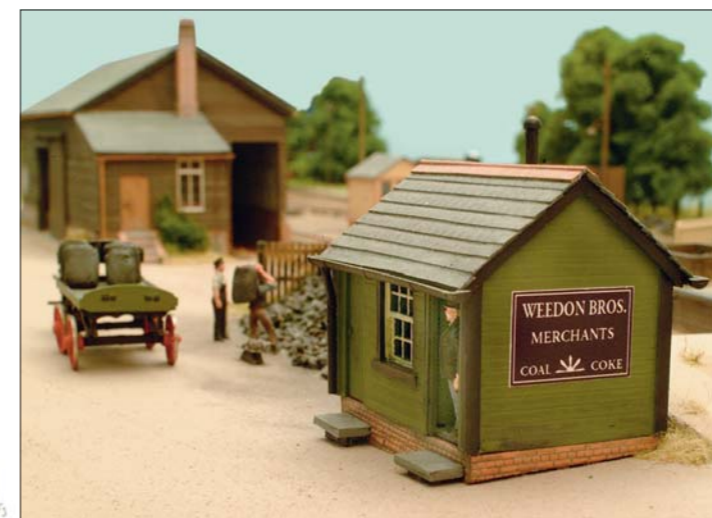
The present

Watlington station lingered on, though deserted, the track removed, both on site and that linking it to the rest of the world. Nature began to take over, kindly concealing the ruin that time and gravity were wreaking on its structures, as I recently discovered.

My son-in-law kindly took me to Watlington last year for a weekend as a birthday present.

Naturally the site of the old terminus was the first on my visiting list.

The little country road leading to the station looked just as it did in the old photographs. It felt like being back in the 1940s and 1950s, and I reflected on all the people that I felt I had come to 'know' that must have walked its length so many times. But, on reaching the spot where we should have been able to bear left at the entrance road and through the gates to the goods cart way and see the station house and carriage shed on the right with the goods shed further on, it was something of a shock to be confronted by a hedge with a small padlocked gate and beyond that, all that was left was the cart way and the rest a wilderness of trees, bushes, brambles, and nettles!



I suppose I was very foolish to think that it could be otherwise, maybe a bit overgrown perhaps, but I was not prepared for this wild explosion of unrestrained nature.

After spending months reading and re-reading those two wonderful books and studying minutely the many photographs, getting to 'know' the station staff, the drivers and firemen, and some of the locals, the past seemed to become the present, the here and now. The reality was, to say the least, a bit of a knockdown. Never mind, picking myself up (mentally), we found a gap in the hedge and suddenly there was the old carriage shed, quite intact, if a bit weatherworn. I realised I was standing just where, in the past, many a Pannier had stood waiting to be released into the loop before running round its train. My son-in-law told me afterwards that my subsequent behaviour put him in mind of a ferret (a ferret with a camera, naturally). I dived hither and thither amongst the restraining

bosage, clicking the old camera, and found Reg Pocock's poor semi-ruined headquarters, the old station house and the awful ruin of the wooden goods shed, now a collapsed pile of timbers and slates, heartbreaking stuff!

◀ 9640 leaves the coal stage to collect the spare coach from the carriage shed.

As I stood looking at this poor abandoned station, so busy in its heyday, I wondered if the place was now haunted. It had served its turn, done its job well, and was best left to moulder away quietly.

We came away and although we stayed another day in the area, I never went back. I do not suppose I ever shall.

On a brighter note, next day we went to Chinnor, now the headquarters of the Chinnor and Princes Risborough railway. This station had been totally demolished, but reconstruction began in 1994. A new platform was built and by 2003 a replica of the station house was completed. All the station houses (Watlington, Aston Rowant, and Chinnor), were practically identical, being rather alpine in appearance, therefore the new Chinnor house was a dead ringer for the ruined one at Watlington. Imagine then my pleasure, after leaving a sad ruin, the very next day to come upon it reborn, as it were, brand-new, looking as it must have done at the opening of the line in 1872. I almost performed a jig!

The model

The room at my disposal was about 13' x 8'6", and in 4mm scale Watlington would fit easily into one of the longer sides, with a fair amount of countryside to run through. A fiddle yard would be situated along the





▲ The Pannier takes water from the pillar tank at the site of the old loco shed. The allotment on the far side of the yard belonged to Tommy Johnson, one of the branch gangers.

opposite wall, making a U-shape layout. One good thing was that Watlington was a quite small affair, so no shortening would be necessary. So Watlington was built on two baseboards each 80" x 30", both resting on a couple of office type desks. Lightness was not a consideration, as I had no intention of exhibiting it, so I used 2" x 1" timber framing with 3/4" blockboard for the track foundation. The contours of the surrounding land are smoothly graduated so I used hardboard sheet pinned and glued to wooden formers and then covered with earth-coloured gunge and finally 'grassed' using dyed lint and carpet underlay as per Barry Norman's *Landscape Modelling*. Hardboard was also



used for the station approach and cart way, also the backscene.

The latter item was painted with pale blue matt emulsion. When dry the 'landscape' was executed with Plaka paints, noting carefully the position of certain trees and woods as seen in the photographs. Being a sometime artist and landscape painter helped somewhat. Three-dimensional trees are by Heki. They could be improved... a future task.

I used Peco code 75 track, and all points with live frogs. Point control is by wire in copper tubes laid beneath ground level. The track was laid on 1/16" cork sheet. More 1/16" cork sheet was laid between each track butting up to the sleeper ends. N gauge ballast was then laid between the sleepers using the well-tried (and much repeated!) water and glue mix fed through an eyedropper, not forgetting a drop of washing-up liquid, of course. The cork surfaces were then coated with glue and fine sand sifted on. When dry the excess was removed and the whole, including the track, was sprayed with an appropriate colour. This procedure gains the 'station look' as opposed to main line raised ballasting techniques.

Returning to scenics for a moment, the cornfield was created using plumber's hemp (Barry Norman again).

All the buildings are constructed of plasticard, most built from scratch, and I tell you, cutting out and fitting the brick and flint facing of the station house was murder! There are faults and omissions in this little building. The roof sags (the only time I used cardboard), the two chimneys look as if they want to become more closely acquainted, and one of the finials is not quite vertical. Oh dear! They are only slight things, but they irk one.

If any reader has seen photographs of this quaint little station house, he or she might well exclaim 'Where are the decorative ridge tiles?' I left them out deliberately. First, they are too fiddly to make... I did try! Second, on the prototype a lot of them were missing by 1946. Imagine the comments! Not worth the bother! At least it has interior fittings and figures, except for the ladies' waiting room and the toilets. The roof does come off, so, at some future time, that can be attended to, plus the chimney and finial.

The timber-built goods shed was a nice model to make. It includes the inside timber framing of the walls, a loading bay and platform, an overhead crane, a lean-to office with desk and fireplace, and the weighbridge room. You may be able to see the telephone wire running up the wall to the chimney from the lean-to (fuse wire).

The little green coal office (Weedon Bros) strictly speaking was gone by 1946, but I liked it principally because, as Paul Karau in his book complained, it had craftily skulked out of sight when anyone approached the station with a camera. Only in one picture can you just spot the roof. There is a recollected description of its dimensions and interior layout by someone, which made it possible to construct a model. The casual spectator on looking at my layout would not and could not see Mr Simmonds (a model naturally), standing in the office doorway. You would need a mirror to see him, and there he would be!

The pillar tank is a modified Ratio kit – what more can one say? Except that the chain supplied, which would do to anchor the *Queen Mary*, has been replaced by one of a more delicate nature, thanks to Gareth Jones of *Ruabon* fame (RM February 2004).

Another modified kit is the grounded horsebox used by the loco-men (a cosy place, it is said). This is a vandalised GWR diagram N13 horsebox, a Blacksmith etched brass kit. The platelayer's hut next door is scratchbuilt apart from the row of fire buckets arrayed on the trackside wall. Arranged round the door frame are five horseshoes made from plasticard... a little touch I like, and just as the prototype. The walls were painted matt black and weathered with pastels to give that tarry look. As to the cycle shed, on completion I glued it in place (as are most of the structures) and then realised I had omitted to include some bikes! Too late!

The coal stage, signal box, milk platform, cattle dock, and carriage shed are also all scratch-built. All fairly straightforward in the main, but the carriage shed was a bit of a problem – a girder and corrugated iron structure with a curved roof. I used Plastruct H-section strips for the girders and plasticard corrugated sheet, the whole assembly fixed to a base including the track, painted and glued into the baseboard before the first layer of cork sheet was laid.

The point rodding and facing point locks (one at the station throat and the other at the entrance to the loop) are purely cosmetic, but I think, are left out far too often on many layouts.

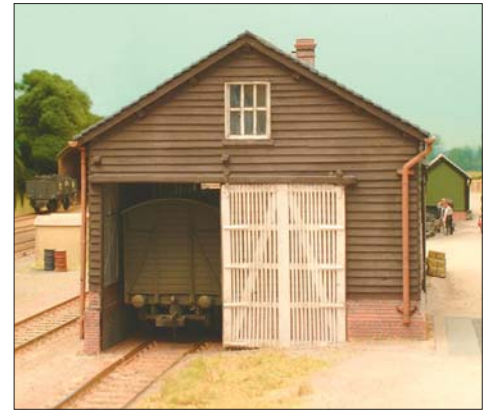
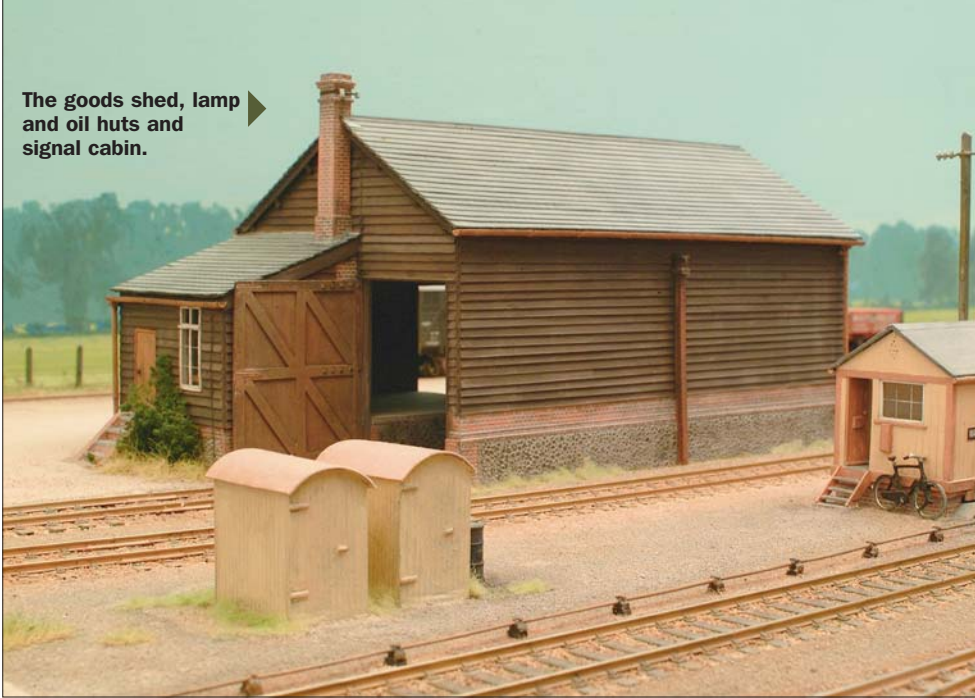
The bonfire next to the platelayer's hut is given a bright glow at its centre by crumpled red tinsel, I like that a lot and often point it out to visitors.

Most of the people dotted here and there are the excellent figures from Monty's Model Railways, as are also the crews of the locos.

This brings me to the subject of motive power and stock. Both 57xxs are Bachmann

◀ The carriage shed. 9640 awaits release to the loop.

The goods shed, lamp and oil huts and signal cabin.



▲ The goods shed from the cart way. The sliding door was later demolished by a heavy shunt and replaced by one of a slightly different design. Alongside is the weighbridge.

and run superbly. In the photographs they have the numbers they came with, but subsequently I have renumbered them to satisfy the purist who might know the running numbers of the 57xxs at Watlington at that time: 9643 became 9640 and 6752 became 4617. In 1946 GWR locos were transformed from wartime black to the lovely Brunswick green. Mine are green!

Goods stock is mainly Bachmann, but there are some Coopercraft, Ratio, and Blacksmith kits. The autocoach is Hornby, as is the spare coach which is, temporarily, a clerestory eight-wheeler.

I have kept the whole layout simple. Uncoupling is done with a shunter's pole. There is nothing high-tech, no complicated wiring, but I do like inertia control, it is smooth and satisfying. Track maintenance is by vacuum cleaner and an oily rag. A little oil on the track smoothes away those 'jerky bits'.

The whole layout is lit by four overhead spotlights spaced at about 4' intervals. I find that quite adequate.

As regards running to the timetable, it covers 24 hours including all the details of what goes on while trains are not actually running, all shunting movements, and even details of staff.

9640 takes water at the pillar tank. The line to Princes Risborough can be seen curving away in the distance.



Train movements are run to actual time, but time between trains is cut by moving a stopwatch forward as required, or stopping time altogether...you have to eat sometime!

I have to say that the whole experience has been most satisfying, studying the books, building the layout, and running the trains as prototype. I would recommend any railway modeller to build a prototype rather than a fictional model. You know just where you are with it. You do not fall into the trap of not knowing where to stop and ending up with a cluttered layout or possibly making mistakes that would set a real railwayman's hair on end.

Conclusion

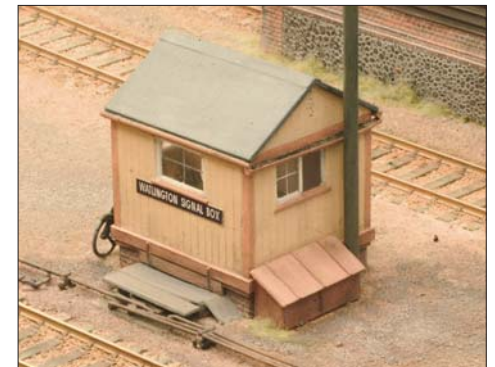
My only regret is that I did not go for scale track rather than 00.

There are still things to do. Correcting faults already mentioned and completing certain tasks before I can say with any certainty that the layout is complete. But are they ever?

In conclusion I would like to thank the following people:

Gareth Jones for his continuous efforts to push me into writing this article – and it took some time pushing, I can tell you!

John Jones, my son-in-law, for contributing his muscle



▲ The signal box was really no more than a covered ground frame.

power to move a rather heavy layout from my wife's work room to my railway room, which entailed negotiating a few hairpin bends and a stairway...but mostly for a wonderful weekend trip to Watlington.

Pat, my wife, for enduring without complaint (?) the use of the work room while the construction of *Watlington* proceeded.

Most thanks, though, are due to Paul Karau and Chris Turner for the compilation of two wonderful books, which obviously involved a colossal amount of research, interviews galore with many people who were familiar with the Watlington and Princes Risborough Railway, and hunting down all those superb photographs. Without their efforts I would not have built this layout or written this article.



Telegraph poles

in 7mm scale for *Long Preston*

The models of these once-common lineside sentinels were constructed by **JAMIE GUEST.**

Look at any of the many 'Then and Now' books on railways that are available and many differences are apparent. From the base upwards the railway has changed. Some things look similar, such as track, but one feature has changed and that is the profusion of telegraph poles in any scene taken much before the mid-1960s. Telegraph poles were a major feature of railway life from the very early days of the electric telegraph in the 1840s. They not only carried telegraph and later telephone circuits, but also block signalling and track circuit information and often the electricity supply to signal boxes and other equipment.

As such any model that represents the railway of that era looks better if it has telegraph

Right: Beyer-Garratt No.47975 on a down freight train passes Elstree on the Midland main line on 30 April 1955. Two pole runs are visible, the one on the left having dual poles.

Photography by Philip J. Kelley.





poles on it. There are several items available in various scales for adding these easily to a layout, but one item that is very rarely modelled is the wires themselves. This is for a variety of reasons but usually because they fall into the 'too difficult to do' category.

When I started on my model of *Long Preston* (see RM December 2005) I put such things as backscenes and telegraph poles very low down the list of priorities, but every time I looked at the prototype photographs my conscience pricked me and that set me thinking as to how we could add telegraph poles to the layout, if possible put the wires in, and still make it easy to erect and take down for exhibition purposes.

The first thing to do was some research into the prototype. Fortunately I had many photographs of Long Preston and found that I was going to need 12 telegraph poles each with 11 cross-arms to make it look correct. The complicating factor was that the Midland Railway used very distinctive double poles alongside many of its main lines and there are no models available of these. This forced the team down the road of scratchbuilding. To do this we needed more information.

A visit to Long Preston revealed the stumps of most of the old poles still visible so we were able to measure their diameter and spacing, 12" to 14" diameter and up to 7' apart. We then looked around for other poles so that we could measure up cross-arms and insulators. We discovered to our horror that poles of that type have almost completely disappeared.

Above left: this shows the run of wires that comes past the station and includes the single pole that lifts the wires over the road bridge as well as showing the T pole by the signal box. Meanwhile the Scotch express heads north having just had 311 attached at Hellifield for the climb of the Long Drag.

Above: one of Ray Clasper's 'breathed on' Lima 4Fs heads south with a Liverpool-bound freight. In the background can be seen the run of wires that goes across the main road to Wigglesworth. Note in particular the single pole behind the stationmaster's house that was used to lift the wires over the road.

Photographs by Steve Flint, Peco Studio.

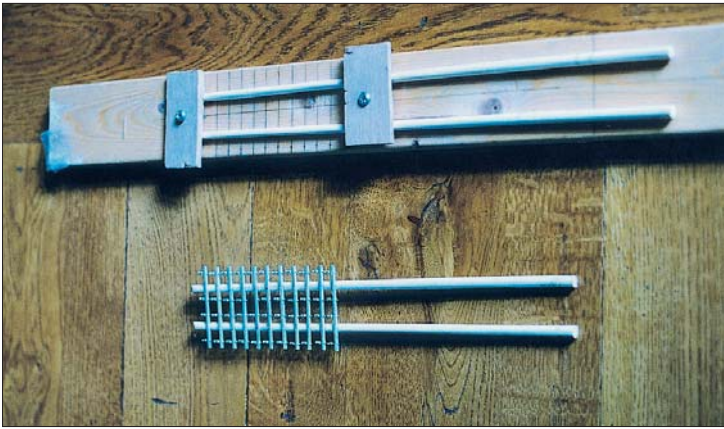
By chance I found an odd insulator pot secured to the side of my church's Sunday school, which dated back to wartime use, so I was able to measure that. Also by chance I found an old post still *in situ* next to Tamworth station platform whilst trainspotting one day. That had no cross-arms but still had the marks of where they had been, so I was able to confirm the thickness and spacing; 3" square at 1' centres. From photographs we were able to deduce the length of the cross-arms which came out at 7' long, each with four insulators, two between the poles and one each side. The study also showed that each pole was of a different length to suit its location and that they were not only inclined towards each other but that each pole was tapered.

We also found that not all the poles were double as there was a single pole to give extra height by the main road bridge and also a spe-

cial pole that had extra arms on it to allow wires to go across to the signal box in a 'T' arrangement. These would need a different design of cross-arm. Yet again research is vital.

The first items were the cross-arms. After much discussion I decided to have these cast in whitemetal. Ray Clasper turned me some insulator pots out of brass and mounted them on 0.8mm brass wire. The arms themselves were made from 2mm square brass section. This was distressed by scratching the sides with the edge of a fine needle file to give a wood grain effect. Holes were then drilled at the appropriate positions and the insulators inserted and the wires trimmed. Two small marks were made with a centre punch to show where the fixing bolts would go. Six of the standard arms for the double poles and one for the single pole were made and sent off to Keith Sutton, of Mid Carr Castings. Keith was able to cast them in sets of seven cross-arms which gave me the required number. These are now available from him as part of his range.

The poles all had to be tailored to fit their individual locations. Due to the fact that this is an exhibition layout they all had to be removable. The scenery was in most cases not strong enough to support the poles. The solution was to look at each location and decide where a suitable base could be placed under the scenery and then measure the total height needed. The height of the lowest wires above the ground varies considerably. Normally they are about 16' above the ground but obviously they need to be able to clear roads and not to



be within reach of someone standing on a fence at the top of a cutting.

Once the full height of each pole plus the length of the tapered section had been worked out, Paul Brearley made them out of straight-grained hardwood. They were initially cut square, then made octagonal with a plane and finally turned in an electric drill and sanded until the correct taper was obtained. The tallest were nearly 18" long.

I then started to assemble the poles. First I sanded the top of each pole to a triangular

shape to accept the metal cap that kept water out of the grain. I made the caps out of thin sheet brass and used Araldite to hold them in place. I then made a jig with two clamps on it that would hold the poles, which I then marked out at 7mm spacing to set the cross-arms, and then set the poles at the required distance and inclination before clamping them. The taper is small, only 4mm throughout the visible length, but it is very important visually. It was vital to get the marks for the fixing bolts as central as possible on the poles. Once

the poles were aligned the clamps were tightened. I then used the edge of a small file to make locating slots for the cross arms using the grid as a guide. I spent some time selecting the correct file for its thickness rather than any other dimension.

The cross-arms were then Araldited into position and holes drilled through them and the poles. 0.8mm brass wire was then put through the holes to represent the fixing bolts. These were then trimmed to length and fixed with superglue. When each pole was finished

Above: the jig on which the poles were assembled. On the top is the jig with a pair of bare poles clamped into place ready to cut the slots for the cross arms and below it is a completed pole with the cross-arms but before the brass caps were fitted and the poles painted. Note the difference in length between these two poles to suit their specific locations.

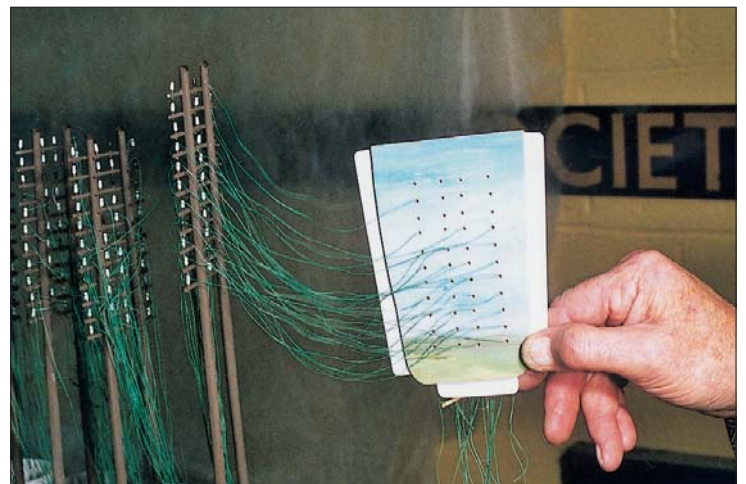
Above right: erecting the poles. Tony Bond holds the keeper board as I move down the inside of the layout planting each pole and then untying the wraps that hold the threads together for transport.

Right: the poles all in position on the keeper board for transport with the board bolted down through the trackbed. Note that to the left of the keeper board one of the permanently fixed poles can be seen.

Below: one of the painted solder ties that hold the threads together for transport. Three are used for each length, each span is between 3' and 4' long. They are put on before the poles are uprooted.



Photographs by the author.



it was painted with Railmatch 'sleeper grime', the pots were then finished in white or brown gloss, with Railmatch 'oily steel' used for the pole caps.

For wires I had decided to use an American product, EZ Line. This is latex-based and is available in light green, rust colour or natural and two sizes. I used the thicker, 0.15mm size in green to represent copper wire. This was bought via the net from www.berkshirejunction.com

As there were 40 lengths of wire and the layout is 45' long I needed 20 spools of line which arrived safely within a few days. The layout was then erected, the poles planted and the wires run out. The pole bases were made from lengths of 2" x 1" timber secured to a suitable cross-member on the baseboard. We discovered that the scenery needed to be reinforced where the poles went through. This was done with plaster bandage and the holes disguised with scenic material. Each thread was tied off to a matchstick at one end then passed round each insulator pot and secured with superglue. One tricky area was the signal box and as the photo shows the wires run across the tracks to this.

From photos we were able to find that the Midland used a wooden trough to get the wires from the pole to the box. This was made from a piece of stripwood, and the EZ Line was placed within and then painted with a mixture of PVA and gloss black paint to represent tar. The signal box post also has a guy-line to a short straining-post. The straining-post is fixed to the baseboard and as it is on a baseboard joint, has had to have a special guard attached when the layout is transported. There would also have been lines going to such places as the station, the Stationmaster's house and down to each signal and track circuit. However I haven't yet gone to that level of detail.

Now for the tricky bit. We had had many ideas as to how the poles and wires could be safely removed and refitted. We even toyed with the idea of stringing the wire for each show, but sanity prevailed. It takes several weeks of work. Eventually after a long car journey together, Tony Bond and I came up with the solution. We decided to start from the end scenic board that has a permanently fixed backscene. The first two poles would be fixed and all the others would be removable with the wires strung. A keeper board was made for the other poles and this is bolted down through the trackbed of the end board for transport (see photo). When the layout has been erected two of us carefully unbolt the keeper board and then I plant the poles whilst Tony moves down the layout with the keeper board. At the ends the wires go through holes in the sky area of the backscene and are wrapped and glued round matchsticks. The far

Left: a portable piece of sky. The termination board for the runoff wires at the Settle Junction end of the layout. It is a carefully-removed piece of the backscene with plastic-card tabs glued on so that it fits neatly in when the layout is erected.

Photograph by the author.



end of the run terminates in a removable piece of backscene that slides into place when all the poles are placed (see photo). At the end of a show removal is the reverse. The whole process takes about 15 minutes.

The EZ Line is non-tangling but does snag onto anything to which it comes near. To avoid this happening the wires are bunched together before removal and tied with white-painted lengths of multicore solder (see photo). As each pole is removed the bunch of wires is wrapped round a piece of pipe-insulating foam and placed in an empty pill container that is fixed to the keeper board.

The final effect was worth all the effort and makes a major contribution to the overall appearance of the layout. The total cost was about the same as a bogie coach kit but was I

Above: this shows the run of wires that terminates at the signal box and the wooden trough that takes them into the box. Also note the straining post that keeps the T pole upright and the different shape of the T pole. This detail is all taken from photographs.

Photograph by Steve Flint, Peco Studio.

feel well worth it. The research is however vital as different companies used differing styles of poles but they form an important part of the visual feel of a period layout. Many onlookers said it would never work but the system has now been put up and down twice and functioned very well. Though the layout is in 7mm scale, the whole system could be used in 4mm as EZ Line produces a thinner version for that scale.

Abergwynant

A truncated Cambrian Coast branch in BR days

NEIL RUSHBY challenges established layout design principles to create this small-space scheme.



A long time ago I trained as a design and technology teacher. Then the buzzwords were 'criteria', 'design brief', 'evaluation', 'specification' and others, similarly pompous, that implied the design-and-make process was an orderly logical affair. Thinking like this gives solid, safe, predictable results that meet the requirements set out at the beginning of a project. But it's a deadly dull way of going about things that leaves no room for heading off at tangents, for experimentation, or for inspiration. Applied to a hobby it can turn a joy into a job!

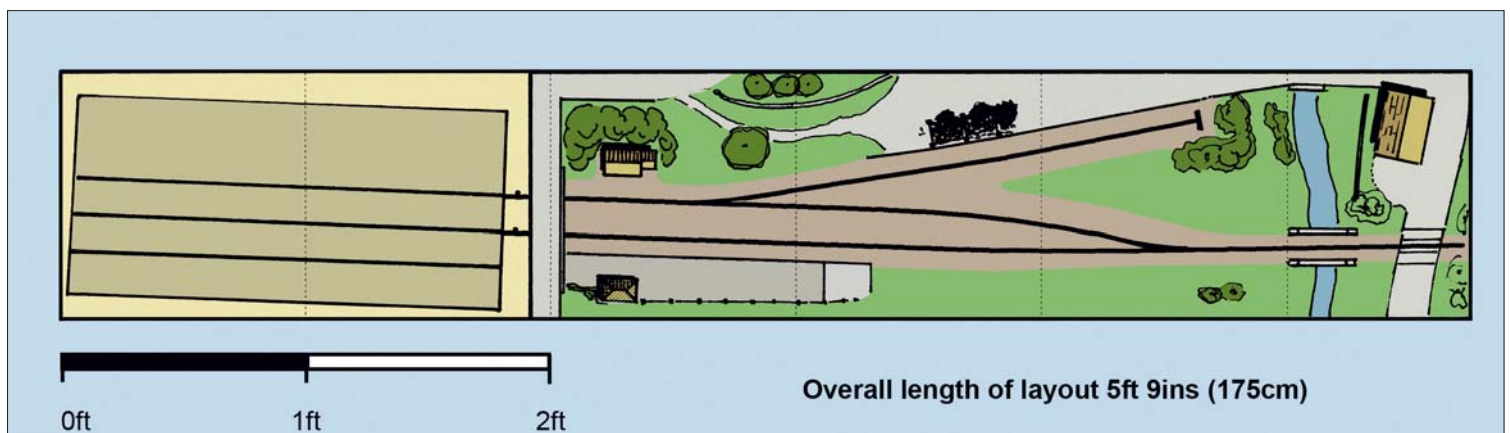
Grand designs

As you may expect, therefore, *Abergwynant* did not start out with a highly specified plan. I had a vague idea of what I wanted to achieve, but part of that was to experiment with what was possible and to let the materials to hand dictate construction. If I know exactly how a layout will go together, look and operate before I've cut the first piece of timber then part of me says 'why bother?' It's a bit like doing a jigsaw, lots of time and effort, but you know what the end result will look like; better to spend that time doing something original. I

hoped that the layout as a whole would evolve in the same way that a piece of art does, rather than follow the precisely defined path of an engineering project.

Megastructures

When construction started I had many years away from the tyranny of car ownership, the garage bills, the cost of petrol, car tax and insurance. As a result I can afford to work shorter hours and play longer. The downside of this utopia is that taking layouts to exhibitions means expensive van hire or persuading



Left: Derby Sulzer Type 2 No.5091 arrives in the loop with the coast line pick-up freight, as a Park Royal DMU on the Pwllheli to Shrewsbury service idles at the platform.

Right: green-liveried 5092 retrieves an empty 16T mineral from the coal staithes. Coal was one of the last remaining regular traffics carried by the daily pick-up. Most photos of freight traffic during the diesel era show a mix of minerals and gunpowder vans, almost to the exclusion of everything else.

Below: having dropped off a coal wagon and shunted the brake van to the other end of the train, 5091 will couple up and head off back to the junction at Morfa Mawddach. It will then head north towards Penrhyndeudreath where the empty gunpowder vans will be left for reloading.

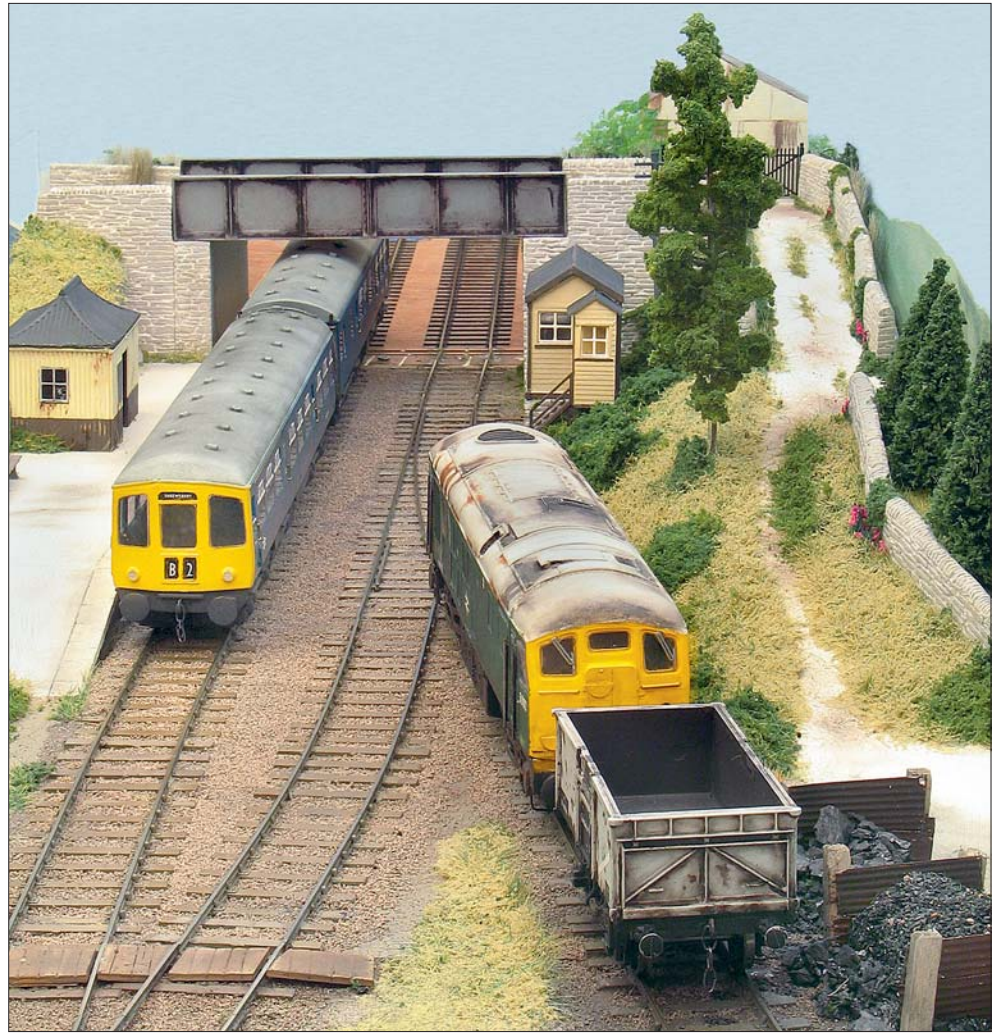
friends that they would like the pleasure of chauffeuring me and my railway around the country. I therefore wondered if it would be possible to build a proper layout in 4mm scale with main line trains, passenger and freight (not another diesel depot), and for it to be compatible with public transport.

To do this I reckoned that the unit size of the boards would have to be pretty small, and that the legs needed to fold up in some thoroughly ingenious way. Because legs and boards have to fit together, work progressed on both at the same time. As I am by nature an ecologically-conscious miser, it was also important that costs be kept as low as possible.

The boards are three 23" x 11" medium density fibreboard shelves given to me by a friend and framed at the ends with more MDF off-cuts. The side rails are planed down matchboarding, recycled when I dismantled the kid's cabin beds. These components are glued and pinned together in a pretty conventional way.

Inspiration for the supporting sub-structure came from watching Dave Tailby's 'Martini' layout *Jubilee Sidings* being set up at Microdiesel, Kettering. Part-way through erection, opinions were offered that it was a nice timber model of the Forth Bridge; but the notion of a cantilever framework had stuck in my mind! I realised that it was not necessary for the legs to reach the ends of the boards as the weight of the centre board, along with the depth of the inter-board interface, would give stability and permit some overhang. A separate support structure 48" long was constructed using reclaimed matchboarding for the top rails and leg cross-pieces and 1" x 1" pine for the legs. Because I wanted the layout to be at a reasonable height (I'm over 6' tall and don't enjoy an aching back and cricked neck) and the boards are relatively narrow, I arranged for the legs to splay outwards front to back. With hindsight I wished that I had done the same side to side, as the extra stability this imparts for just a few degrees of lean is well worthwhile. Using light section materials for the sub-structure aids portability, whilst the way in which the materials are used, ensures sufficient strength.

I also built end pieces, which allow the boards to be crated up in traditional style, the stack being three deep. The size of this block is determined by board depth and scenery. Therefore this chunk of the layout can't be



reduced any further, whereas the leg structure can; all the components are joined by bolts and wing nuts or are hinged. Like tent poles, the leg components are bundled together for transport in a bag. The bag happens to be made out of the leg sections of a pair of my jeans which met with an amusing seat-related incident on the allotment – followed by a draughty walk home!

Points of view

An outbreak of conventionality saw the points (both of them) constructed quickly to EM gauge using copper-clad sleepers, rail and point plans from the EM Gauge Society. The tiebars are a development of my usual method combining quilting pins, square-section brass tube, cotton and Araldite. These are jointed onto a section of rail, which in turn are

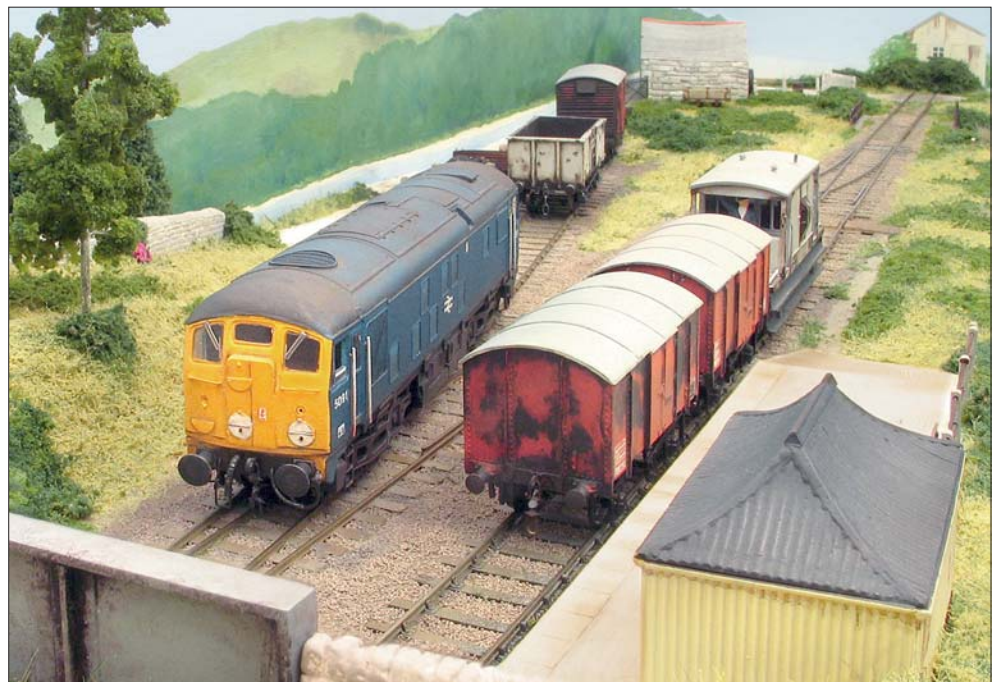


Fig. 1. Point and tie-bar linkage

Wire switch loop inserted through holes in linkage and soldered. The loop, drops over the toggle switch which is mounted at surface level.

Extra long quilting pin - upper portion smeared with araldite and sewing cotton wrapped around (to act as an insulating barrier layer).

Tiebar assembly.

Linkage bar.

Hole drilled, washer soldered over the tiebar 'spike' and the excess trimmed off.

Two equal lengths of square tube are araldited over the cotton, taking care to leave a gap between them. The gap can be filled with a little more araldite and smoothed over.

connected to miniature toggle switches acting mechanically as point lever and electrically to change frog polarity. The diagram (Fig.1) should make this clear. I know this is going to tempt fate, but, I've never experienced a tiebar failure since using this method.

The electric 'knitting' under the board is pretty standard stuff. In the interests of durability 1/4" jack sockets and plugs are used for the inter-board connections, and just in case it all goes horribly wrong the wires are colour-coded and have intermediate terminations in a 'chocolate block' connector. Control is by a handheld Gagemaster controller: I would never now contemplate a panel-mounted unit, such are the improved ergonomics.

After wiring and testing the track was spray-painted in a mixture of pale grey and mid-brown. Ballasting was with the finest grade pale stone that Woodland Scenics produces, tinted before application with powder paints and stuck down with dilute PVA after brushing in place.

Location

Concurrent with all this physical activity, thoughts were turning to a setting for the layout. It's no secret that the Cambrian Coast has a draw for me that most other parts of the rail network do not. This choice was also compatible with my desire to run 'proper' trains, the difficulty being that there were no longer any branch lines off the coast line in my favoured post steam/pre-TOPS era. If I cobbled together a scenario involving a fictitious branch then in all likelihood passenger services would have had blanket coverage by DMUs, with general freight unlikely to have survived. Now whilst this may have been typical, I had a hankering to run an imaginary Pwllheli portion of the York-Aberystwyth mails. Also on the must-have list was the coast pick-up freight, partly because I have a soft spot for 24s, and partly because one of the earliest railway photos I took is of this train shunting at Towyn. Try as I might, I just could not squeeze a section of the coast route into

the 5'9" x 1' dictated by the size of the three boards.

The resulting logical conclusion (hollow laughter) was to mess about with history by keeping open a short length of the Dolgellau line from Morfa Mawddach to Abergwynant. To try to explain why the line was kept open I have blessed Abergwynant with a quarry that supplies road stone and ballast. As virtually all this traffic would be heading south towards Machynlleth and points east, the triangular junction at Morfa Mawddach would be retained to cater for this. Some trains travelling up and down the coast therefore reverse at Abergwynant before setting out for the remaining half of their journey.

This is not as improbable as it sounds, since I do remember through services reversing round the triangle at Shipley before platforms were built on the Leeds-Skipton chord.

Even by employing this subterfuge, I still could not fit the entire station into the space I had, so only the east end is depicted. The station approaches, quarry and sidings are off scene and, like the remainder of the British Rail network, are represented by a three-road traverser. An overbridge marks the start of the modelled area, spanning both the platform and loop. A short siding for general freight remains, branching off the loop by the former Cambrian signal box. Past the end of the platform the shunting neck passes over the Afon Gwynant and a rough track before petering out in a clump of weeds and bushes. At the far side of the crossing is an agricultural engineer who has set up in business in one of the old

Left: heading under the bridge 5091 passes the signal box at Abergwynant; the small window in the front is a characteristic of former Cambrian Railway cabins.

Right: in contrast to the industrial activity of the quarry at the seaward end of Abergwynant the eastern end is much more leisurely, though traces of a busy past are apparent in the remnants of narrow gauge track and an old wagon slowly decaying behind the agricultural engineers.



quarry workshops. Prospective passengers have an ex-GWR pagoda shelter provided for their protection; access to it and the platform is from the opposite side of the bridge.

Structures

Structures on the layout are a mixture of home-cast plaster, and commercial plastic mouldings, some much altered, some a combination the two.

My main aim is to avoid the easy recognition of commercial offerings. Though ours is a multi-faceted hobby, with room for collecting tinplate, extreme scratchbuilding with inside working everything, and all shades in between; I believe that the vast majority of us seek to portray a believable scene. In this context one of my pet hates is to be aware of the origins of layout elements; structures are often the big giveaway. Therefore all commercial offerings come under scrutiny to see how they may be altered so that their familiarity does not destroy the illusion of reality. For instance, the bridge over the Afon Gwynant is a pretty standard Wills item, with additional depth to the girders from Plastruct strip. The pagoda shelter is also a Wills item with a window inserted into the end wall; the glazing has been artfully distressed to give the appearance of a broken pane.

More radical has been the surgery to 'Cambrianise' the Wills ground frame. The front windows have been filled in, then opened out again for the characteristic single central frame. A storm porch has been added to the side, and the whole raised onto a home-cast low stone base. Steps and the handrail up to the box are Plastruct items: these are so easy to use, I don't know why they are not used more frequently. The girders for the overbridge are Peco items cut down in both length and depth to give a lighter structure more appropriate for its function. The consequent missing framing was restored with strips of 40 thou plasticard cut to width.

All the walling, bridge abutments, signal box base and the agricultural engineer's workshop

are home-cast items in plaster of Paris. I use wax for the masters and liquid latex for the moulds; but the process is worthy of an article all to itself so I'll spare you the details here. Because of the process I use, and the modest cost of the plaster I tend to make big batches. My website 'Rushby's Railways' has some details (<http://homepages.tesco.net/~n.rushby/>)

The culvert towards the rear is a cardboard scratchbuild incorporating a short section of plastic tube; the core of a bus ticket roll!

Barely qualifying as a structure, the coal cells have uprights formed from distressed balsa and dividers from home-made corrugated aluminium sheet. The foil packaging from cat food provided the raw material for this which was smoothed out, held firmly onto the surface of Wills corrugated sheet, and embossed with the sharpened end of a paintbrush. The resultant sheet is thin and ribbed on both sides. No pussy? Then eat takeaways!

Panorama

The edge of the landforms were defined by profile pieces cut from thin MDF, glued and pinned to the board edges. For infill I wanted to use foam, the expanding type sold for sealing gaps. Previous bad experiences with this motivated a more measured approach than aiming the nozzle, pressing and hoping for the best.

This time a cardboard box and an old washing-up bowl were lined with newspaper before having a layer of foam sprayed in. As the foam expands to several times its initial size, there is no need to fill the containers: in fact a thin layer sets better and to a more even density than a thick one. Leaving overnight to set, the foam blocks were popped out of their makeshift moulds and rough cut to fit their locations with an old breadknife and blade from a hacksaw. After sticking down with PVA, final shaping with coarse glasspaper took place. To seal the surface a skim mix of cellulose filler, fine sawdust and yet more PVA was brushed over. This fills any gaps, smoothes the transition between surfaces and provides a

durable crust that will not crack. A drop of powder paint added to the mix ensured that it had colour all the way through, providing a scuff-proof base for the following treatments.

Grass, undergrowth and weeds are a combination of electrostatic flock fibres from Heki, ground foam and tufts from Woodland Scenics, and lichen thickened up by being soaked in PVA and rolled in ground foam.

Colouring is important. I try to find a master photograph of the area being modelled with the weather conditions I want to depict and set in the season of choice. This master shot does not need to be a work of art, but the colours have to look right, and it should include all the elements you are modelling so that the correct relationship between colours can be maintained. I would suggest that the minimum requirement would be for field, hedge, trees and sky. Other desirables would be road surface, local building and roofing materials, rock outcrops and distant hills.

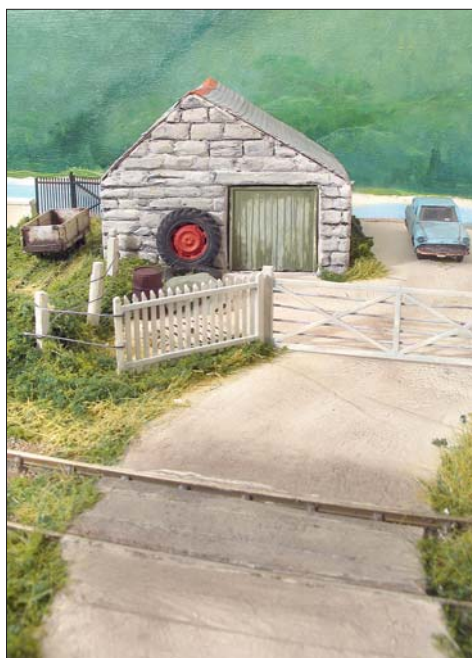
I try to blend materials used to match the elements in the master photograph as closely as possible. You may notice that though grass, undergrowth and woodland are all green, the shades vary considerably. As a rough rule of thumb grass is the lightest shade, weeds and undergrowth darker, and woodland darker still. This colour awareness should continue onto the backscene, again matching from the master photograph

In the concluding part of this article, next month, I will cover the scenic detailing and describe the locomotive and rolling stock items in use.

Abergwynant is appearing at a one day show in Thirsk, North Yorkshire on Sunday 9 July (see Societies and Clubs pages for full details).

Below: having uncoupled from its train, 5091 draws forward onto the stub of the line to Dolgellau left in place as a headshunt. The bridge over one of the small watercourses draining into the Afon Mawddach is a modified Wills kit.

Photographs by Steve Flint, Peco Studio.



City of Truro in 4mm scale

The famous engine created for 00 gauge with Dapol and Branchlines kits

A locomotive which inspires fond memories, as related by **MARTIN WICKS.**

This is definitely not a 'how to' article – we would not be so presumptuous – this is more a 'this is how we did it' article and here are a few hints and tips that we picked up along the way that maybe useful for the average railway modeller wanting to build such a model.

My good friend Rob Cooke came to me and asked – Rob not being railway minded – if there was an RTR model of the *City of Truro* in 4mm scale 00 gauge. To which I replied 'no, but there is a conversion of the old Airfix/Dapol *City of Truro* by Branchlines or a whitmetal kit by Nucat – I think.' I asked Rob why he was interested in such a model and he went on to tell me that his father, Richard, had very fond memories of *City of Truro* when it was in and around his home town of Wootton Bassett, near Swindon, in 1957.

I had seen Richard's condensed 4mm scale model of Swindon station – circa 1950s – and the penny dropped – Rob said that Richard would have liked a working model of *City of Truro*.

Richard also had an ancient copy of RAILWAY MODELLER (May 1961) which contained an article entitled *Motorising the 'City'* (pp.112-114) that we managed to secret away.

Rob has always been there to help when I have needed it – which seems to be often – and so I immediately offered to purchase the Branchlines kit and build the loco for him. Some time later after some research Rob decided to buy the Branchlines kit and make



the model himself with my guidance – I was aware that Rob would want to build the model for his father, but I offered anyway. I had purchased 7mm scale narrow gauge items from Branchlines and knew that it is a good company with which to deal. After Rob had been persuaded that the price tag of around £80 (at the time of writing) was a reasonable one for the complete kit, it was duly ordered.

One Tuesday evening Rob turned up at our house with the kit under his arm and a smile on his face; we opened the package, checked the parts – some lovely etched brass and nickel silver items, with wheels, motor and gearbox all included and of course the instructions. We also fettled and prepared some items as we couldn't help but get started! We decided that we would meet every Tuesday evening to work – or discuss work on – the model. We also decided that the model would be built in

secrecy as a surprise for Richard for Christmas 2005 – we hoped! Rob is a good modelmaker and I had seen some of his model aircraft, including a very nice model conversion of the prototype Spitfire, and I told him that I thought that he was up to the task. Rob referred to me as his 'consultant' and in the past has been very kind about my model making abilities – so between us we should be able to get the job done.

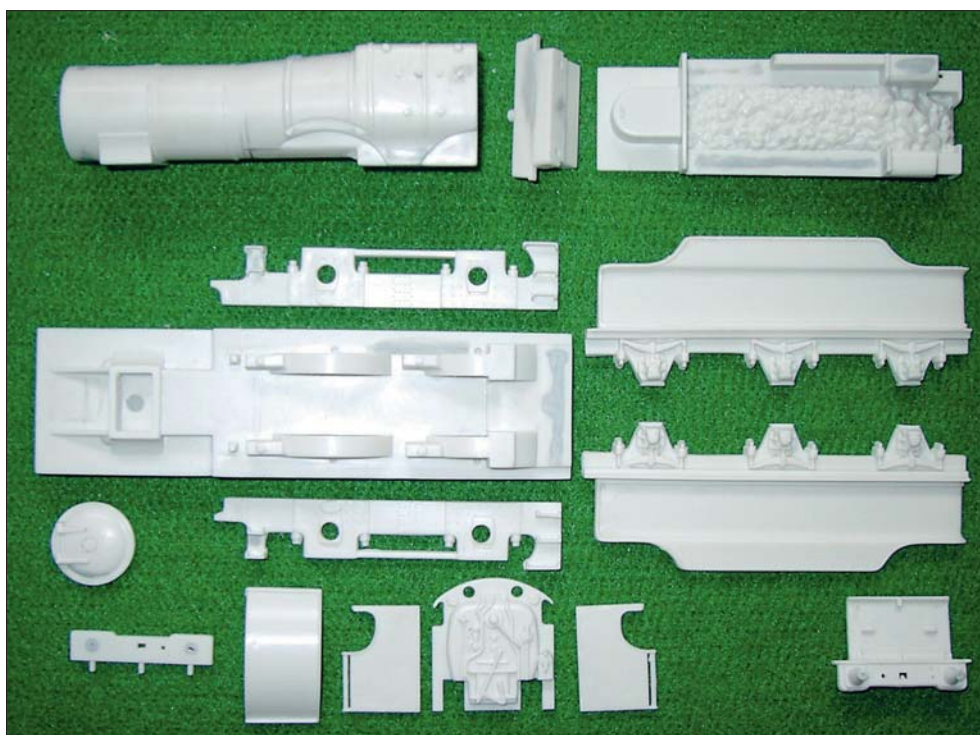
The Dapol superstructure and bodywork

We decided fairly early on that we would model the loco in 1904 livery as preserved. We thought that this would not only fit in with Richard's era, just, but that this was the most flattering of liveries and one of the most challenging to paint.

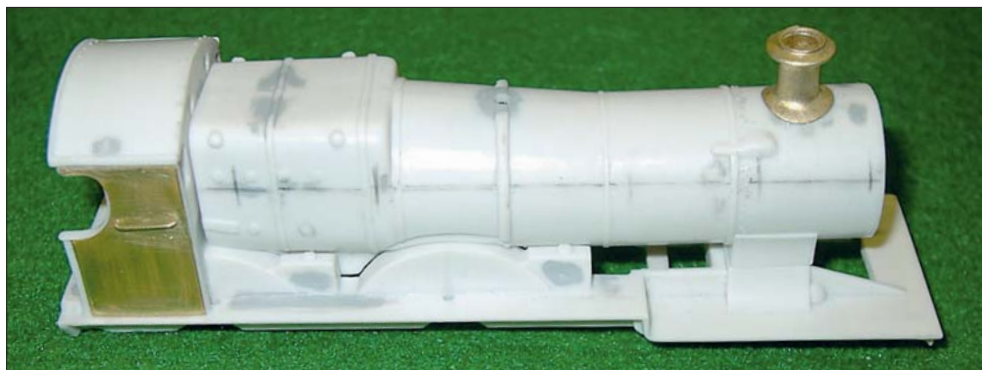
Rob also purchased a second Dapol kit in order to try out any new modelmaking techniques with which he might be unfamiliar, and also to use to as a test piece for cutting and modification etc to ensure that we had followed the instructions correctly – a fiver well spent!

Above: the loco almost complete with all parts lined and painted. We found it best to use a gloss or satin finish and then, when dry, transfers from Fox and HMRS were applied more easily, using various products to aid settling the decals onto the model with a final coat of satin varnish (Humbrol) being applied to finish and give the model a more pleasing scale appearance and to 'tie in' all the various colours and textures of the paints applied. I was somewhat disappointed for Rob that he was unable to obtain a bespoke set of transfers for this model and had to 'cut and shut' many generic styles to suit. We finished the process off with some very subtle weathering using photographs of the preserved locomotive as a guide.

Left: in this photograph one can see the Dapol kit of parts. These will need to be filled, filed and tidied with the complete removal of unnecessary details. Dry fitting at this stage will help one to see how well the kit of parts will go together. Note that the running plate aperture(s) still need to be cut and sanded.



Right: a dry test assembly of the already-glued boiler to the running plate. Judicious use of plastic solvent, filler and Araldite allows softening and better alignment of all components. Note the removal of the boiler topfeed pipework and the chimney. The large apertures in the centre of the running plate, below the smokebox, caused some consternation but checking at the Gloucestershire Warwickshire Railway (GWR) and with Rob's photographs from the day there proved everything to be correct. Note: we made this aperture larger than indicated on the Branchlines instructions as we felt that this was required to tie in with the prototype and we also then added a reinforcing strip below.



Below: the kit assembled including majority of brass 'super-detail' items. Note the correct handrail pattern on the cabsides.

Photographs by Robert Cooke.

Even looking at the plastic Kitmaster/Airfix and the reworked Dapol kit through both kind and nostalgic eyes, the kit's mouldings were going to provide us with many challenges – the design was, after all, forty-plus years old, see photo below left.

Most of the mouldings were peppered with 'sink marks' and some hot gas marks and therefore would require a great deal of work and re-work to bring the plastic kit aspect of the model up to the required standard, and even then some compromises would have to be accepted.

All in all, it took Rob the best part of fifteen hours to remove the handrails and other moulded-on details and then file, fill and fettle, with additional filing and fettling also being carried out by me at this stage in the project. The name of the game with this kit was patience and to take one's time, so as to get things right.

Rob and I decided that rather than use the plastic strip as supplied in the Branchlines kit for the boiler bands, we would leave the original 'moulded on' boiler bands in place. The reason for this was that, to remove them, would mean removing what we felt was too much obvious rivet detail – obvious on both the prototype and the model. This meant more filling and fettling and indeed more care when removing the moulded handrails and it also meant that that moulded-on boiler bands would need filing down so as to reduce the effect of their overscale appearance, but we felt that this was worth it in the long run. We were later told by a friend that in the real world, the rivets on a locomotive cannot be seen at 100yds and at what distance would the model be viewed when working on its layout?

I worked on the model intermittently for over five hours, with more fettling and filing and the fitting of the etched cabsides, using Deluxe Materials Rocket 10-20 second gap filling cyano 'superglue': the etched parts required some slight reworking in order to provide a good fit on to the Dapol cabsides.

I also spent some time ensuring that the correct pattern of handrail was fitted to the cabsides and then went on to build the gearbox. I now remember why I changed to 7mm scale!

We wanted to build the gearbox early on in the project to ensure that it would fit correctly

within the superstructure. We were also going to be using a flywheel that Rob had turned down himself to his own design. The gearbox is relatively straightforward to assemble and solder, but as I mentioned before, to my eyes it looks so small!

One point of note for the novice solderer – don't worry I am not that far ahead of you! – is that the bearings for this gearbox are relatively small and rather than 'tinning' them before soldering them I would recommend 'sweating them in' otherwise they will not fit four-square and true.

By this I mean coating the bearing journal, the hole in the gearbox mount, with a good quality flux, but try not to get too much on the surrounding area. I use Andy Duncan's general purpose liquid flux and place the bearing in the journal, after first checking that it will fit snugly i.e. dress/adjust as appropriate, and then add a small amount of solder and some heat and the capillary action will do the rest! The key with any soldering is cleanliness, the correct iron, the correct solder and the correct flux. For this aspect of the project I used an Antex 18w iron, Duncan's 145° solder and Duncan's flux.

I always clean the area to be soldered with a small glassfibre brush; clean wet-and-dry paper would also do the trick. When folding and soldering the gearbox I checked constantly that everything was square and true, both on a flat surface and with a setsquare. It is sometimes useful to use a dummy axle or one of the axles from the kit set into the gearbox after all the folding work is done, with the bearings having been placed in their journals and strengthening (solder fillets) made along the etch fold lines, to ensure that the journals line up with each other. Rob turned down the flywheel from some scrap brass, so as to provide smooth running and inertia.

We noted some deformation around the firebox area and also some in and around the boiler. In order to have the correct cab and boiler height and the porthole windows in full view, some more filing and fettling was

required in these areas along the base of the firebox.

We found it beneficial to start to fix the boiler to the running plate from the firebox end and twist the boiler ever so slightly to achieve a square and true fit along its entire length; all this whilst gluing the boiler on was a bit of a challenge to say the least! See photo above.

The front side-mounted windows also needed some reworking to get the correct shape. The etched brass overlays on the splashes were straightforward to fit. The smokebox door also required attention in order to achieve the correct shut lines around the door. The unwary may think that the door is a larger diameter than it actually is. Reference to photographs of the prototype are essential for this sort of work.

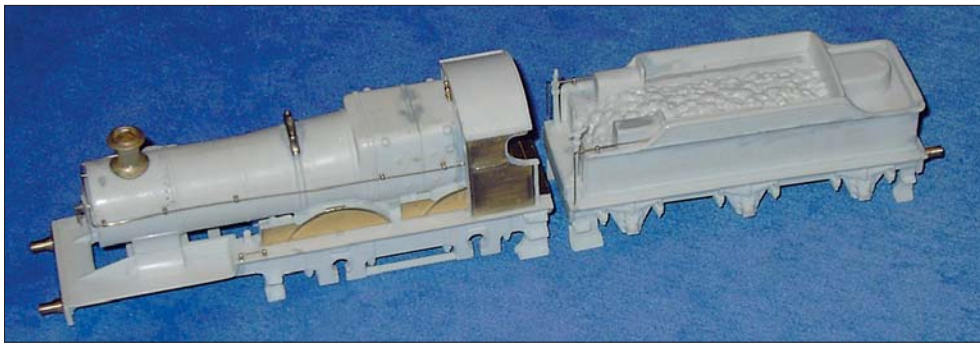
The main handrails were carefully marked out, with holes drilled, and then duly fitted as was the smokebox door dart and other such details. Rob found it beneficial to leave the handrail wire hanging under slight tension for a couple of days to straighten it out somewhat and to make fitting much easier. On the subject of handrails for the boiler area, we found it best to mark out their positions, drill out the appropriate holes, locate them and then glue them *in situ*, from the inside with a cocktail stick liberally coated with Araldite. This made the whole process a lot less messy.

Loco chassis and sideframes

The Branchlines kit has sufficient parts to make several types of GWR 4-4-0 such as the 'Bird' Class. Reading the instructions very carefully is therefore a must as is referring to photographs and drawings of the prototype. Photographs are always useful, as drawings, in my experience, sometimes have inaccuracies and tend to show the designer's original intentions prior to manufacture.

For the 'City' Class, the existing Dapol sideframes are used with the option of fitting the Branchlines brass steps. Although we manufactured these steps, we decided at the last minute to leave the existing moulded steps in





Left: the loco and tender assemblies ready for priming.

place as they were fairly well represented and removing them would mean losing rivet detail.

A point of note is that my preferred method of removal of the parts from the brass frets is by way of Xuron cutters, Knipex side cutters or if really inaccessible then a Stanley knife – all used with great care so as not to distort the etch! It can be argued that most rivet detail on this model will be overscale, but that this detail helps to add 'solidity' and 'weight' to the appearance of the model.

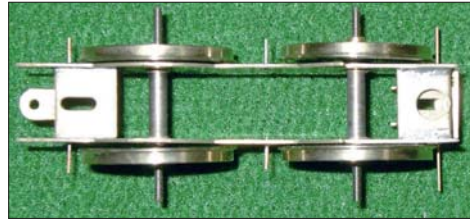
In the past, on military and aviation models, I have reduced rivet detail through very careful sanding so as to give a more scale appearance, but on *City of Truro* this aspect was helped through painting.

At least there was some detail on the Dapol sideframes and it didn't detract, we thought, from the overall look of the model as our adding or removing extra detail here may have done. One has to know where to compromise, where to start and stop, on any model conversion or super-detailing exercise.

The reinforcing plating is, in the later preservation era, one complete solid reinforcing plate from front to rear coupled wheels. I have identified that this is the case back until 1991 but it could also be so prior to this date – so modeller beware, if you are representing the loco in either its later or earlier restored/preserved state. We were building the model to represent the loco as restored in 1957 and so we were able to leave the Dapol sideframes as are, i.e. with two distinct reinforcing plates.

The main brass chassis assembly was assembled using a home-made jig consisting of machined steel face with 1/8" studs to act as dummy axles. The brake gear was dry-assembled and it was found that a small modification was required. The position of the brake hanging rods needed to be modified in order to get the correct angles of the actuating rods. The hanging wires were removed, bent into a 90 degree 'Z' shape and re-soldered. Using this method and, with the brakeshoes ground off, an acceptable appearance was then achieved. Because of the nature of two joining points to the 'Z' bend, there was a significant degree of adjustment available. The brake gear on the loco may need further adjustment by way of drilling additional holes in the chassis frames, as these items would not align well on this particular model. The reader may be luckier with his model.

Another point to note is the front bogie. A large amount of axle clearance is needed to be cut into the plastic sideframes and the axle



pinpoints need dressing down to fit. Additional washers were slipped on to the axles to reduce lateral movement. A main point of note is that the mounting lugs for the plastic frames are bent up and the plastic is pressed onto these lugs.

A modification was made to these lugs by snapping the folded part off and soldering an off-cut from the chassis kit onto the lug. This allows the distance between the bogie sideframes to be increased slightly and thus increases free play/ease of running.

Tender and tender chassis

The tender required similar treatment to the locomotive body in terms of the removal of moulded detail.

I use the Bill Bedford handrail gauge tool for

Centre left: the loco chassis and sideframes are a fairly straightforward affair but one must be careful in selecting the correct parts in order to ensure that the 'City' class is modelled and not a hybrid of a 'Bulldog' and a 'City' in terms of the modified frame reinforcers etc. We chose to solder the top hat bearings into the lower of the chassis journals. There are two 'settings' for these bearings, so that the other classes, with differing wheel sizes, are catered for. It is also worth reaming the journals slightly in order to ensure a perfect interference fit. The axles for both the loco and the tender may require lapping (with very fine wet-and-dry paper or a coarse toothpaste) then cleaned to a shine after lapping lightly to provide a better fit and free movement.

Below left: the tender chassis with modified brake hangers. As the only 'top hat' bearings included in the kit were in the motor and gearbox assembly pack, the axles would have to run in tube bearings, rather like an automotive live rear axle within its axle casing. In fact soldering tube bearings, as opposed to 4mm scale top hat bearings, was a lot easier. The front and rear (tender) brass axle bushes were extended to give a more accurate back-to-back distance and to prevent the wheels from fouling the brake gear/water scoop actuating lever. The actuating rods for the water scoop were fitted, despite us not fitting the water scoop, as these can be easily viewed from the sides, and the same also goes for the brake gear).

Below: the loco and tender are now in their basic colour scheme prior to detail painting of the backhead and other items and awaiting lining.

any complicated handrail work in either 4mm or 7mm scale, with larger SM32 work being carried out on a small home-made wire bender which is more suitable in the use of heavier gauge handrail wire, welding rod, brass rod or whatever else one can lay one's hands on.

The tender was a bit awkward to assemble with many aspects of the moulding conspiring to stop one from putting the thing together four square straight and true!

Rob did his utmost to put the tender together neatly using good modelmaking practices, but this approach didn't work! He asked me to have a look and I was able to assemble the



Right: Railmatch Indian Red and Loco Green were used to good effect. A point to note with the chassis parts, is that, prior to priming, one should degrease them with an appropriate degreasing agent or solvent. These chassis components were then scarified slightly, primed, and then airbrushed with the Indian Red. Note the correct pattern handrails on the front of the tender.

tender virtually true whilst leaving some gaps for filling later – this was preferable than trying to glue all the surfaces together and the tender being out of true. I was able to get the two sides and back of the tender straight and true, with the problem area being the front. This could, when the solvent welds were thoroughly dry, be reworked to shape.

The brass chassis fits between the Dapol tender frames/axleboxes and went together relatively easily as long as care and patience were used.

Once one is happy that the chassis is four-square and true then we would advise running a small solder fillet down each inner 90° bend for strength, rigidity and to maintain trueness. We also chose to use the brass tube provided within the kit as axle housing tubes as opposed to using individual bearings.

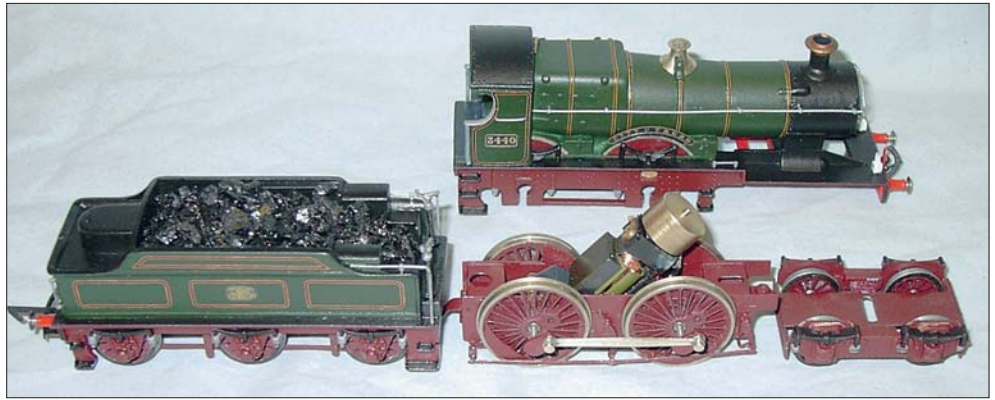
The trick when using this technique is to ensure that one takes into account the back-to-back measurements. We had to true the wheel centres in a lathe to ensure that they sat squarely upon the axles and to solder the tubes into place so that they were equidistant whilst taking into account both the chosen gauge and thus the back-to-back measurements. Small washers (with the appropriate inside and outside dimensions) can also be used as spacers as an aid in this aspect of the construction.

Painting

The model was thoroughly cleaned in warm water and Cillit Bang and then left to dry in a dust free box. According to the instructions on the Cillit Bang 'this product is not suitable for brass', but it seemed to bring the brass super-detail parts up a treat – perfectly clean and perhaps now slightly etched by the Cillit Bang no doubt. The model was then primed using Halfords acrylic primer and when dry, after being left for 24 hours, was checked for any imperfections and reworking. After this work was done the model was sanded with 2000 grade wet-and-dry as and where appropriate before the final finish was applied.

We decided on the use of Railmatch paints and to airbrush the model as we felt that this method would give a finer finish than an aerosol. We had several chats with Phoenix Paints and others who, so I am told, recently supplied the paint for the real *City of Truro* but we decided that the 'correct' shade of paint as used on the real thing was not 'correct' for our model. Not that we are the experts in such things, but we did have some theories of our own, combined with those of modelmaking friends from other disciplines. If it looked right then it was right was our approach.

One has to take into account the substrate material being painted i.e. plastic versus the



'metallic nature' of the real thing etc. These issues, of course, affect the reflection of light upon the model despite it or the real thing being covered with a primer and a top coat. One also has to take into account the scale viewing distance for the model. As every artist knows, as rule of thumb, the further away an item is from the viewer, the lighter in colour it appears to be.

Whilst bearing all of the aforementioned in mind, we also used Humbrol No.85 Satin/Coal Black and Humbrol 'Clear Satin' varnish as a top coat. We have both agreed that we prefer to use Humbrol colours wherever possible as they are easy to brush, give good coverage and can be easily thinned for airbrush work.

I would think that the painting of the real engine over the years through preservation has not always been as exact a science as we would like to think that it was or indeed is. As painting technology moves on and indeed old colour photographs fade, one has to come to a happy compromise and be happy with the way in which one's own eyes view both the model and the colour scheme, all very subjective. Thanks to both Phoenix and Railmatch for their help and advice. Both are excellent suppliers and we are lucky to have them. I use both suppliers' products as and where appropriate. However I still believe that the final finish should have been a lighter shade for this 4mm scale model. Maybe that is just my personal preference or eyesight!

I always try to build my models, with the final finishing and painting in mind, in sub-assemblies, and I advised Rob to do the same. After some discussion and testing of the new airbrush Rob decided that he could airbrush the main aspects of the model and brush-paint the running plate and smokebox in black. With a model of this size this reduced the number of sub-assemblies required for painting. We used new paints for every aspect of this model as we didn't want to take any chances!

When deciding on sub-assemblies one has to remember that they will need to be glued or soldered together at some stage. Either method of fixing would of course destroy a lovingly-applied paint job if this planning of sub-assemblies was not carried out carefully. This process sounds obvious I know, but even by using this method I have made mistakes and after all this is meant to be an enjoyable process, a hobby, and not something riddled with mistakes and problems culminating in a

poorly finished model. For masking off we both use Tamiya masking tape of various sizes and Humbrol Maskol.

Additional details

I supplied the vacuum pipes, couplings and lamps from my scrapbox and the name and number plates were bought in from the usual sources. We decided to add real coal to the tender as the moulded detail would detract from what is expected from a good 4mm scale model these days.

The kit already came with much detail and is, of course, in itself an exercise in super-detailing.

Conclusions

All things considered we were able to make a model of which Richard is both proud and pleased. In hindsight we could always have done things better, but then that is just us being self-critical. Anyone with a little model-making experience, some common sense and some fairly 'common or garden' modelmaking tools can make this kit successfully, especially if they are prepared to take their time and put the effort in.

The instructions that came with the kit could have been a little better, but to be fair to Branchlines, the kit is billed 'For the Experienced Modeller' and it is a challenge, but we feel that, with care, time, patience and a strongish nerve, the average modeller can carry out this conversion. The secret is, as soon as a modelling session becomes frustrating, to put the model down until next time, and to give oneself time for new ideas to form and to think through how to execute that next 'tricky' procedure. Many a good model is ruined by too much haste.

Rob can say that he built 85-90% of a fine model of a famous prototype, with yours truly adding the rest – quite an achievement I think for a first time loco builder such as Rob. The model was finished in the nick of time on Friday 22 December 2005. We hope that this article has inspired you to have a go – happy model making!

The usual disclaimer applies in that neither Rob, nor I, have any business interests in the companies mentioned in this article and suffice it to say that throughout the duration of this project these suppliers have all given sterling service in terms of advice, quality, delivery and price.

Santon

A modeller's inspiration from the 3' gauge Isle of Man Railway

ROBIN WINTER looks at a simple wayside station that offers considerable potential as a layout.



One of the most basic considerations for the modeller thinking about a layout is the track plan – it is very difficult for work to start in earnest until a design has been determined. For the layout to stand a chance of looking realistic, the track plan should reflect the features of the prototype.

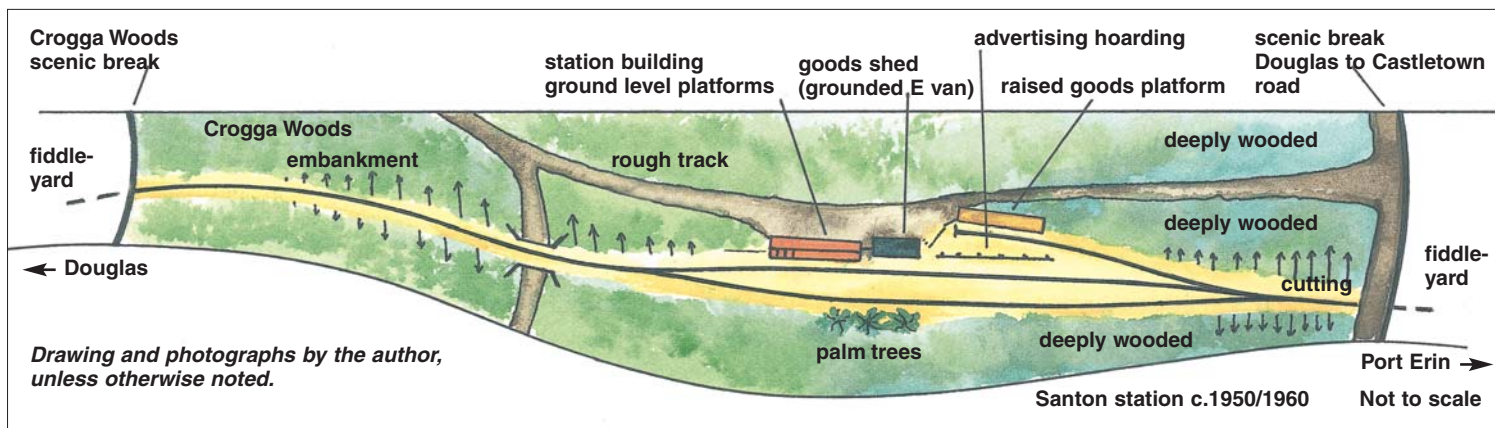
There have been many books on the Isle of Man Railway which include diagrams of the station layouts at certain periods, even reproductions of signal diagrams. But none has published accurate surveys to scale, presumably due to the sheer size and length of the prototypes and the general limitations of page sizes.

Above left: a recent view of Santon station building, constructed of matchboarding on a timber frame, with a corrugated iron roof.

Above: a clearer view of the rail side of the station building. Note the end has been re-boarded and all trace of the end window has gone – observation of details like this makes for an accurate model, if you are concerned with representing a particular period.

Left and below: the station as it was in May 1953, with the body of an old E van (E2) on a plinth serving as the goods shed.
Below right and far right: two further views of the goods shed, and part of the large advertising hoarding which masked the goods siding.
Photos: the late David Odabashian.





The Manx Heritage Museum in Douglas now holds all the IoMR archives, including a vast collection of drawings which would assist modellers in any scale with true dimensions for station sites in any specific period.

While modellers like to have information that is as accurate as possible, the shortage of proper station site plans in print is not quite so serious since most of us do not have the luxury of unlimited space to be able to reproduce station layouts exactly to scale. Compromise is almost always inevitable.

One method would be to use a coach length as a guide, working from the simple diagrams published as a basis. Stations on the south line would be required to hold up to 14 bogie coaches plus the loco in the loop, but Sulby Glen platform on the Ramsey route was built to hold just three coaches.

For the purpose of on-site research, there is a problem with the three closed lines as in many places there is no trace whatsoever of the former railway.

In contrast, the south line to Port Erin still exists and sites could be measured. However, the whole line has been relaid recently and may not now represent the original track layout, or loop and siding lengths. Platforms have also been added where they did not formerly exist. The station at Ballasalla is not of IoMR origins and the station at Castletown has in recent years been considerably altered. Port Soderick is now a private dwelling, though not difficult to distinguish as a former station. Santon, Port St. Mary, and Port Erin stations are almost as built. Douglas unfortunately has borne the brunt of some considerable demolition work, including the almost total transfor-



mation of the track layout, and the removal of the corrugated carriage shed, the Port Erin platform, the platform canopies, and the original signals. Fortunately the original signal box was saved and physically moved across the site to sit next to the railway line once more.

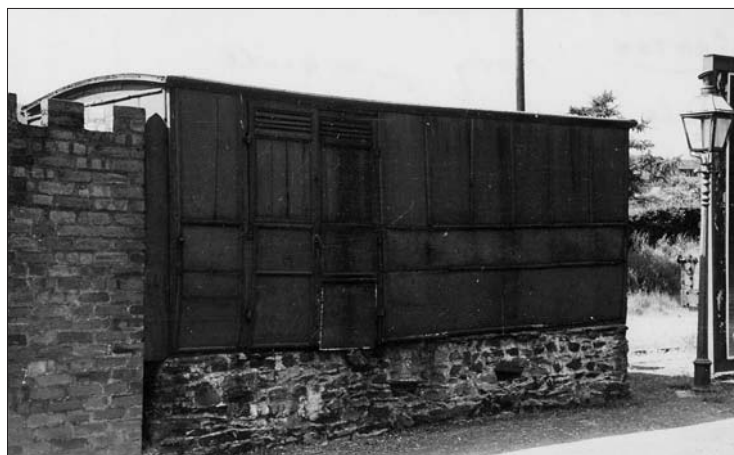
By 2004 all the original crossing gates on this line had been removed and replaced by modern lifting barriers.

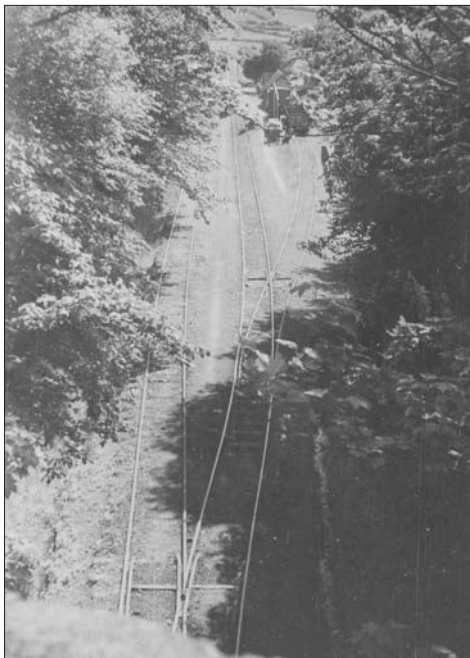
Structures

Architectural features are not such a problem as many structures do still exist, even along the closed lines.

Above: Santon station name board today, with the now obligatory Isle of Man Railway flag poles. The former plinth for the goods shed is now a whitewashed stone flower bed. Note the raised platforms added just a few years ago.

Station buildings were altered or rebuilt completely, goods platforms were built, and use changed. Many goods platforms had enormous advertising hoardings to hide them from the travelling public.





Far left: looking over the parapet of the road bridge at the south (Port Erin) end of the station on 30 May 1953, the track arrangement is clear. Note the Y point, far more common in IoMR station trackwork than left or right hand turnouts. The line to the right goes to the raised goods platform.
Photo: the late David Odabashian.

Left: seen from the road bridge at the south end of the station, No.11 *Maitland* storms through Santon on a train bound for Port Erin in June 1996.

Below left: the body of four-wheel van E2 as the goods shed at Santon, seen from the road side, on 30 May 1953.

Photo: the late David Odabashian.

Track

The track arrangements need careful study. Some stations changed little throughout their working lives. However, many were given additional sidings or had passing loops put in, lengthened, abandoned, and removed.

Station and yard layouts were not limited to left and right hand points – Y turnouts were common. Published diagrams may only be schematic so it is worth looking at photographs to confirm the actual situation before track laying commences.

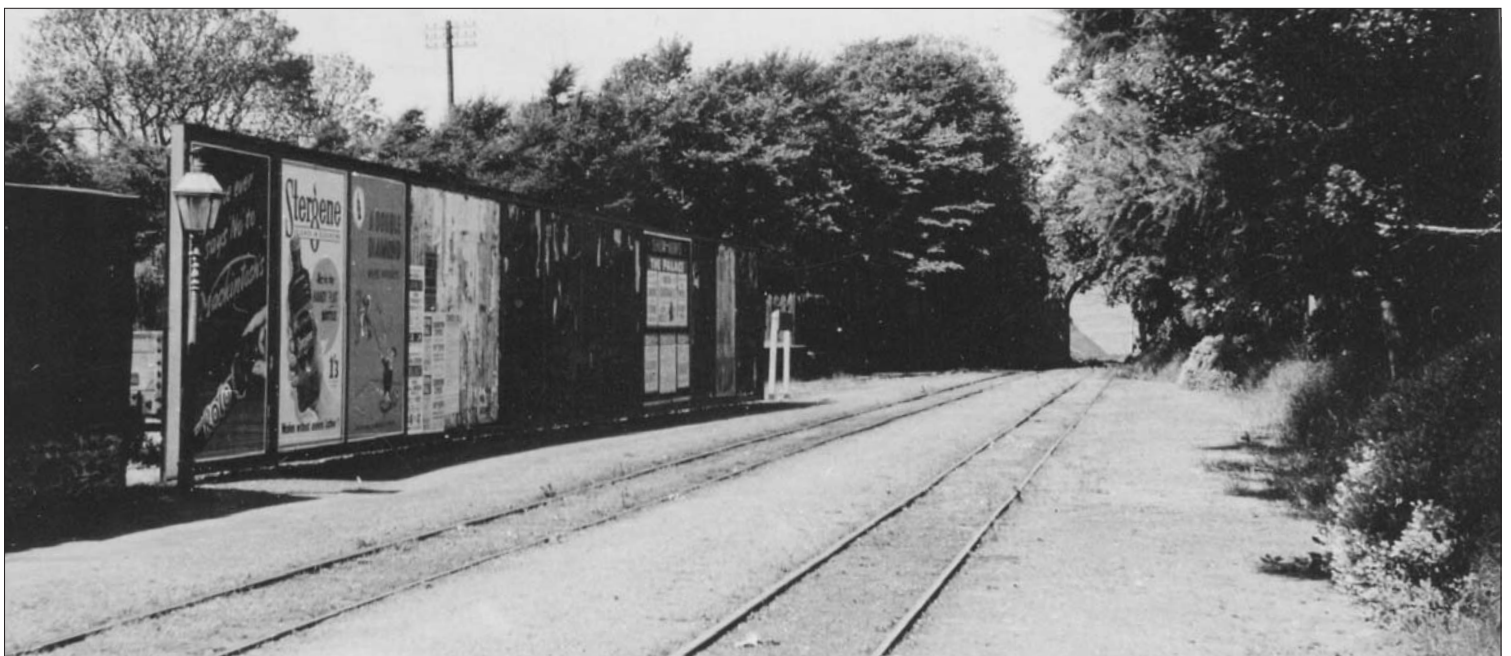
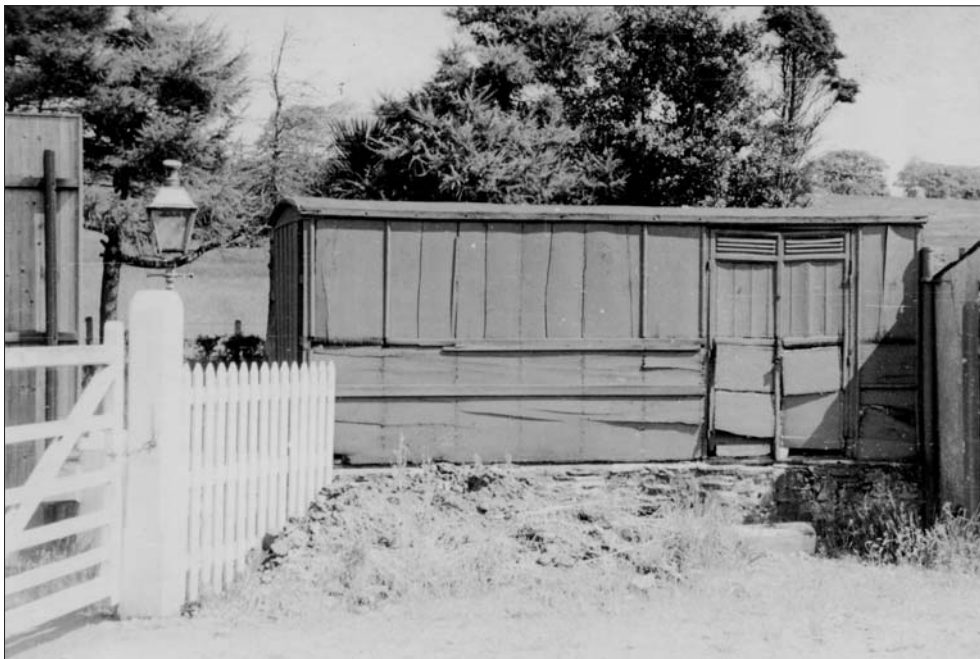
There was only ever one diamond crossing on the system, in the sidings at Foxdale.

The poor standard of the track can cause problems in model form: staggered curves and rough track just do not look right on a model railway, nor do they aid reliable operation, but the prototype was all this and worse.

Santon

Santon would make a good subject for a modest layout. The layout as it was c.1950-1960 is shown here, by which time the station was beginning to look very run down and little used. It was considered as a request stop and was unstaffed.

The Port Erin line was always by far the busiest line of the four in the railway system. As such, some considerable length trains were to be found. Consequently the passing loops





Above: looking towards Port Erin in May 1953 from the goods loading platform, served by its own siding. The bridge carries the Douglas to Castletown road.

Photo: the late David Odabashian.



Above right: a more recent view as No.15 *Caledonia* passes under the bridge carrying the Douglas to Castletown road. The siding has been cut back but is still in use, here holding vehicles on permanent way duties.

Right: almost the same view, some 40 years earlier – No.5 *Mona* in charge of a northbound service to Douglas in August 1955. By this date Santon had become an unstaffed halt but retained the lengthy passing loop.

Photo: the late David Odabashian.



Below: looking towards Port Erin past the station sign and goods platform in May 1953.

Photo: the late David Odabashian.

Below left: a 30 May 1953 view of the long advertising hoarding, constructed of timber panelling supported by old rails. Such screens were constructed to hide goods facilities.

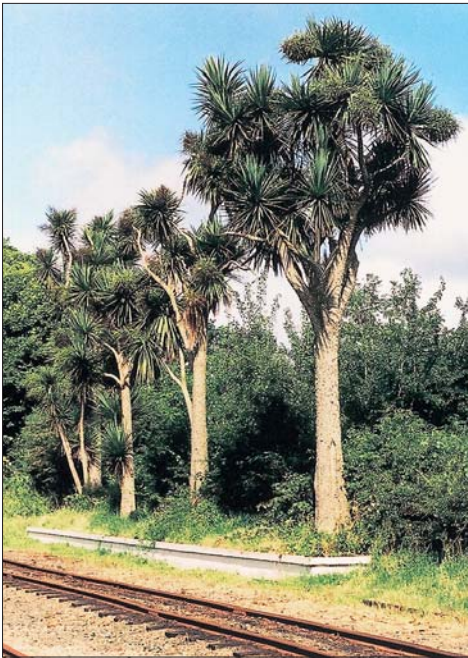
Photo: the late David Odabashian.



on the line were very lengthy. This layout is not drawn to scale as in 4mm scale the loops on their own would be some 10' long!

The layout at Santon is little changed today, except for the addition of raised platforms in place of the original ground level ones, but many of the features on the station in the 1950s have disappeared. The class three tin roofed wooden station building still exists, but formerly attached to it was a grounded E van as a store, on a stone plinth (the plinth still exists, as a garden), and there was a lengthy advertising hoarding to hide the raised concrete cattle dock and goods platform.

Santon must have required some considerable earthworks during construction. From the north (Douglas), the line arrives from Crogga Woods on an embankment. Levelling out briefly in the station area, it then passes through a very deep tree-lined cutting before the line goes under the Douglas to Castletown road using a very tall round arch bridge – which makes an ideal scenic break.



Above: the famous palm trees which have stood opposite the station building for decades.



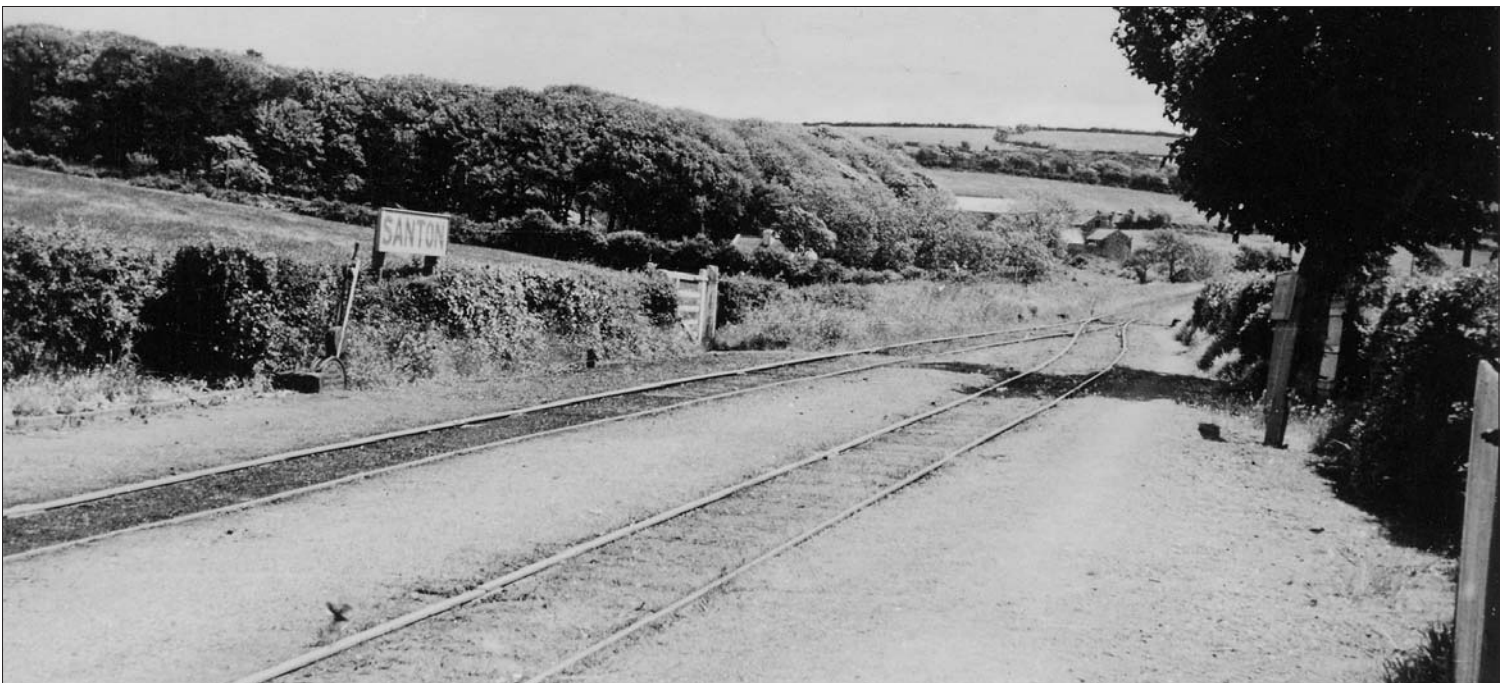
Above right: looking north towards Douglas in June 1996 with No.15 *Caledonia* entering the loop. Notice the rough state of the track which used to be synonymous with the old IOMR.

Right: a recent view from a passing train of the station building and the white-painted surround to the flower bed which once served as the plinth for the grounded E van body which did duty as the goods shed here.

Below: looking north towards Douglas from outside the waiting room on 30 May 1953. Note the station nameboard at this end of the site, and the signal lever in the open.
Photo: the late David Odabashian.



If modelled in more recent years one must not forget the compulsory Isle of Man Railway flag poles, and the obligatory palms.



Headlamps for locos

Guidance for modellers on their positioning

ANDREW SHARPLES delves into this often-overlooked aspect of recreating railway operations.

I recently purchased a rather nice Bachmann Class 24 diesel, which is supplied with separate white and yellow discs to be fitted to the front of the locomotive as desired. As I was not completely sure where to position them, I consulted my 1957-vintage *Observer's Book of Railway Locomotives* as I knew that it contained a key to standard locomotive headlamp codes, although I had paid it little attention in the past.

Having fitted the discs in an appropriate manner for the work in which I had decided the engine would be involved, I took a closer look at the other locomotives in my stud, and

realised that while the diesel types with their discs were more or less correct, my steam engines were completely bereft of headlamps. Flicking through a few back copies of *RAILWAY MODELLER*, I realised that I was not alone in this, as a fair proportion of modellers appear to give little thought to the provision of headlamps on the front of locomotives. In fact, as a glance at your favourite book of railway photographs will show, steam and early diesel locomotives were invariably fitted with lamps or discs which, depending on the way they are arranged, describe the type of train they are hauling. This, I assume, was primarily so that

the signalman could identify correctly the train that was entering his section.

As we shall see, there are valid reasons for choosing not to add lamps or discs to your models, but lack of supply is certainly not one of them. Model headlamps are readily available, such as the packs of 10 produced by Springside Models in GWR, SR, LMS, LNER or BR patterns. Just make sure you buy the right type for the region and period you model – it was only when I got home with my pack of 10 BR-pattern lamps and went back to my reference book (see below) that I realised that for my 1960s Scottish Region models I should

Standard classes of train, c.1955

1. Express Passenger Train. Breakdown Train going to clear the line, or Light Engine going to assist disabled train. Empty Coaching-Stock Train timed at express passenger speed.
2. Ordinary Passenger Train. Mixed Train. Breakdown Train not going to clear the line. Branch Passenger Train. Rail Motor Train or Railcar.
3. Parcels, Newspaper, Fish, Meat, Fruit, Milk, Horsebox, Cattle or Perishable Goods Train composed of vacuum-braked stock with brake-pipe connected to engine. Express Freight Train. Livestock, Perishable or Ballast Train with not less than one third of the vacuum-braked vehicles connected to the engine.
4. Express Freight or Ballast Train authorised to run at a maximum speed of 35 mph. Empty Coaching-Stock Train not carrying headlamps for Class 1.
5. Express Freight, Fish, Meat, Fruit or Cattle Train. Ballast Train not running under Class 3 or 4 headlamps. Special Train carrying 36-ton breakdown crane but not proceeding to an accident.
6. Through Fast Train not running under Class 3, 4 or 5 headlamps and carrying a through load.
7. Light Engine or Light Engines coupled together. Engine and brake van.
8. Freight, Mineral or Ballast Train. Train of empties carrying a through load to destination.
9. Freight, Mineral or Ballast Train stopping at intermediate stations.
10. Ballast, Freight or Inspection Train requiring to stop in between signal boxes in the section. Branch Freight Train.



Above: Class 1 lamps on a Hornby A4 Pacific. No.60031 *Golden Plover* trailed a corridor tender for life, so was a regular on the East Coast Main Line non-stop expresses.



Right: Class 2 position on 0-6-0PT No.7739 (Bachmann), one of several models here without lamp irons! The same manufacturer's lamp is held in place by Tacky Glue from Deluxe Materials, as were all the lamps in this feature.

Below: Hornby Black 5 No.44668 displays the Class 3 arrangement: see also the comment in the caption overleaf on 'special cases'.





have bought the type with carrying handles that go from front to back and not from side to side as on the later types.

The lamps can then easily be fixed to the lamp irons, whether moulded or a separate fitting, on the front of your steam engine with a drop of superglue. The white discs used on Southern Region steam trains and the folding discs which replaced headlamps on the early BR diesels are also readily available, as part of super-detailing packs for example, as well as being provided as optional accessories with certain RTR models as I mentioned. The question is, where to position them?

Headlamp codes, and other methods of train description, varied considerably from region to region and from company to company in pre-nationalisation days, but for those of us modelling the post-1948 steam and early diesel scene, the accompanying panel, adapted from the aforementioned Observer's Book, should cover most of the trains that we run on our layouts. Note that the codes were subject to alteration, for example in the case of 'through' trains working over branch lines and even in BR days there were minor variations from region to region, reflecting the old company loyalties and practices that tended to persist for a long time after nationalisation.

A good example of this is on the West Highland lines, where passenger trains on the ex-LMS Glasgow to Oban line carried a single Class 2 headlamp, while the same trains on the ex-LNER Glasgow to Fort William and Mallaig line carried Class 1 'Express Passenger' headlamps, a practice which carried through into diesel days. My favourite reference work, Robert Robotham's superb *On West Highland Lines* (published by Ian Allan, ISBN 0711025266), has some excellent pictures reflecting this and also gives some good indication of the weathering involved, should you want to tone down the pristine white of your new lamps. There are many other books which will provide examples of exactly where and how to position the lamps, not to mention RAILWAY MODELLER itself, as clearly there are some who do take great care to get this aspect right – Chris Klein's lovely picture of the *Cambrian Coast Express* crossing the Afon Soch (RM March 2005) being one example. I have found that once you have become aware of this point you find yourself checking the lamps on every photo you see!



Special case: the Southern Region

All the codes in this feature relate to class of train, but the Southern Region perpetuated its predecessors' practice of signifying route of train. Six lamp irons were provided on SR locomotives, which often deployed as many as three discs (in daytime) or lamps (at night) to cater for the 30 arrangements in use.

The codes were re-used for routes that were geographically far apart – thus no confusion could arise amongst signalmen and train crews – for example, the London Waterloo-Bournemouth code displayed

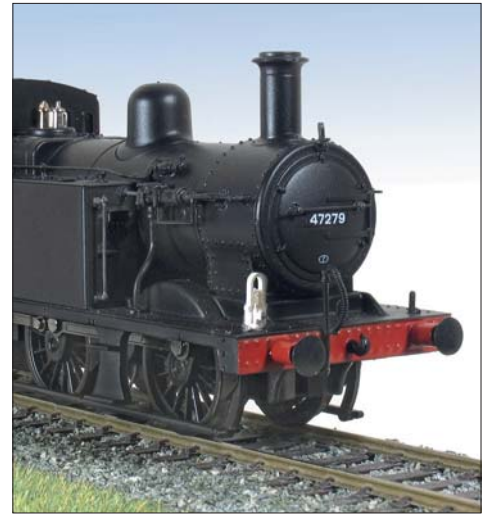
by Hornby 'Merchant Navy' No.35019 *French Line CGT* herewith was also used to denote London Bridge-Oxted and Tunbridge Wells West via Hever, and also the London Bridge-Dover via the Chislehurst Loop and Maidstone East routes. Lamps were unnecessary on these big Pacifics, as they had electric lights.

The discs themselves are available from several suppliers, and are included with some models of SR machines, but these admittedly overscale replicas were made simply by placing a piece of thin card in an ordinary office hole-punch.



Above left: Class 4 arrangement, on the Bachmann Ivatt Mogul, No.43160. By 1961, the positions for classes 3 and 4 had become transposed: the classes of train were then lettered (A-K). Tender-first running may not be ideal, but at least the modeller can justify some alternative codes at the other end, such as engine-and-brake.

Centre left: Class 5 lamps on a Hornby BR Standard 9F 2-10-0, No.92239. By 1961 this was the code for Class 6 (which by then was Class F). In addition to the 'special case' alongside, the 'Nine' and the Black 5 display both codes, signifying passenger and freight trains respectively, for the storied Somerset & Dorset route. Note too that 9Fs only worked passenger trains on the S&D, as they were too long to be turned at Evercrech Junction.



I suspect that one reason many modellers do not bother with headlamps is the difficulty of actually fitting lamps on anything other than a permanent basis. The problem is that the locomotive in question is then 'stuck' with a particular identity and should strictly speaking only be used to haul that type of train. Personally, I decided that the authentic look which a set of lamps or discs, correctly displayed, imparts to the locomotive and its train outweighs the operational limitations. So far, the only such limitation I have come across on my own layout is that I can no longer run my Stanier Black 5 on goods trains, so on steam days my J39 now has the monopoly on branch freight, correctly fitted with its Class 10 headlamp, of course. For those of you with a large locomotive stud that will not be such a problem as if you have more than one representative of a class or type you can code them differently; for those of us with smaller collections there are some tricky decisions to make.

One advantage that the diesels have here is that their double ends give you two options, for example the No.1 end could be set up as Class 1 or 2 for passenger duties; the No.2 end for one of the freight codes. Diesel experts will know that the later types did away with the disc arrangement in favour of headcode boxes and a four-figure alphanumeric code, but that's another story...

Of course, even superglue isn't completely permanent so if you do have a change of heart as to what duties a particular locomotive is best suited to, you can always prise the lamps



off carefully and re-position them. I will leave it to the undoubted ingenuity of RM readers to come up with a way of attaching lamps and discs that allows them to be switched easily from one configuration to another as required, and I would welcome any suggestions.

As a footnote, most of you will know that the trailing vehicle of every train was (and still is) required to show a single red tail lamp and this convention should not be ignored either – my brake-ends and guard's vans have now been duly fitted out. Again, suppliers such as Springside supply red-lensed lamps and I have also seen advertised in these pages flashing red LEDs to recreate the contemporary style of lamp.

Top left: Class 6 lamps on Hornby 'Britannia' No.70036 Boadicea. Late on in these Pacifics' careers such duties became more commonplace, especially once the survivors were concentrated at Kingmoor shed.

Above: Class 7 – light engine, in this case a Hornby ex-GWR 28xx.

Below left: a Bachmann ex-GWR 43xx Mogul No.4377 running a Class 8 train.

Top right: Class 9 for the traditional pick-up goods, with Bachmann 'Jinty' No.47279 earmarked for this role here.

Below: Bachmann J39 No.64960 is fitted out with a Class 10 lamp.
Photographs by Peco Studio.



Scratchbuilt narrow gauge locos

44 years on from the *Aire Valley Railway*

DEREK NAYLOR returns to 00n3 modelling with a brace of small tank engines.



The *Aire Valley* was a 00n3 (4mm scale 12mm gauge) railway. The gauge was born for me due to the difficulty of constructing a 2' gauge line. I was about to revert to standard gauge when Triang came on the scene with its TT gauge equipment. Those two greats of narrow gauge modelling, P.D. Hancock and the late David Mander, much to their credit persevered with 2' gauge. More recently I did construct a 2' narrow gauge layout for exhibition work. The scale of this I referred to as 'Imperial TT' as it was built to a scale of 1/8" to 1' with a track gauge of 1/4". See *The Semerdale Railway* in the May 1998 issue of RAILWAY MODELLER. My modelling has now come full circle and I'm building a permanent layout in 00n3.

A full description of the *Little Langdale Railway* will, with the editor's permission, appear in the future. This article describes, without giving an over-extended blow-by-blow account, why and how these L.L. Rly locomotives were built.

Both the Southwold first No.1 and the Ravenglass *Devon* and *Nab Gill* are to my eye nice locomotives. They also have inside-frame valve gear. I have a third locomotive, not featured here, which is my interpretation of a Dübs 2-4-0 metre gauge locomotive using a photograph in the book *The Shale Railways of New South Wales* to make a working drawing. This also has inside-frame valve gear. Not having to fabricate outside valve gear is some-



thing of a bonus at 75 years old but I really do like scratchbuilding if I can find a prototype that takes my eye and is not too complicated to build.

I always start with the chassis and in the case of these locomotives I decided to tackle the crossheads first. If you cannot make crossheads it's too late to find out when you have frames, motor, gears and wheels together. The crossheads are fabricated from my favourite recycled material, the brass pins from 13 amp plugs. It's a case of filing and cutting until you are happy with the result.

The slots for the crosshead guides are produced with a junior hacksaw blade. Drawing 1 should explain how I arrived at the measurements for the crossheads and cylinders. The piston rod is a 14BA screw, screwed into a section of small diameter brass tube which has been tapped 14BA. The thread of the screw is filed/emery papered off. Not as tedious as it sounds. The thinking behind this was that it would be easier to solder to the crosshead.

Referring again to drawing 1 it will be seen that the basis for the cylinders is 3/32" brass tube. The crosshead guides are made from 1/64" x 1/32" flat brass bar. The object of bending the brass bar U shape is for ease of soldering to the brass tube. Care is needed when bending the bar to the U shape. Note that the plastic tube to extend the diameter of the cylinder has internal slots cut in it to fit over the crosshead guides. Further laminations of plasticard can be used to increase the diameter of the cylinder if required. The completed cylinder is glued to a piece of 1/64" marine ply which will later be glued to the frames.

Before continuing with the rest of the chassis construction I should point out that the Ravenglass locomotive is built to a scale of 3.5mm to 1' to bring it to the same size as the 4mm scale Southwold locomotive. The main frames and coupling rods are from 3mm Scale Model Railways. The company has a selection of frames and rods for various 3mm scale locomotives. Calculations showed that the 08 diesel shunter frames have the correct wheel-base for both locomotives.

Driving wheels for both locomotives are Sharman 10mm diameter. Worm and gear-wheel are Romford 20 series 40:1 gear sets. The Ravenglass motor is the M16K/Cub. The Southwold motor is the MHK 1015 Cerval. All you get with the 3mm chassis kits are the frames and rods etched from 15 thou nickel-silver. The holes in the frames for the axles were reamed out to take top hat bearings suitable for the Sharman axles. The frames have two further holes in them, presumably for some kind of spacer. After some thought I



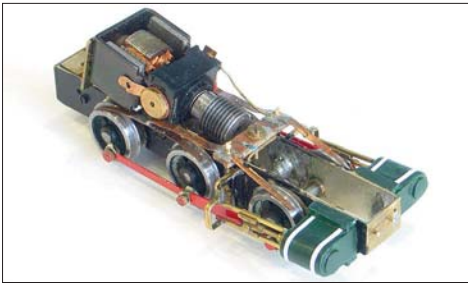
came up with using 10BA screws and nuts as spacers. Drawing number 2 should make this clear. End spacers fabricated from nickel silver sheet were added after getting the frames the correct distance apart with the 10BA screws and nuts. One driving axle was fitted with the gearwheel in position between the frames.

The motor mounting plate is once again 15 thou nickel silver bent to a channel shape to fit snugly between the frames using 14BA screws. The motor mounting plate is tapped 14BA. Some care is needed when fitting the motor mount, making sure that it is a snug fit between the frames and doesn't distort them. Shim brass can be used a packing.

After getting the gear meshing correct the motor was removed and the remaining axles and wheels fitted. Coupling rods were then fitted once the wheel quartering was correct. In the case of the Southwold I was able to use part of the coupling rod as a connecting rod. The Ravenglass needed a scratchbuilt connecting rod. New axle holes were drilled for the Southwold leading axle. After refitting the motor the current pickups were made. See drawing number 3. A simple L-shaped bracket fixed to just one frame carries the pickup assembly. The cylinder/crosshead assembly was fitted and connecting rods attached. Attention was then turned to the bodies.

In the book of Rowland Emmet cartoons, *The Early Morning Milk Train* there is a splendid





Far left: threequarter front view of *Lady Maud*. The crossheads and guides show up well.

Left: threequarter front view of *Langdale*.

Lower far left: threequarter rear view of *Lady Maud*.

Lower left: threequarter rear view of *Langdale*. Both locomotives have yet to have their spectacles glazed.

Above: *Langdale's* chassis. This should help with showing the current pickup arrangements.

Photographs by Steve Flint, Peco Studio.

cartoon in which two retired seamen living in upturned boats have forced a retired engine driver to 'observe the basic architectural rule of the district' and upturn his locomotive to live in. I mention this as an analogy that in the 1950s it was metal for locomotive bodies, OXO tins in my case, and card for rolling stock. This is all now turned on its head. The introduction of styrene sheet was one of the best scratch-building aids to come on the market. All three *Little Langdale* locomotives are constructed from styrene sheet. The footplate is the first component using 30 thou sheet with areas cut out to accommodate the motor etc. For tank and cab sides in 4mm scale I find 15 thou is adequate. Smokebox and boilers are laminated from 10 thou sheet: not by taping round a

former and dipping it in hot water but by laminating as in drawing number 4. Smokebox front and door are compass cut. Chimneys are plastic tube with a section of larger tube to form the cap or a copper cap turned up in a power drill. The flare at the chimney base is shaped from Miliput. The Southwold loco has a dome shaped from plastic tube and Miliput. The Ravenglass has a brass turned dome. Various fittings are made from styrene offcuts such as the sprue from kits, plastic rod or copper wire.

These locomotives are the first in which I have used fluid lead for weighting. The side tanks really are tanks filled with fluid lead. Boilers are also lead filled. Spectacle frames are sections of brass tube at the moment without glass. The livery is BR standard green with red buffer plates.

The name and number plates I have etched myself. The very small letters on these plates are obtained from rub-down sheets of computer symbols. The small letters explain what the symbols are. The symbols themselves are used as a source of straight lines for the plates. The oval for the number plate is a nought from larger rub-down lettering. For those readers wondering how the finished plates are achieved, the method is briefly as follows. The rub-down lettering is rubbed down onto thin brass sheet. The lettering is resistant to circuit etchant. The brass sheet is placed in the etchant; a small test tube is ideal. When the desired depth of etch is reached the plate is washed and cut/filed to size. The whole thing is then painted and left to dry off completely. A careful buffing of the plate will then reveal the painted background with polished brass letters and edging.

The lettering and lining is by Peter Blackham who also provided some straight lines for boiler and cylinder bands. I found these very difficult to apply; nothing to do with



Paul Towers has secured for the OO9 Society Heritage Collection two more *Aire Valley* locomotives made by Derek Naylor. At the York Model Railway Show Derek presented them to the OO9 Society on behalf of Audrey Boston and the Boston Collection.

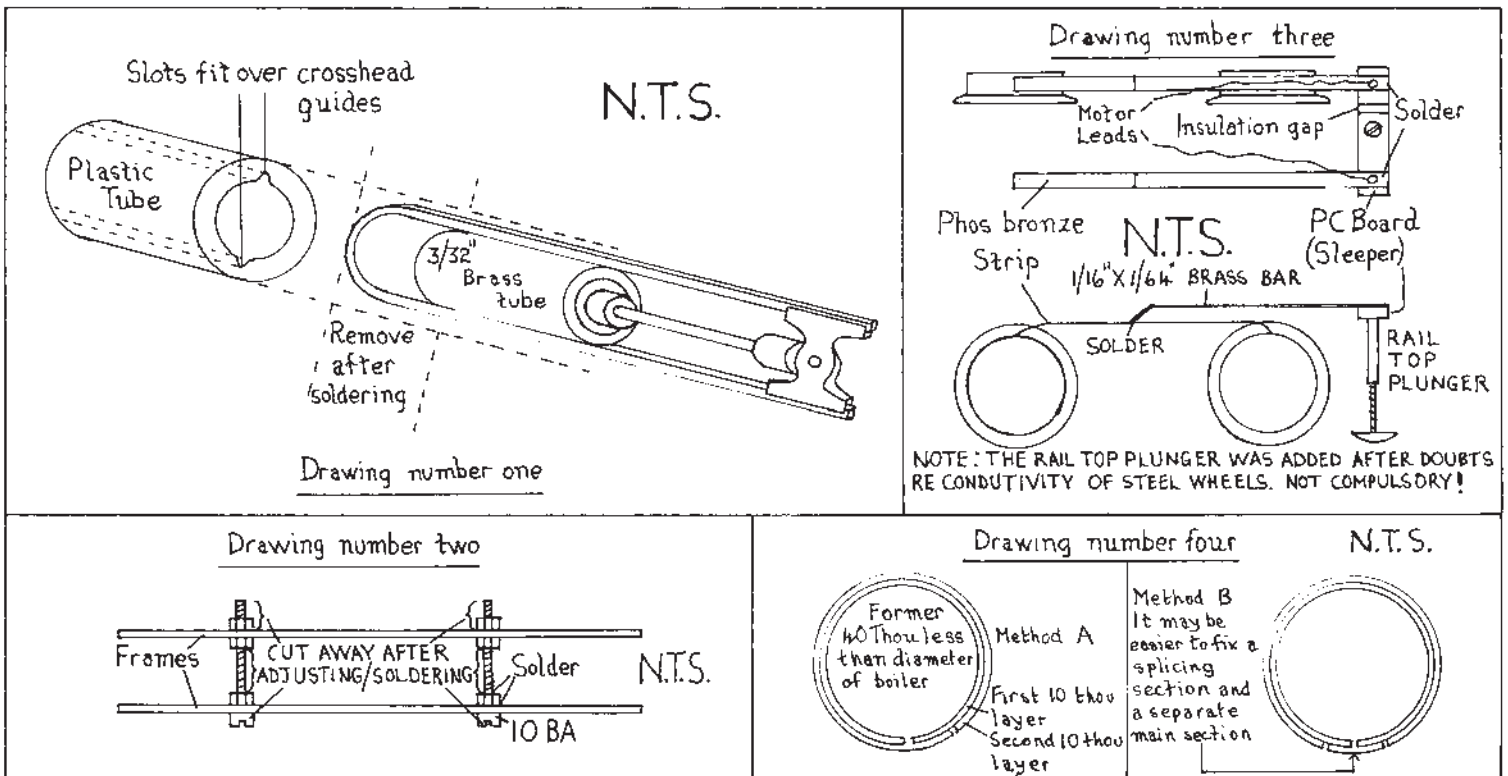
In 1978 Derek was dismantling the *Aire Valley* and Paul was asked to approach him for two locomotives so that Audrey could give them to Teddy Boston as a birthday present. The two selected were *Aire*, a Ballymena & Larne 2-4-2T (built in December 1968) and *Arthur*, a Tralee & Dingle 2-6-0T (built in June 1960).

Paul (right of picture) started discussions with Audrey a while ago and the presentation to David Burleigh, the Society Chairman (pictured centre), took place in the presence of Maudie and Derek Naylor.

Photo: Steve Flint, Peco Studio.

the quality of the dry print. In the end I used very thin strips of self adhesive address labels. These could be lifted and reset.

These are not super-detailed models but I like to think they do have some atmosphere. At the present time it seems that the cottage industry fills most modellers' needs but if your favourite locomotive is not there, you will find great satisfaction if you do complete a model.



Crackington Quay

7mm narrow gauge in 51" x 27"

*This layout, set in the far south west, was built and described by **ROY PARKES.***

My old interest in model railways was re-awakened while browsing in a newsagents where I picked up a magazine in which there was an article describing a narrow gauge layout based in Wales. Having spent many holidays in Mid-Wales amongst glorious scenery and narrow gauge steam trains, I was hooked.

I therefore built my first model railway, which was completed in 1995, a 009 narrow gauge layout based in Mid-Wales.

I was never totally happy with the slow running of the locos, which was no doubt down to me because I have seen many excellent layouts where the stock run superbly. I therefore sold the layout and all the stock some 18 months later, thinking that my model railway career had now come to an end.

I suppose the initial enthusiasm for a new layout can be blamed on the fact that I retired early, had time on my hands and purchased a computer. Whilst browsing the World Wide Web I came across various narrow gauge modelling sites, and it was the 7mm variety this time that appealed. They had a nice chunky size that would suit my eyesight much better than the smaller scales, but unfortunately being twice the size of 009 any layout that I constructed would need to be nearly double the size of the equivalent in the smaller scale.

So back to the internet I went. What sort of size were some of these layouts? Needless to say some were very big. But then I came across a couple of sites which specialised in small/micro layouts of various gauges, and it was amazing what some modellers packed into so small an area.

So next came decision time, where should it



be based? I thought that I would do something a bit different this time and therefore dreamed up a scenario based in the North Cornwall/Devon area.

The name by the way is fiction, but based upon another of our holiday haunts, Crackington Haven in North Cornwall.

History of Crackington Quay

Crackington Quay is an unspoilt cove nestling in the dramatic cliffs on the North Devon/Cornish border. It originally existed as a small port having its own pilchard works and

importing lime and coal and exporting slate, the operation of which must have been a hazardous affair as the ships simply ran up onto the beach at high tide. But in the 1950s we find that all has changed.

Crackington Quay still has its pilchard industry which is somewhat in decline, but now it is where the quiet charm of the typical North Devon fishing village meets the working world of earning a living from other sources.

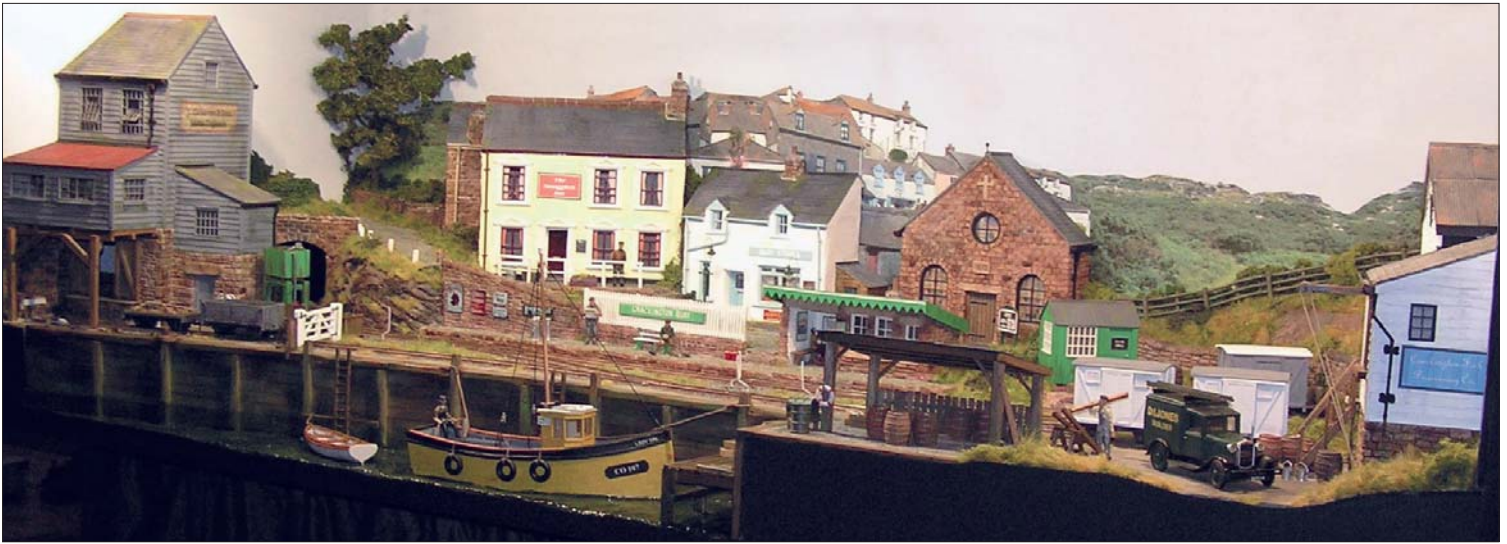
The pilchard works has now become a fish processing works. It has been packing pilchards since 1905, with screw presses installed in 1926. The product is known as North Devon salt pilchards, which taste similar to salted anchovies, are available as fillets, dry, or in oil and also in their traditional form as whole fish packed in wooden boxes or barrels for export to Italy where they have been sent since 1905.

Owing to the decline in the pilchard industry the Company changed its name a few years ago and now processes various types of locally caught fish.

At the opposite end of the quay is J. Greaves Marine Engineering Co, a small concern which is involved in boat building, repairs and the manufacture of various ship fittings.

A few miles up the coast from the village, the North Devon Quarries provide further employment for the locals. A very small quarry by the standards of the day, it does have its own 2'3" gauge railway to transport the aggregate from quarry loading facility to a transfer point some four miles away adjacent to the Great Western main line.





Left: locomotive No.3 and quarry train passing through Crackington Quay.

Below left: a sleepy view of the Quay.

Above: almost the whole layout in one shot.

Right: Crackington Quay station, with a passenger train hauled by loco No.2.

Photographs by the author.

Nowadays the railway is not only used by the quarry but also by the other local industries together with increased passenger traffic, and is especially busy during the summer months.

Layout plan

Due to space restrictions I needed to build a small layout with as much interest (operational and viewing) as I could possibly accommodate in such a small area which in my case was 51" x 27".

I am not a rivet counter and my main aim is to create an artistic impression of this type of railway, and – it is hoped – to create a series of pictures.

Was it possible that in so small a space I could create a 7mm scale narrow gauge railway incorporating the following?

Part of a small quayside incorporating a small fishing boat, a marine engineering works, a fish processing works, a small station with a goods office and unloading bay and a cottage, pub, shop, chapel and loco facilities (water tower).

The plan on this page shows what I finally decided upon after much fiddling with paper templates of buildings and pieces of track.

The ground to the left and right slopes up from the front of the layout, therefore the cottage and pub are on a sloping site. I have tried to give the impression of a village built around



a small cove, like the typical Cornish fishing village.

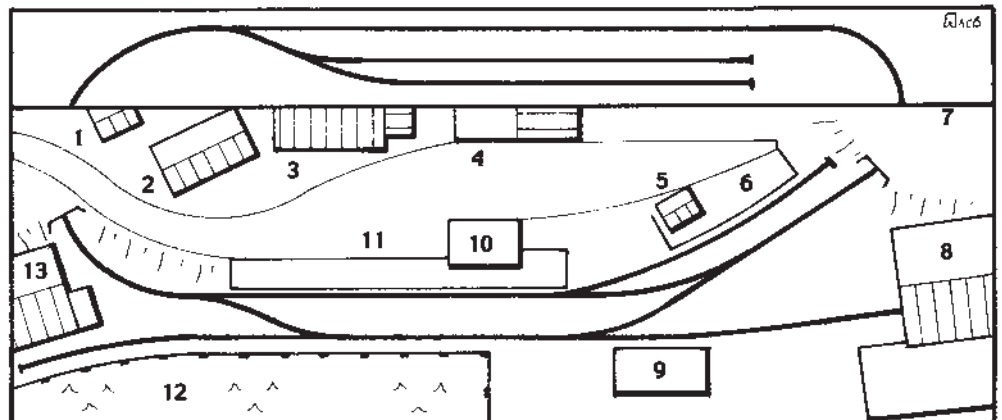
The right-hand track disappears through a tunnel to the quarry; the station therefore is the end of the line for all but quarry traffic.

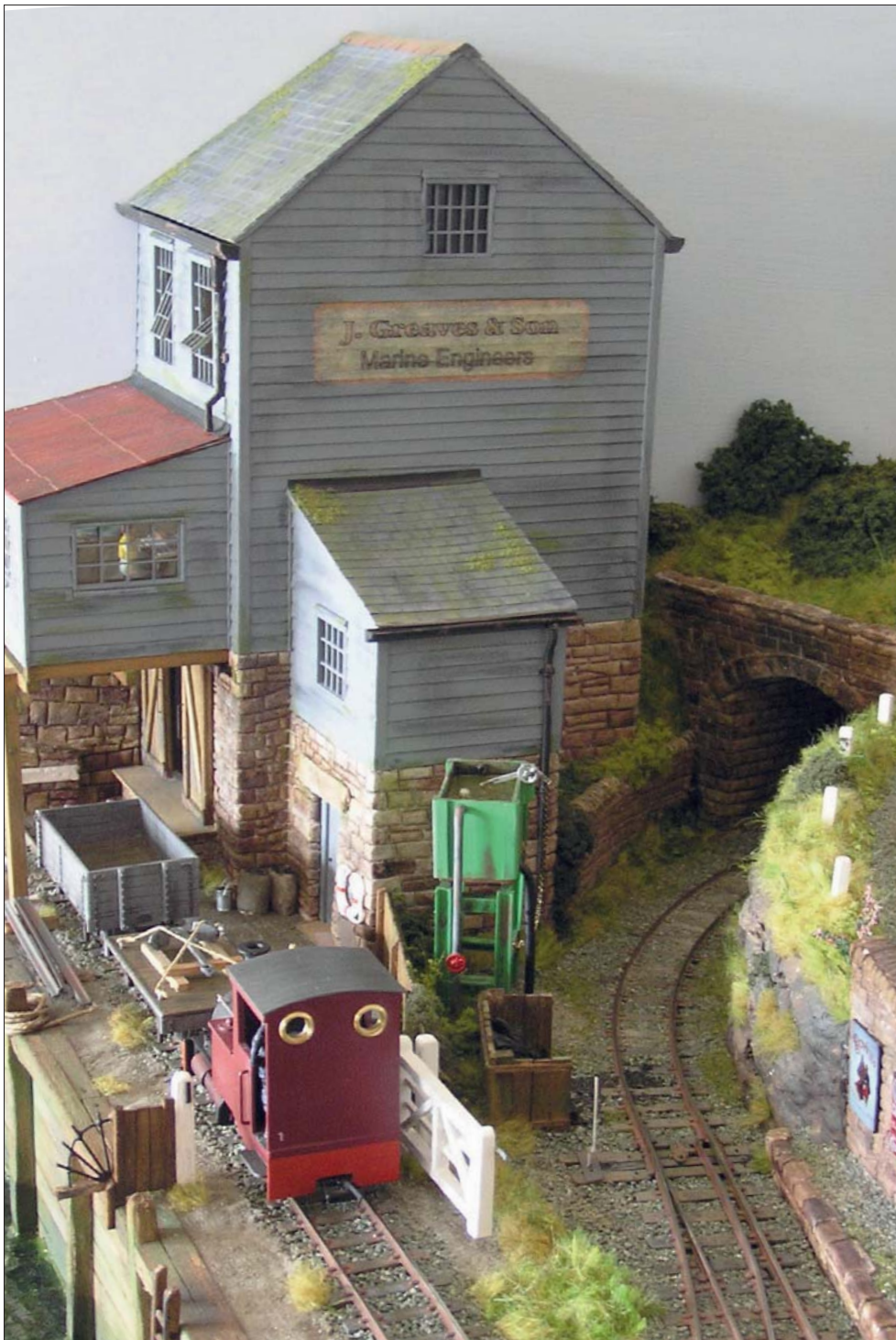
Due to the very tight radius of the curves, 6" and 9", all stock would need to be four-wheeled and only very small locomotives can be used.

Baseboard and laying the track

The single baseboard is of simple construction, 51" long and 27" wide. A framework of 3" x 1" planed timber was glued and screwed together with a chipboard top which incorporated a dropped section at the front where the quayside was to be. The completed board was then boxed in with 20" high end pieces of 6mm MDF board and with a further piece

Key to trackplan	
1	Cottage
2	Pub
3	Shop
4	Chapel
5	Goods office
6	Loading dock
7	Backscene
8	Fish processors
9	Fish shed
10	Station building
11	Roadway
12	Harbour
13	Marine engineers





across the back which separates the rest of the world (fiddle-yard) from the front. The whole unit has separate bolt-on legs 46" high.

Across the front is a separate bolt-on fascia which incorporates the lighting. It is basically a plywood 'L' shaped girder that fits between the two end pieces. It is covered with aluminium foil on the inside and fitted with three equally spaced lamp holders, a 100w bulb in the centre and a 60w either side. These are the daylight blue bulbs that are often sold in craft stores, which give a more natural lighting effect.

The whole of the visible woodwork was then given a couple of coats of matt black paint and a dark green curtain was fitted around the ends and across the front.

All trackwork is Peco 0-16.5 track laid directly on the chipboard base and held in place by

track pins, the track being drilled and countersunk to suit the track pins used about every eighth sleeper and slightly closer on the very tight curves. Then the holes were filled and sanded level with the tops of the sleepers.

Time had now come to think about the dreaded coupler. If I made a decision at this stage it would then be easier to fit the uncouplers. I decided after much deliberation to use the Bachmann mini coupling and details of how I used this coupling can be found in an article in the March 2006 issue.

Electrics

At this point every item of trackwork, point and point frogs was soldered to wire droppers through the baseboard so that continuity of the electrical supply did not rely on fishplates or point blades. All points are operated by

SEEP point motors with built-in contacts to switch the frog and operated via a capacitor discharge unit.

Then all was painted a haphazard mix of rust and track colours and finally ballasted by the tedious method of eyedropper and diluted PVA mix.

The control panel is built in at the back as part of the layout and includes a transformer for the track supply and the CDU.

A small mimic diagram is on the top face with track isolating switches and 2-way spring return to centre switches for the points. Loco control is via a Gaugemaster hand-held controller.

Scenic details

I first had to create the various levels, the sea being at the lowest level, and the base for the small cottage being the highest and 7" above sea level. Various offcuts of ply and hardboard were used for this.

The general base for the hills on either side are polystyrene blocks carved roughly to shape and covered in a Polyfilla/PVA mix. The rocky outcrop is Pyruma fire cement which was attacked with an old knife to form the desired shape.

All grass areas are a long haired carpet felt that was coloured using an acrylic paint mix to give the correct shade of green. The felt became very soggy using this method and took a couple of days to dry out.

In order to cover the ground I cut off small wads of the felt and pushed and coaxed them into a small area that had been covered with a thick coating of PVA glue. When all was dry I could then either leave it as it was or cut it to various heights, whatever looked the best; the grass could also be lifted by brushing with a stiff brush, in my case an old toothbrush.

Coarser type material represents bracken with bushes being made of rubberised horse-hair coated with flock.

The sea has a base of some left-over brown frame sealant which was rippled with an artist's palette knife, painted various shades of sea green with acrylic paint and then given many coats of Humbrol 'gloss cote'.

Buildings

All the buildings are freelance but I have tried to reproduce the typical buildings that you would find around many of the Cornwall/Devon fishing harbours.

All are built of various layers of thick card-board, the stonework being represented by Pyruma fire cement which is spread over the card wall and then scribed with a small knife or similar implement to represent the different stone blocks, lintels etc. This is then hardened off by placing the wall inside a microwave for 50/60secs (this is not so easy with some of the buildings as they are rather large so I had to let it dry naturally).

Colouring was achieved by painting the stone work with Colron medium oak wood dye; this only takes a few minutes. I have to thank Allan Downes for this idea. The industrial type buildings are part covered in timber planks which are individual strips cut from

Left: the marine engineering works.

Right: loco No.3 shunting the fish vans.

Lower right: the quayside with scratchbuilt fishing boat.

breakfast cereal packets. Roofs are fitted with individual card slates, windows and gutters from Invertrain Model Railways and down-pipes of various lengths of brass rod.

The marine works siding is protected by a gate, which is opened by the same method used for the uncouplers, a wire inside a pvc tube. The gate is hinged on a brass rod which goes down through the baseboard and is fitted with a small lever coupled to the operating wire. Push or pull the wire and the gate opens or shuts; silent, no noise.

The small yellow fishing boat that sits in the harbour is all constructed from cardboard and balsa strip scaled from a photo I downloaded from the internet.

Stock

All the locomotives are built from kits or modified Dapol 00 gauge 'Pugs'.

Loco No.1 is a Springside 'Kennet' kit built as per instructions on a 'Pug' chassis, and locos Nos.2 & 3 are modified 'Pugs' with the original cab, chimney etc removed and a new cab, and footplate constructed of plastic sheet.

New chimney and domes were obtained from Wrightlines.

There is also a small Avalon Line Models industrial diesel locomotive running on a Tenshodo Spud chassis, which looks after all quarry traffic.

All locomotives are packed with as much lead as possible and a lot of effort has been put into making the chassis run as smoothly as possible so that any shunting can be carried out in a realistic manner.

There are only three coaches to date, all standard Peco 4-wheelers, fitted out with seats and passengers.

The goods stock consists of a mix of Avalon and Chivers kits built as per instructions, all fitted with lead weights low-down under the chassis for smooth running.

Conclusion

Crackington Quay has given me many hours of pleasure in the making and seemed to get a good reception at its first outing at the 7mm Narrow Gauge Association AGM and convention. If there are any other exhibition managers reading this, and need a small layout to fill a corner, I am open to invitations.

Finally, I must thank my family for all their support and the various kits provided as birthday and Christmas presents.

If you are interested in narrow gauge modelling in 7mm, I would strongly recommend joining the 7mm Narrow Gauge Association. For further details visit www.7mmnga.org.uk or write to: David Broome, 43 Coombe Drove, Steyning, West Sussex, BN44 3PW.

***Crackington Quay* is booked to appear at Chiltern Narrow Gauge on 1 July. See Societies & Clubs for details.**



Sealane

Sunderland trams in 7mm scale

GEORGE WILKINSON describes his first venture into tramway modelling.

Seaburn and Roker are coastal resorts situated at Sunderland. The tramway network arrived at Seaburn from two directions, one from the town via Fulwell terminating in Dykelands Road and, the second from the town via Roker arriving at a circular terminus complete with tram shelter at Seaburn or Sealane as it was also known. The two termini were approx 300 yards apart but not joined.

Sunderland Corporation Tramways had a fleet of trams, the variety of which gave the observer an opportunity to see cars from all over the country. As well as some splendid cars built by the Corporation itself, second-hand vehicles could be seen from Accrington, London, Huddersfield, Portsmouth and Manchester to name some of them. A feature of the cars was the use of the pantograph adopted as standard just before the war.

From a spectator's point of view there was never a dull moment. Sadly the system closed in 1954, the route to Sealane via Roker closing the previous year.

Planning the layout

My biggest inspiration for constructing the layout came from one of our North East Tramway and Light Railway Society (TLRS) group meetings in 2002 when proposals were discussed for an exclusively tram exhibition in September 2004 to commemorate 50 years of trams in Sunderland.

As Sunderland Car 86 had been built previously and Car 100 (Ex Met. 331) was half-built, it occurred to me that something could be done if I got a move on.

I have travelled on the trams to the seaside many times and have happy memories of the different cars. To recreate the scene and some of the cars was an ambition I had for some years. Sealane seemed to be an ideal terminus to model with its turning circle and sidings.

An original test track became the basis of



the layout. Another source of inspiration came from Terry Russell who, as most tramway modellers will be aware, provides a wealth of plans, parts, kits and advice for 0 gauge modellers.

The track layout therefore is dumbbell-shaped with prototypical layover sidings at the terminus. Trams often used a crossover at Roker for short working and this inclusion on the model gives variation if continuous automatic running is not required.

The plans for an exclusive tram exhibition by the North East Branch failed to come to fruition but I was fortunate to receive an invitation from members of Sunderland Model Railway Society to exhibit the now completed (are they ever?) *Sealane* layout at their annual exhibition in September 2004. This was held at Seaburn, the very place where the prototype had ceased to run 50 years earlier. It was a nostalgic reminder for a lot of visitors.

Construction

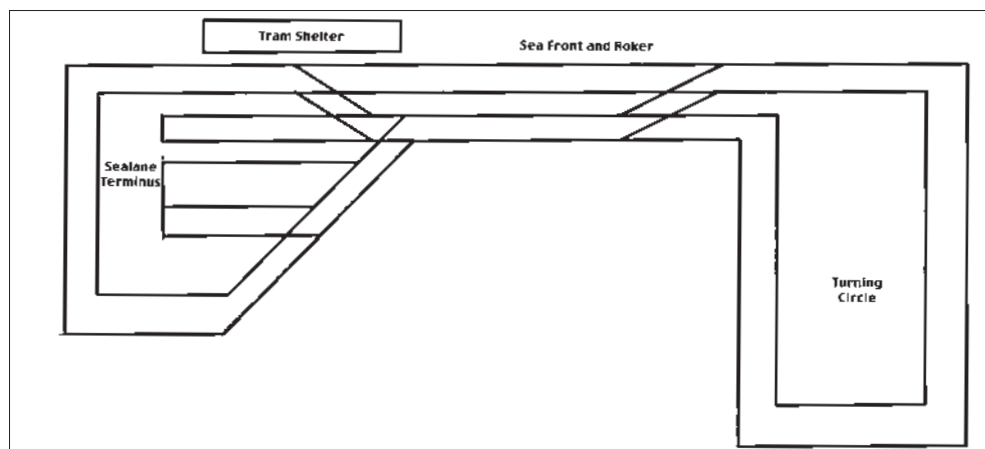
The baseboards were constructed from dressed 2" x 1" timber with plywood top. Trackwork is Peco code 100 rail soldered to staples fired into the baseboard with a staple gun and points are hand-made with the same code rail, filed and fitted until a smooth path through the frogs was achieved. 7mm stone sets were carved individually out of glazier's putty which when hardened and painted gives a most realistic appearance.

Current collection follows prototypical practice from the overhead wire and can accommodate bows, pantographs and trolley poles though some track restriction exists for poles.

Backscenes were photographed digitally and superimposed one on another to give a representational view of Roker and Seaburn. The aim was for local people to recognise the view. One stroke of good fortune was the tramway passenger shelter at Seaburn which still stands today. After meticulous measuring and head-scratching a 7mm shelter emerged and occupies centre stage at the terminus.

From the terminus at Seaburn the prototype line ran along the seafront to Roker where it turned inland towards the town. The seafront balustrades have been faithfully reproduced with parts from Derek Ascott. Some street furniture is also his. The Corgi vehicles and 7mm personnel are from various other sources.

At the Roker end of the layout where the line turned towards the town another turning circle had to be provided to return the cars the right way round, a pre-requisite if automatic running was to succeed. Although not accurate prototypically, poetic licence was taken



Left: Car 30, a former Huddersfield tram, waits at the Sealane shelter before returning to the town's Circle route.

Right: cars 48, 30 and 45 at Sealane terminus.

Centre right: the turning circle at Sealane.

Below right: the passenger shelter and Car 30 at Sealane.

Photographs by the author.

and short of modelling the rest of town, a fictitious scene of the 1940s and 1950s was constructed.

The trams

Automatic running is achieved by the short rail break method which, as the axles are not insulated, provides current for the car on the dead section ahead by bridging the gap. Overhead wiring is from 3mm nickel silver wire although in my experience copper wire is less likely to break, a nasty headache when occurring on curves.

The tram fleet comprises seven vehicles:

1. Sunderland Car 86 (The Ghost Tram)
2. Sunderland Car 100 (ex-Metropolitan 331)
3. Sunderland Car 45 (ex-Portsmouth No.1)
4. Sunderland Car 48 (South Shields)
5. Sunderland Car 30 (ex-Huddersfield)
6. Gateshead Car 10
7. MET Feltham Car 321

MET Feltham Car 321 is a superb St. Petersburg model.

Gateshead Car 10 is constructed from an original 7mm card kit from Beamish Museum, Co. Durham.

Sunderland Cars 86 and 100 are my own scratchbuilt work. Running lights (with direction changeover) and interior lights are fitted in Car 100.

Decals and adverts (generated on my computer) and assembly of running gear, current collection and fitting of vehicle parts and embellishments taught me that nothing is impossible if you try. Those parts not available commercially just have to be fabricated from scratch.

Acknowledgements

I am particularly indebted to David Rhodes for the body construction and painting of Sunderland cars 30, 45, and 48.

Malcolm Fraser of the TLRS Durham branch for his advice and in-depth knowledge of the detail of the trams of Sunderland Corporation Transport.

All the cars in the fleet benefit from the expertise and precision of Terry Russell's motorising genius (the running of which is a joy to behold) together with his cast interior and overhead parts.

Conclusion

Considerable expertise and knowledge was gained in creating a scene reminiscent of my youth. The greatest lesson in the 7mm modelling scenario is that most things have to be modified or made from scratch.

Except for the people acknowledged above the work is entirely my own. My satisfaction is



in seeing Sunderland cars running in a representational diorama of their native surroundings. If a similar sort of satisfaction is obtained by those who view it then that is a bonus.

Who knows, Car 331 at the National Tramway Museum at Crich might yet be seen

running in its Sunderland livery again as a lone representative of the city?

Sealane can be seen at the Festival of Model Tramways in Manchester on July 22 and 23. Refer to Societies & Clubs pages for details.





Ferndale Light Railway

An extensive garden line in 16mm scale

DAVID HILL is our guide around this system, which is enjoyed across the generations.

As the saying goes, once a modeller always a modeller. I began, as many of us did, at a very early age with balsa and tissue paper. With increasing years I progressed through radio controlled slope soarers, planes, cars, boats, and N and 00 gauge railways, finally coming to

a halt with a quarter scale model of a fully aerobatic Zlin Akrobat 562, 100" wingspan with a 49cc petrol engine. Flying this proved to be quite hairy, especially on the occasions when I was flying alone, I felt it was time to come down to earth.

Fortunately my retirement coincided with the birth of our first grandson and it was suggested that I might need to build a train layout for him to play with. Not one to do things by halves I decided to build a railway that could be enjoyed by grandfather and grandson alike. 16mm was my choice and I began finding out about railways in gardens.

The main problem confronting me was that our small 30' x 25' garden slopes upwards in

Above: RTM No.57 and train at Staddle Stone station while the gardeners take a rest.

Left: the Zoo train crossing the viaduct.

Above right: Judith enters the Japanese garden as the band plays on.

Right: the local train (PA No.58) waits at Staddle Stone signal box.

Photographs by Steve Flint, Peco Studio.





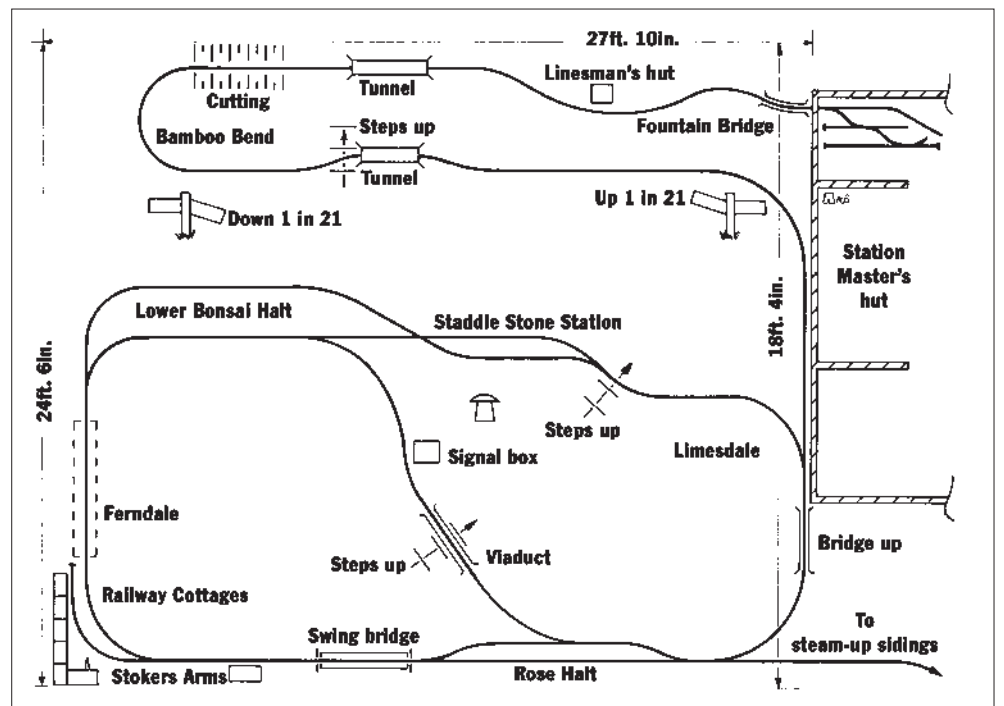
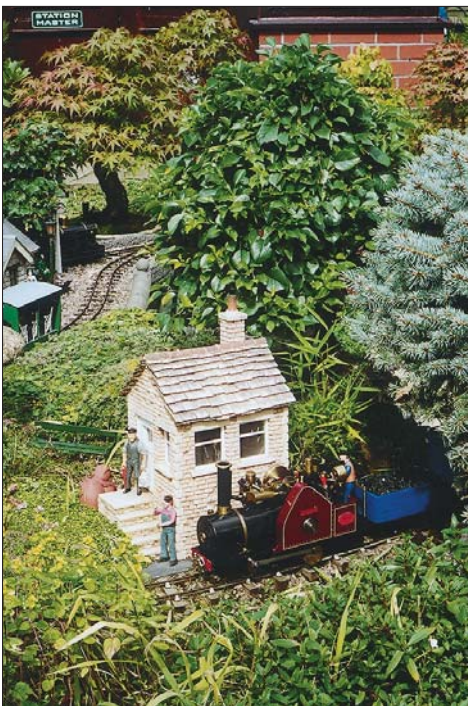
three levels from the back of the bungalow. The starting point had to be a line fixed to the bungalow wall approximately 3' above ground level bringing it up to the level of the middle terrace. From there the line arrives at the top level via a 1:21 gradient, two tunnels and a sharp bend terminating at the steaming-up

area and turntable in the comfort of the Station Master's Hut, a luxury on wet days.

The construction and development of the line took time and a lot of soil and rock shifting. My wife (as yet unretired and keeping me in the manner to which I had become accustomed) would return from school to find

sacks of soil standing in neat rows waiting to be dispersed, resulting in many new flower beds appearing in the front garden!

Let me take you on a journey round *Ferndale*. Beginning in the comfort of the Station Master's Hut we steam across Fountain Bridge along the top level passing a Stuart





Left: tram No.PA81 enters the Station Master's Hut over Fountain Bridge.

Below left: tram No.PA81 arrives at Staddle Stone as the jazz band plays an impromptu tune.

Below right: *Katie* emerging from Upper Bonsai tunnel.

Right: *Judith* on her way out with the Zoo train.

Currie lineside hut, through the first tunnel into a cutting overlooked by a fishermen's village made up with a variety of purchased character bird boxes. Round Bamboo Bend and down the 1:21 gradient through the second tunnel, past the Station Master's hut to Limesdale and the Japanese garden. We now cross a hinged bridge and proceed round to Rose Halt. From here we take the scenic route over the viaduct (constructed from Jigstones) spanning the steps up from the lower patio to the middle level. Passing an S.C. signal box on the right we run into Lower Bonsai Halt for a comfort stop!

We continue our journey past the busy village of Ferndale where Railway Cottages overlook a playground shaded by Maple trees, a Chapel where a wedding is taking place and the ever popular *Stoker's Arms* (all constructed with Jigstones) and finally back to Rose Halt.

We now have a choice. We can either continue on round the corner past an S.C. water tower and Jigstones workshop to a large steaming-up area, a later addition and still in the process of being completed.

Or we can return across the bridge to Limesdale meandering through the Japanese garden to Staddle Stone station (Jigstones) where a jazz band on a scratchbuilt bandstand (copied from a photo of a Victorian bandstand) entertains the passengers. and back to Ferndale and a well deserved libation at the *Stoker's Arms*.

At present my rolling stock consists of a kit-built radio control 'Lady Anne' and a 'Katie' from Roundhouse, several Peter Angus manual locos, three scratchbuilt diesels, numerous scratchbuilt coaches and wagons including a 15-vehicle Chester Zoo Train complete with





animals and the Yorkshire Group annual pensioners' outing train.

At night the streets, buildings and station, can all be illuminated giving a magical view of the garden when sitting outside on a balmy summer evening drinking our G&Ts or more than likely our cocoa.

Another of our passions is the study of the art of Bonsai. Most of our small trees, many of which are Maples of varying types, are placed round the line giving it colour, perspective and an added attraction.

Two years later, with the birth of our first

Right: the pensioners' excursion halts at busy Railway Cottages.

Below: the Zoo train assembling in the Station Master's Hut.

Below right: the new steam-up area.

granddaughter it was suggested that I build a doll's house. Not to be outdone I built a scale model of *Ferndale*, my grandmother's

Victorian house (which gives its name to the railway) where I lived during my school years — but that's another story!



Lazy Cottage

A micro layout in 009

ANNEMARIE WINTER *developes skill and confidence with the creation of a small detailed scene.*

I have always travelled around with the family exhibition layout (*Port Foxdale*, see RM September 2002), and having done so many shows with that I decided I wanted my own. So one Christmas I asked for the startings of my very own layout and indeed my wish came true. I received a small piece of plywood with a continuous circle of 009 track already affixed and in working order.

Plans

I started to plan my layout soon after I got the baseboard and track. Ideas picked up from books and shows came to mind, such as a layout with a cottage. That idea has stayed. In addition I wanted a pond, some swings, and a climbing frame. I also decided I wanted a vegetable patch and garden with an apple tree and a shed.

After I had measured the track and decided where the cottage would be, I realised that my plans had to change. This is where the idea of the fields with sheep and cows came from.

I then decided I wanted the cottage to be thatched which produced some varied ideas of how it could be created.

Building the layout in such a small area was a bit hard because I did not really understand the scale or know how to make some of the model buildings.

To do some of the scenery, my Dad helped; if you call lifting quite a lot of his scenic materials 'helping', then he 'helped' quite a lot!

My Mum has helped too, mostly by nagging me to get the thing ready for shows to which I had been invited – but she has also helped by giving ideas.

The cottage is a cardboard shell cut and formed to shape covered with DAS air-drying clay and left for a couple hours, after which detailing for the rough walling was done using my finger. When it was dry, the roof was installed using cardboard again. For the thatch I used plumber's hemp, painted to add an authentic weathered look. To finish the roof off I added two chimneys using the same clay as the main building.

I used the same idea for the hump back road bridge over the railway track, but for the bridge I also used cardboard, filler, sand, and paint. The details are pressed in using a lolly stick shaped like a scalpel. The paint has been weathered with dry paint on a stiff brush to show up the cement and stone work.

The trees are seamoss bought from a shop, with scenic materials added at home. The cabbages and many of the other vegetables including the lavender are all made from dried flowers found around the house. The



sweet pea canes are thin pieces of metal soldered together and painted in a light cream colour. Then scenic materials were added.

The tractor, a plastic toy, was bought at an exhibition; however I did not like the colour so I repainted it red and added some brown paint to make it muddy. The nice little car by the cottage was driven off the family layout to be parked nearer to my cottage, with many grunts from father!

The background of the layout is simply a scored and bent piece of mounting board but next time I shall use plywood or hardboard as the score marks on the card do show through. At one point we tried covering it with scenic paper but it made no difference.

The electronics – if that is what you can call them – are very simple... anyone can do it, just two wires and a transformer.

Rolling stock

Most of the rolling stock is from the 009 Society secondhand sales stand, but family friends have also donated some items. Meridian Models is also to be thanked for providing kits.

When I was choosing the rolling stock I had to be careful because of the tight corners; chunks of wall had to be removed from the road bridge on the curve to allow trains to run underneath. I soon found that long or wide wagons would not go around the track.

Couplings are an important part of 009 modelling, as my father has found from his experience, and this information was useful in choosing my own type. Although Peco and Bemo were tried, the 'Greenwich Coupling' has been found to be the best choice, especially for the tight curves.



Above left: in this picture you can see the train appearing from under the moss and ivy covered road bridge, which caused a few problems with the loading gauge to start with, and approaching the front of the layout, passing the cow and sheep fields.

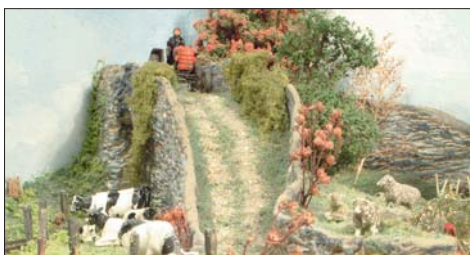
Above: I have tried to include as much as I can without overcrowding the layout, which is just 14" wide, 12" deep, and 7" high.

Left: this is my favourite picture. The cottage has a garden allotment with a sweet pea support full of growing interwoven sweet peas. A row of red cabbages looks ready to pick, and alongside them is a row of leeks, while the last row, of green cabbages, being is dug up. Near the vegetable patch is a big lavender shrub. Note details such as the wheelbarrow full of dirt, and the garden spade and fork. In the other half of the garden are another two lavender bushes, flowerbeds around the grass, an apple tree, a shed, and a lawn mower with a dog playing beside it. You can also see the owner of the cottage, and his cat climbing on the window sill.

Right: the horse and cart are a whitmetal kit from Dart Castings. There is a tree full of ripe apples in the garden.

Below: the red, muddy tractor can be seen driving over the road bridge; the lane eventually passes the cow and sheep fields and heads towards the cottage.

Photographs by Len Weal.



Shows and awards

I have been lucky to be able to exhibit *Lazy Cottage* at several shows: Amberley Chalk Pits Museum in both 2004 and 2005, and Lancing, St.Alban's, Tonbridge, and Tolworth Showtrain in 2005.

This year so far the layout has been seen at Biggleswade in February and Exbury Gardens in the New Forest in June. It will be at Amberley again on 8 and 9 July, and (looking ahead) at Guildford on 20 January 2007.

As a bonus, some awards have been received: *Best Junior Layout* at Amberley in both 2004 and 2005, and *Best Small Layout* at St.Alban's in 2005.

Footnote

Building this little layout has given me an insight into the hobby and some happy memories, and I hope there will be more of them.

The exhibitions are not just a chance to show the layout, they have become additional opportunities to learn – and a social event.

At the moment I do not have any plans for a new layout, and I do not intend to extend this layout or make any major changes, but I hope to carry on exhibiting and improving it. For now I have to concentrate on school coursework and GCSEs, but I will of course still enjoy doing some modelling.

I am pleased with what I have achieved; being a young modeller, I have been able to take advantage of my Dad's interest, but that need not be the only source of motivation for others. Model shows, from the smallest to the largest, can provide good examples, and there are many publications available to give advice.

Details of the Amberley show are in *Societies & Clubs* – Ed.



LSWR 700 Class 0-6-0

The Drummond 'Black Motors', drawn and described

IAN TATTERSALL presents *Dugald Drummond's first design for the London & South Western.*

In 1895, Dugald Drummond succeeded William Adams as locomotive superintendent on the London & South Western Railway, the latter having resigned due to ill health. Shortly thereafter, Drummond introduced his first design for the South Western, an 0-6-0 which was similar to a class of 0-6-0s he had built some years before for the Caledonian Railway.

The engines were built by Dübs and Co and were delivered over a period from March to August 1897. Numbered 687-716 when built, the engines were known as the 700 Class although official drawings also refer to them

as Dübs goods engines. Many components were standard with the C8 Class 4-4-0s and M7 Class 0-4-4Ts.

In 1898, Nos 702-716 were renumbered to 306/8/9/15/17/25-27/39/46/50/52/55/68 and 459 and in June 1912, 459 was again renumbered 316.

As built the engines were fitted with conical smokebox doors and firebox spark arresters. These features were found to cause poor steaming; the spark arresters were quickly removed and new Adams pattern smokebox doors were fitted between 1902-4.

Below left: 'Black Motor' No.30315 (Dübs 3513 of May 1897) stands cold at Exmouth Junction shed on 9 July 1956.

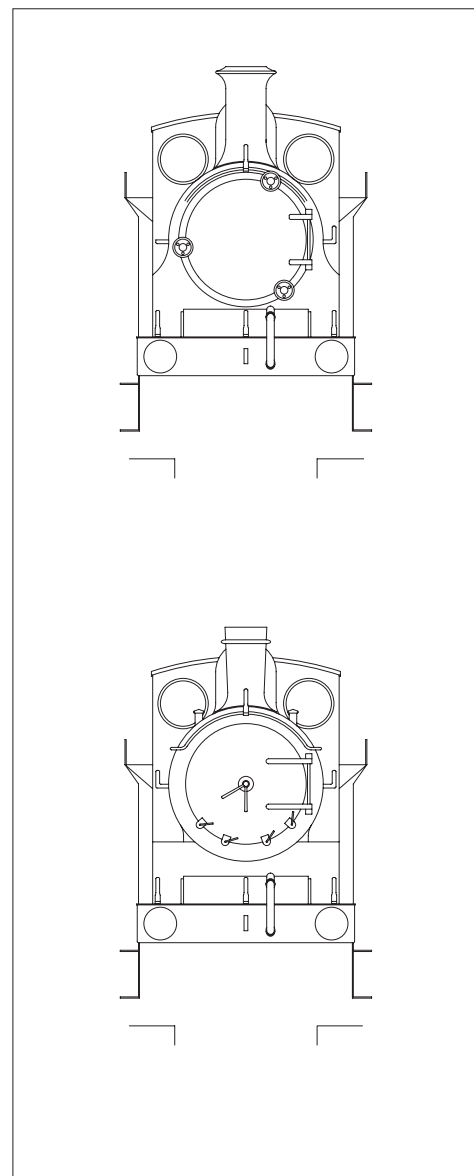
Photograph: Frank Hornby.

Bottom left: No.30346 was captured in light steam at Feltham MPD on 17 March 1956.

Photograph: the late W.G. Boyden, via Frank Hornby.

Above right: broadside view of No.30692 amidst the clutter of Nine Elms shed on 26 May 1956.

Photograph: the late Les Pickering, courtesy Bob Brown.



The engines were soon rostered to main line goods duties. They were also used on secondary passenger trains and troop specials. Another frequent duty was horsebox specials and as a result, Nos.687 and 700 were equipped with Westinghouse air brakes, the air pump being fitted on the right-hand side alongside the firebox. The fittings remained in place after superheating, being removed from 687 in October 1935 and from 700 in January 1936.

The boilers were standard with the C8 and K10 4-4-0s, and the M7 0-4-4Ts. By the 1914-18 war, it was becoming apparent that the engines were under-boilered. The ideal solution would be to use a T9 boiler which alas would not fit the engine. To improve matters, Drummond's successor Robert Urie decided after the war to fit a superheater to No.316. The work involved 18" extensions to the frames, 19" cylinders and an Eastleigh superheater. The boiler, which was retubed and fitted with new tubeplates and firebox, was pitched 9" higher. An extended smokebox was mounted on a saddle and fitted with a stovepipe chimney with capuchon.

No.316 emerged in December 1920 and ran a series of trials between Southampton and Nine Elms. A saving of 6.8lb of coal per train

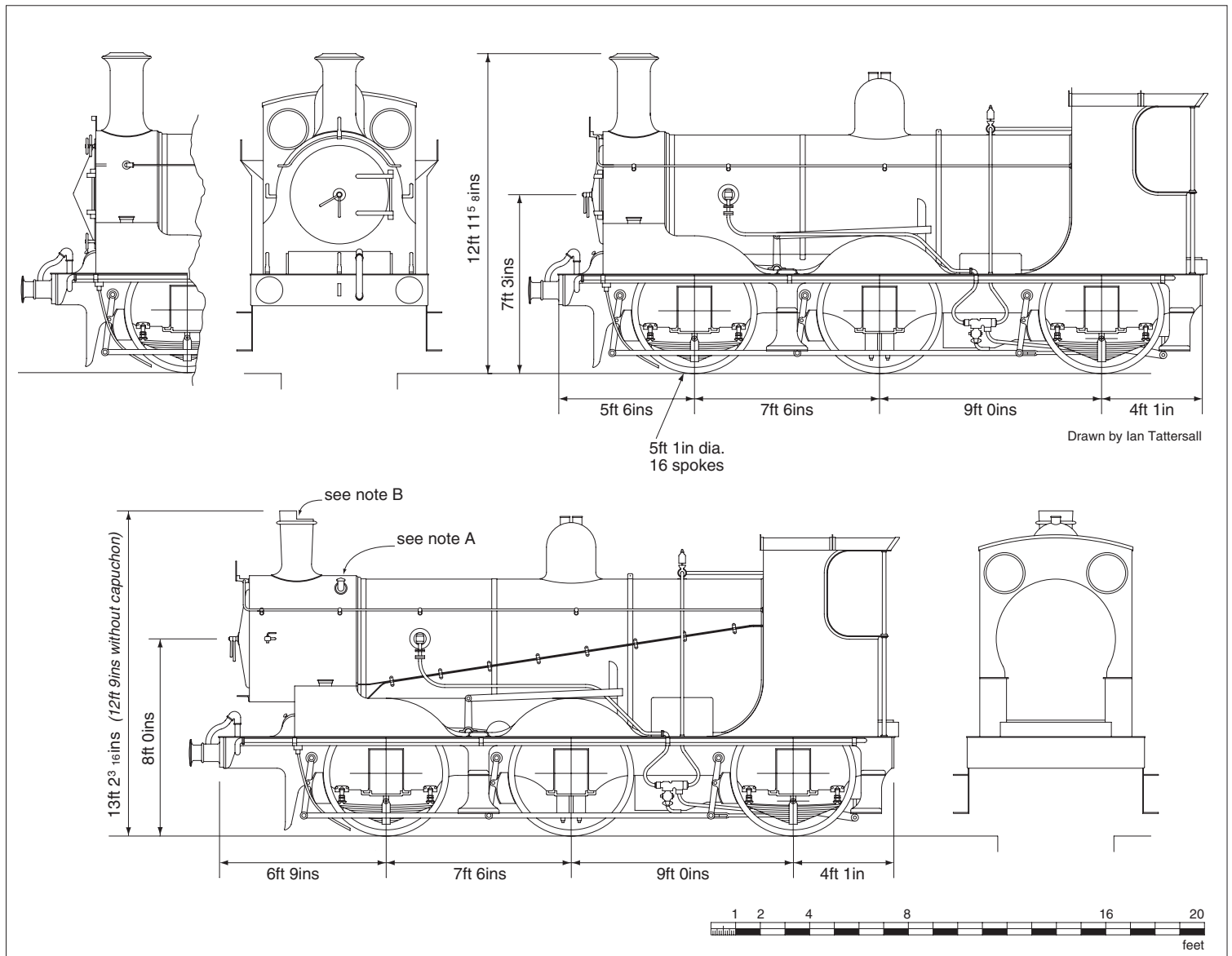


mile was claimed and Urie was authorised to superheat ten more. The conversions took place between March 1922 and May 1924, the engines selected being 308, 326, 339, 346, 350, 368, 687, 689, 694 and 700.

After grouping R.E.L.Maunsell superheated the remainder of the class using his own pattern superheater which had a slightly larger heating surface. The work was carried out between January 1925 and March 1931. The

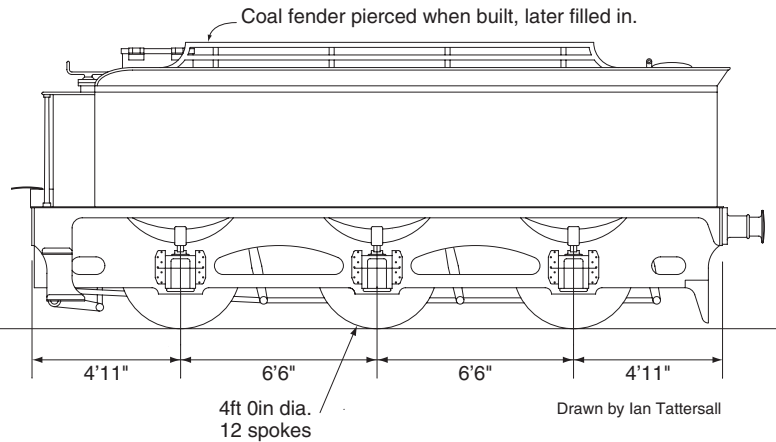
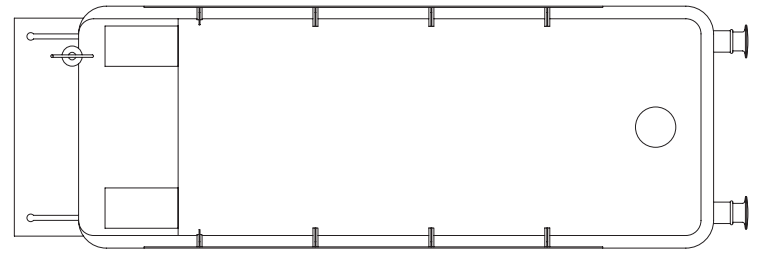
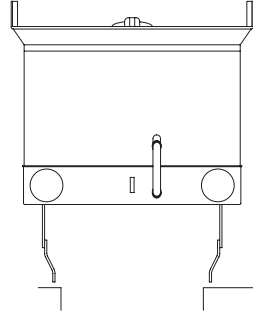
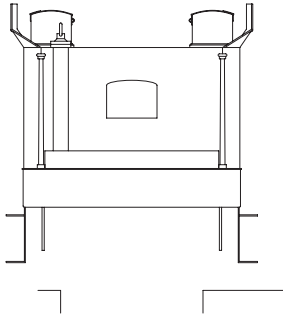
engines superheated by Urie had their Eastleigh superheaters exchanged for the Maunsell pattern between May 1929 and November 1933, when they required heavy repair.

After superheating, the engines underwent very few detail modifications, however engines fitted with Maunsell superheaters were distinguished by two snifting valves mounted either side of the smokebox (note A

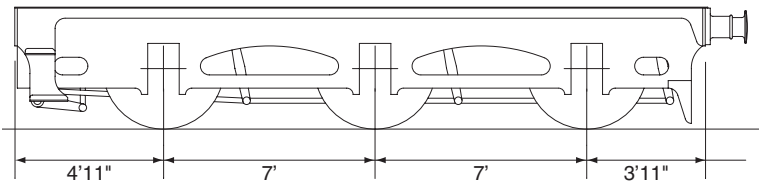


SOUTHERN RAILWAY (Ex L.S.W.R.)

Drummond 3500 gallon 6 wheel tender



14ft 0ins wheelbase chassis.



**Below: No.30695, of March 1897, was nicely on the boil when photographed at Eastleigh shed on 6 October 1956.
Photograph: Frank Hornby.**

on drawing). The snifting valves were removed shortly after Nationalisation. A further detail modification was the stovepipe chimney (note B on the drawing). On conversion the chimneys were fitted with a capuchon but as the maximum chimney height was greater on the Western Section than on the other sections, the engines were fitted with chimneys without capuchons when replacements were required.

Other than these the sole variation in livery. Whilst the engines were always plain black, over the years there were obviously differences in insignia and modellers should consult dated photographs.

Tenders

The engines were coupled with Drummond 3500-gallon six-wheeled tenders, with 13'0" wheelbase. In 1925/26, 20 700 Class engines had their 13' wheelbase tenders requisitioned for T9 and D15 4-4-0s used on the Eastern Section and the Portsmouth-Waterloo line. The tenders were replaced with tenders from K10 and L11 4-4-0s. The replacement tenders had a 14'0" wheelbase but were identical above the footplate.

The class remained intact until September 1957; No.30688 had been involved in a head-on collision with an electric train at Staines a month earlier. Nos.30352 and 30687 went in 1959/60, and withdrawal was steady until November 1962, when 30309/15/16/25/46/68, 30689/90/95/97 and 30700 were placed in

store. A number were hastily recalled for snow clearance duties during the arctic winter of January/February 1963. They saw no further service but there was no hurry to send them to be broken up. The last to go was 30697 which was towed away to Eastleigh in January 1964.

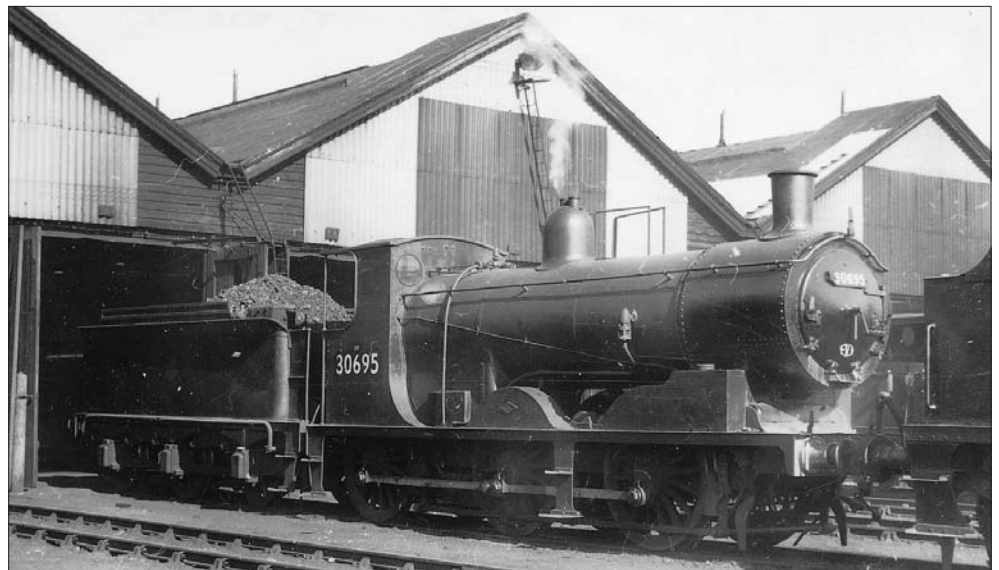
Notes on the drawings

The upper elevation shows the appearance of the engines before superheating, with the scrap sections showing the original Drummond conical smokebox door.

The lower elevation shows the appearance

after rebuilding with superheaters. Note the Maunsell snifting valves on either side of the smokebox (note A) and the capuchon as first fitted (note B). Other than these, the drawings are quite straightforward.

The tender drawn is the Drummond 3500-gallon, six-wheeled tender with 13' wheelbase. Note that as built, the coal rails were open but that in later years a solid plate was fixed behind the coal rails. Beneath the side elevation is the chassis of a 14' wheelbase tender. The upper part was identical with the 13' wheelbase tender.





...an exchange of railway modelling ideas for beginners of all ages

Westbridge-on-Sea

Part 2 – trackwork and wiring

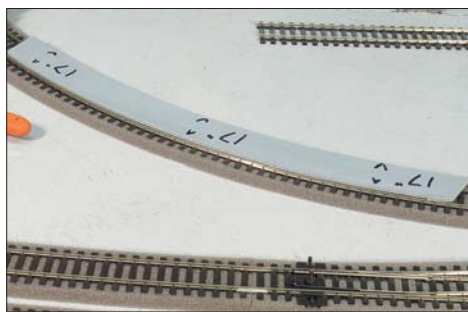
ROBERT ILES explains how good work now means many years of efficient and reliable running.

Track laying

The new Pecorama layout, like all good railways, started with a trackplan simply, but carefully drawn by hand on a piece of paper. This gave all the necessary information required for the initial quantity survey of how much track and how many turnouts, and of which type, would be needed. Peco code 75 Streamline track was chosen to give a very good representation of British railway track. Code 75 simply means that the vertical thickness of the metal rail is 75 thousandths of an inch. Efficient trackwork and good baseboard construction are, of course, very closely linked.

The track plan shows a station at sea level with the viaduct behind. This multi-level layout means that gradients are inevitable and these are set at 1:40. Sufficient room in the Prefabricated Garage is available to allow reasonably gentle radii around most of the curves. The Peco Streamline track is made to produce gentle, smooth curves with the aid of a Tracksetta, a template that fits between the rails when laying the track. These are available in several degrees of curvature. A similar template of the required curvature can be made from plastic or even stiff card. A six-foot way gauge is also invaluable to ensure the correct spacing between double track. Its other use is to gauge the correct platform height relative to the rail height.

Great care is necessary when laying the track, be it on a curve or along a straight section. Although the track on full-size railways is not always perfectly smooth, on a model the effect of unevenness becomes very noticeable and exaggerated. Check the straight sections with a known straight-edge and view the track



along its length at baseboard level to check for vertical and lateral deviations in the rails. If the baseboard is properly constructed, no track alignment problems should occur. The baseboard and track work are a permanent monument to the modeller's skill and approach. Corrections are difficult or impossible to make further on in the layout's construction.

Tracklaying on the new layout had to begin somewhere. The branch line was a good starting point. This had to be placed particularly accurately because it curves through an arch of the viaduct to join the main line. This would be the tightest reverse curve of the layout, but it would still have to allow enough lateral clearance for the longest item of rolling stock to clear the piers of the viaduct.

If there are turnout areas or sections where the exact placing of track items is critical, start laying the track there. It is easier to fit straight track to a correctly located turnout or crossing than vice versa.

Left: a reminder of the track plan, reprinted from part 1 of this series (May issue).

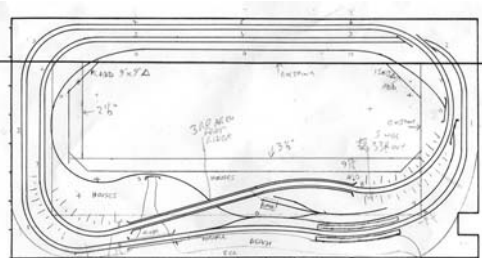
Clockwise from top left: a track setting template of the required radius ensures that the curves are smooth and consistent.

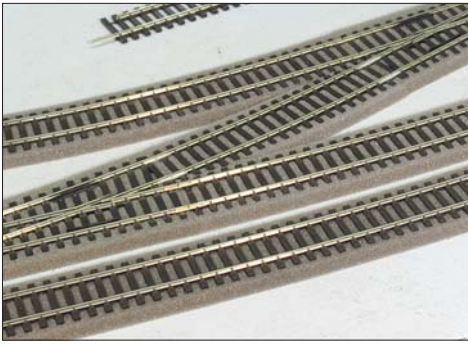
Run impact adhesive into the longitudinal furrow in the foam underlay.

Use small pliers to fit the track joiners, then settle the track into the underlay.

A six-foot way gauge will guarantee the correct spacing for twin tracks.

Below: checking the lateral clearance for the tightest curves on the layout under the viaduct.





Foam underlay under the track creates a basic ballasted appearance and functions as an effective sound deadener. This is available in rolls for straight track and as bespoke moulded items to fit turnouts and crossings. Put manageable lengths of the underlay, perhaps a metre, roughly in place. Use a tube of impact adhesive and run a thin bead of it in the longitudinal track grooves of the underlay. Now lay the track into the underlay making sure that the sleepers are located snugly in the slots. If you have been thorough in planning the track, the final position of the track will be known and marked on the baseboard. The track and underlay combined can then be glued into its correct location. Gluing the track down instead of using pins further reduces the transfer of unwanted train noise to the baseboard.

Many modellers do, however, use track pins to secure the track in place. This makes it easier to lift and relocate the track if need be. Glue the underlay to the track as previously described. It is possible to push the pins through the plastic sleepers and into Sundeala, but this should only be tried on the flexible track. The alternative, and when laying turnouts, is to use a fine drill bit, secured in a pin vice or small drill tool and drill pin holes in the sleepers. Some modellers drill the holes between the rails, but upward pressure from the foam underlay can distort the track as the pin is pushed home; the fine plastic sleepers can bow upwards at the ends causing the tops of the rails (railheads) to slope slightly towards each other, thus narrowing the gauge a little. This can prevent the smooth running that is perfectly attainable with good quality, well-laid track.

Instead, drill and pin the sleepers in the end portions that are outside the rails. Insert a pin at each end of the same sleeper to avoid distorting the track. The pins should only just secure the track in place; do not push the pins fully home to the point of squashing the underlay. On straight track, insert the pins at roughly 15cm (6") intervals; on curves, reduce this to about 10cm (4").

Before the track was laid onto the viaduct, the trackbed was painted matt grey as a basis for a realistic appearance. Obviously, track pins were not used to secure the track onto the plastic viaduct. Instead, foam underlay was glued to the track with impact adhesive. This was then stuck to the viaduct with the same sort of adhesive. The same care was taken to ensure that the track ran parallel and straight along the viaduct.



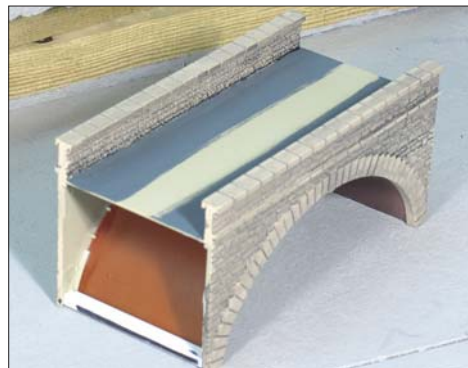
Above left: track underlay mouldings are made specifically to fit turnouts and crossings.

Above: the girder bridge, showing the 3mm plastic sheet used for the trackbed. The bridge piers were made from viaduct piers cut down to the required height.

Below: the small stone river bridge in preparation. Just like the viaduct, the trackbed is painted grey either side of the underlay position, as a basis for a realistic effect.

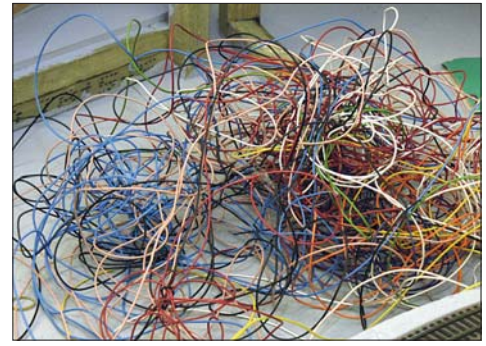
Visual interest can be enhanced at the planning, or tracklaying stage by the careful choice of track features. The massive viaduct is an impressive piece of civil engineering, but size is not everything. At the front of the layout, over the mouth of the river is a small bridge. To contrast the appearance and texture of the stone viaduct architecture, a plate girder bridge is used. This was built up from two cut-down viaduct piers. The trackbed that spans the river was a spare piece of 3mm thick plastic sheet which slotted into the channels moulded into the plate girder bridge sides.

A small stone bridge carries the branch line over the river and provides a great contrast to both the viaduct and girder bridge on the main line.



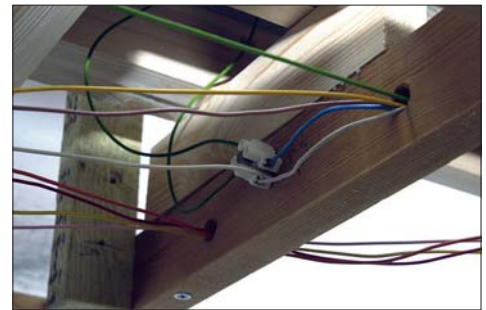
Wiring

This layout is exclusively for exhibition purposes and will run for many hours almost every day of the year. The track plan and operating sequences have been designed to work in the simplest way whilst providing the best visual impact. Up to five trains will run at any one time to give the viewer plenty of action. The major difference between this and a domestic layout control system is that this is totally automatic and must run continuously, virtually unattended, and managed by controllers specifically programmed for the purpose. The wiring therefore is not the same as would normally be found on most layouts.



Above: a colourful shot of the old wire which was in good enough condition to use again.

Below: drill holes at intervals in the framework to accept the wiring.

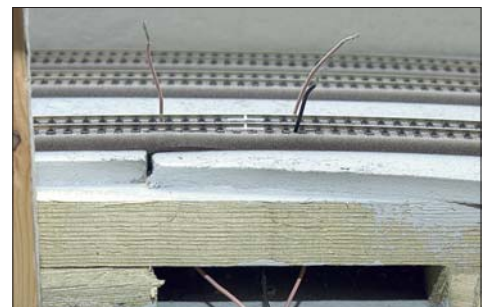


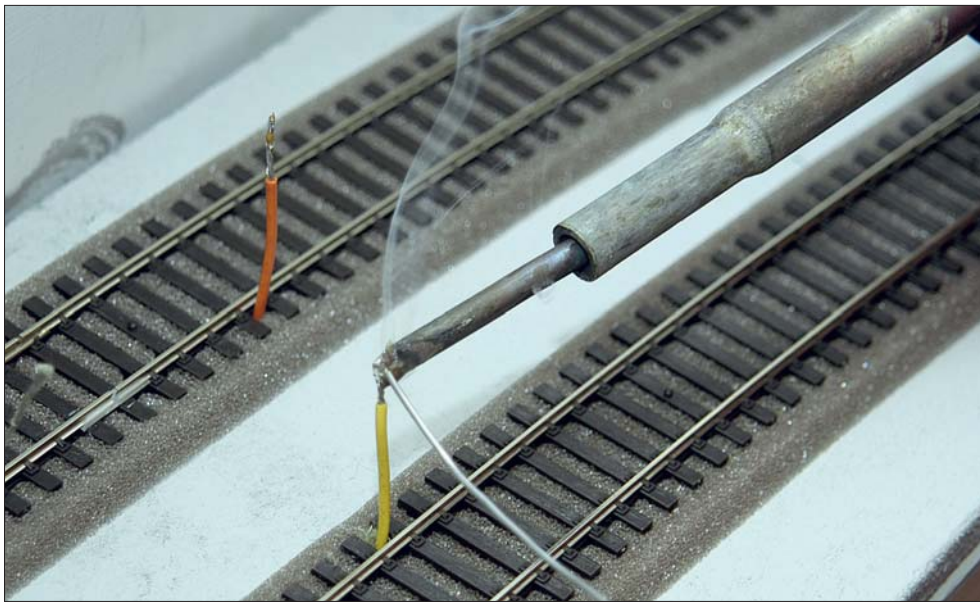
In common with all model railways with electrified track, the wiring must be safe and secure. A small degree of preparation is necessary during the baseboard construction. Drill 1/2" holes where required in the framework to accept the wiring loom as it grows. Usually, there will be wiring for turnouts and train propulsion, but in this case only the trains need power. The turnouts are not electrically activated.

The Peco publications in the *Shows you how* series will give all the necessary information required to wire a layout successfully. There are two booklets entitled *Wiring the layout* – Parts 1 and 2 – which describe the first steps and the more advanced procedures respectively. Also in the series are booklets covering baseboard construction and laying the track. The booklets are inexpensive and available from your model shop or directly from the Peco Technical Advice Bureau.

In order not to waste money, much of the wire from the previous layout was used. The wire was inspected and found to be in excellent condition.

Holes were drilled in the baseboard just to the outside of the rails to accept the current feed wires. The wires were fed through the baseboard ready to be tinned (*below*).





Above: the wire is tinned with flux and solder to ensure a reliable electrical contact with the rail.



Above: note the nylon insulating rail joiner. This will be a section of track where the feed wires can be switched on or off to activate or isolate the section.

The train control system includes reed switches which are used to detect the trains at certain locations on the track. Part of the switch is mounted on the track whilst a magnet is mounted under the train to activate the switch as it passes. The reed switch is mounted centrally on the track and, if in view, could be disguised with a decoupling ramp. In this case, the switch is out of view, enabling the fitter to remove a few sleepers to accommodate it more easily. For ease of possible future maintenance, the reed switches were connected using 'choc-block' or terminal block connectors which allow the wires to be removed with a screwdriver instead of a soldering iron.



Below: a close-up view of the feed wire being soldered to the outside of the rail. Take care with the soldering iron near the sleepers.



Gaugemaster controls are the heart of the system, a twin-track unit for the main line and a single-track unit for the branch line. They are mounted under the layout, out of sight on a couple of shelves (*above*).

In addition to the two controllers is an automatic control unit that is connected to the reed switches and the Gaugemaster units. This is to provide a push-button feature to enable visitors to set a train in motion for a circuit of the branch line. It is also a safety measure to prevent collisions on the main line when a train is stopped at the station. The oncoming train will be stopped at a location on the other side of the layout. *To be continued.*

Above left: a reed switch mounted in an out-of-sight location where a few sleepers were removed to accommodate it.

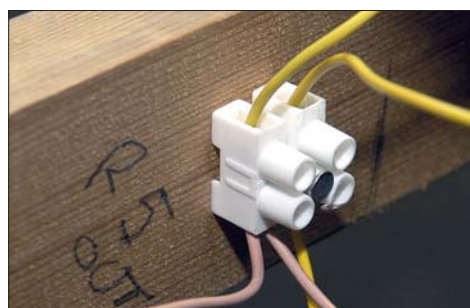
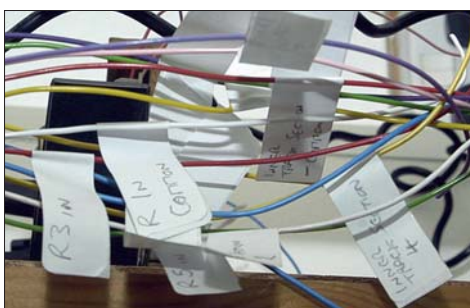
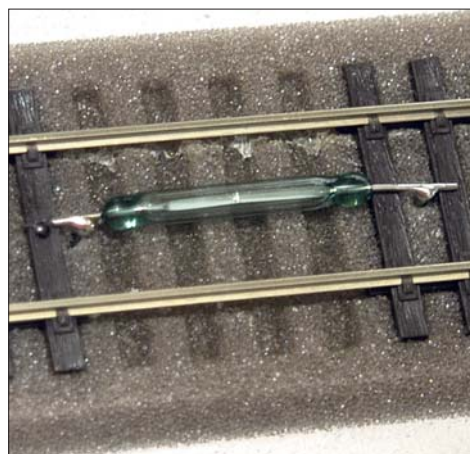
Far left: the colour-coded and labelled wires.

Left: a 'choc-block' or terminal block installed to enable the easy removal of a reed switch for servicing.

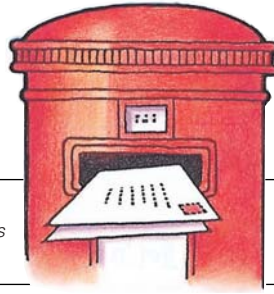
Photographs by Jolyon Sargent.

Tinning involves applying flux to the wire to ensure a good flow of solder and therefore a good electrical contact. A thin coat of solder was applied to the wire as a key to a secure solder joint. The tip of the wires were pulled down to rail-level and soldered to the outside of the rail, again using flux. If the wires were soldered to the inner face of the rail, they might catch the wheel flanges to cause a derailment. Wires can also be attached to the underside of the rail as the track is laid, or to the underside of metal rail joiners. A standard 25watt soldering iron is fine for this job.

Colour coded wires are used to help trace their passage across the layout. Labels are attached to help with identification too.



READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

PPM50 CORRECTION

A couple of errors unfortunately made their way into the photo captions accompanying last month's article launching the 'Build a PPM 50' competition.

The interior view printed in the magazine should have had the caption 'Interior photo taken from No.2 End towards No.1 End. Points to note: clerestory-type roof profile with raised central section; bus-style ticket machine (not actually used in current service) opposite door at No.1 End only; right-hand driver's position; and absence of interior doors to cab area'.

We would also like to clarify that the retractable steps are only intended for emergency egress – as a rule PPM railcars offer completely level access from platforms.

CASPAR LUCAS

Our apologies for the inadvertent assumption and mixup – Ed.

COAL STAITHES...

I read Nick Holliday's remarks on 'coal staithes' (May issue) with appreciation. They were indeed not as common as modellers seem to think. There is no mention of them in Paul Karau's classic *Great Western Branch Line Termini*. Coal stages and coal offices, yes, but no staithes.

I well remember seeing coal shovelled out of wagons onto the trackside at our local station. From there it was laboriously bagged and hoisted (manually) on to the local coalman's dray or lorry. We weren't in such a tearing hurry to get things done in those days, and labour was cheap (i.e. ill-paid).

What I do remember, and have never seen modelled, were large squared-off piles of coal whitewashed all over or at the edges to deter thieves. Another deterrent was night watchmen. Nearly every station had its watchman's hut, often seen tipped on its nose to keep out the rain in daylight hours. They were indeed so common that Hornby produced a tinplate 0

scale model, complete with brazier of glowing coals. The model was painted bright blue; quite unrealistic, as they were usually tarred or creosoted. They were more common than coal staithes – and easier to model!

JOHN ALLISON

...AND COAL WAGONS

I refer to your current (May) RAILWAY MODELLER product reviews, page 334. To quote 'The South Wales and Cannock Chase Co. wagon (Ref 37-181, £6.75) is modelled on a Gloucester prototype, as is the wagon in the plain black livery of the Elders Navigation Collieries'.

If you refer to my *Private Owner Wagons, a Third Collection*, page 88, this shows South Wales and Cannock Chase No.901 as it was built as a coal wagon and painted grey, not red as is the model. This discrepancy was pointed out to me by one of my readers, and I feel that you should have mentioned it in your review, as you pointed out the origin when reviewing another wagon from the same release (Thorne).

The Elders wagon was not a Gloucester product: there is no record of the Gloucester company ever building coke wagons for this owner.

I have taken up the above matter with Bachmann as I am interested to know if they have any information that the South Wales and Cannock Chase wagon was rebuilt at any time and the sources of reference.

KEITH TURTON

I am writing with reference to the advertisement in the June 2006 issue of RAILWAY MODELLER for Buffers Model Railways Ltd., Axminster, in particular the illustrations for the 11 new, Bachmann-based limited edition wagons. I have to point out, as I have already pointed out to Buffers, that unfortunately the wagon for Bassil King & Co., Bournemouth West, has been produced in the wrong colour, i.e. it

should be dark grey, not red. My evidence for this is as follows.

The official 1897 Gloucester photograph of the prototype includes in the photograph the usual Gloucester blackboard with details of the wagon, and this says 'painted dark lead colour'. Ref. *Private Owner Wagons from The Gloucester Railway Carriage and Wagon Company Ltd.*, plate 324, Keith Montague, Oxford Publishing Co.

Dark lead in this context meant dark grey, not red lead as Buffers have taken it to be. Red lead, until it was eventually withdrawn due to being toxic, was used in industry as a primer for metal, especially pipework, and was never used as a finishing colour for wagons.

Bill Hudson, in his detailed discourse on wagon colours, reported his conversation with the late Mr. J. Hepworth, a former chief paint mixer at Charles Roberts & Co. Ltd.. On the subject of grey wagons he said 'To make life difficult for historians and modellers, grey wagons were always referred to as lead, light lead etc.' Whilst details of various greys and reds are given in the discourse there is no mention whatsoever of red lead. Ref. *Private Owner Wagons, Volume Two*, Bill Hudson, Oxford Publishing Co.

I have consulted Ian Pope, the wagon expert (and foremost authority on Gloucester wagons) and he says 'Gloucester wagons which were painted red, light red, bright red or red oxide, specifically said so, just look at the blackboards in the photographs. Wagons which were described as lead, light lead or dark lead were different shades of grey, so dark lead meant dark grey. Many Gloucester wagons where there is no dispute over the colour were shown as dark lead, i.e. dark grey, so the Bassil King one would have been the same'.

As a further example of the use of the word lead to mean grey for wagon sides, I quote the following, for the South Eastern & Chatham Railway, at the time the Joint Committee came into being. 'The only major change was in the basic body colour, from red to grey, of a darker shade than that formerly used by the LCDR. Officially, this was described as lead colour and normally included solebars, headstocks and buffer guides'. SECR wagons were definitely grey. Ref. *An Illustrated History of Southern Wagons*, Volume

Left: the feature on locomotive headlamps made a fine three-pager, but we could not possibly leave out the most important headcode of them all: four lamps, for the Royal Train! Fittingly, the model is the Hornby special version of No.6201 Princess Elizabeth, which was issued to mark the Golden Jubilee of HM The Queen in 2002.

Photograph: Jolyon Sargent.

Three: SECR, G. Bixley, A. Blackburn, R. Chorley, M. King, Oxford Publishing Co.

I have consulted John Harvey, Chairman of the Southern Railways Group, and author of articles on paint finishes for the Historical Model Railway Society, and he says 'for wagon sides lead colour has always meant grey, dark lead was a darker shade of grey. Red lead, as I remember from my early days at work, was a metal primer, it was not a wagon colour'.

I am aware from conversations with Buffers that the firm has changed to using Bachmann for its limited edition wagons in order to improve the historical accuracy of the models which they offer. With this in mind I make my comments in the spirit of constructive criticism only. I believe that, whilst there were of course many variations in private owner wagons, the basic colour, where known, should be correct, which is why, as you will note, I have gone to some trouble to check this particular wagon, bearing in mind the forthcoming review. The other 10 wagons look all right; I appreciate that the actual models will be a more accurate shade of colour than the initial illustrations represent.

With regard to Bassil King & Co., Buffers has said that it does not agree with me and that the wagon was red, and that the firm has researched all the items prior to production. However, I consider that the evidence which I have presented clearly shows that Bassil King & Co. was dark grey (with black vertical ironwork, lettering white, shaded black).

DAVID SZTENCEL

RUNNING OLD HORNBY DUBLO

With reference to the letter from Mr. Martin in the May 2006 edition regarding the problems with running old Hornby Dublo and Tri-Ang locos on modern track.

A late friend had a rather crude but effective answer in turning down the wheel flanges with a file. This certainly works with Hornby Dublo but I have never tried it with Tri-Ang. The first step is to remove all coupling rods and valve gear etc. A large sharp small tooth file is needed, one with a plain edge is best. The method is to hold the file on the top of the flange with the plain edge against the chassis block and then to push the chassis along on a mat or carpet (do not do this on the best carpet to avoid the wrath of the domestic authority). A few hard strokes are needed to remove the plated surface then the rest will be easy. Be careful not to remove too much otherwise you will end up with an all flangeless chassis.

If care is taken the flanges do not come off or the wheels turn on the axle. I still run one of his chassis that was done over 30 years ago and it never causes any problems.

I have never tried this method with Tri-Ang locos as their wheels were too coarse in the tyre width; if it is tried extra care will be needed as the tyres may come off as the wheels are of a different style. On another matter does anyone out there know where I can obtain replacement brushes and springs for modern motors such as a DS10? I destroyed the tension in the very fine springs by getting them too



hot when soldering on the wires, which resulted in a poor performing motor. I am quite prepared to let someone else do the job if it's a package deal or do it myself if they can supply the parts.

To the RAILWAY MODELLER, keep up the good work, I have been an avid reader since the late 1960s and you are still the best. Many thanks.

PAUL S. HYDER

BLONDIN CRANES

Further to Nick Holliday's letter in the May RAILWAY MODELLER, blondins were first devised by a local postman at Abergeldie, near Balmoral Castle in Aberdeenshire. In order to deliver mail to a particular farm more easily, he used a cradle suspended from ropes to cross the River Dee.

A local quarry owner, John Fyfe, saw the contraption (nicknamed 'the Postie's Cradle' by the locals) and adapted it to work the many quarries around Aberdeen. It was then that these overhead cable assemblies were named blondins, after the Victorian tightrope walker. An Aberdeen engineering company, John M. Henderson, became rich and famous by manufacturing and selling blondins around the world.

The biggest Aberdeen quarry was Rubislaw, which was eventually the largest man-made hole in Europe at 500' deep. From Rubislaw most of Aberdeen was built. Granite from the quarry was also used to build the Thames Embankment and parts of St. Petersburg – John Fyfe being a friend of one of the Russian Czars.

As a child, my bedroom window overlooked Rubislaw Quarry and there were four huge blondins at work most days.

TOM SIMPSON

SR ROLLING STOCK MATTERS

I have read, with great interest, the letter from Mr Sztencel in your June issue under the above heading.

With respect, I think Mr Sztencel misses the point. Of course there are many models of SR and its constituent railways in kit form – SE Finecast alone has a wonderful selection. However, his comments presuppose the ability either to build them or to pay for them to be built. In the latter situation the kits plus wheels, motors and gears will cost around £100.00 and a good kit-builder will charge at least another £200.00 to build the same and, possibly, to paint the completed model.

Coach kits are another matter. Again, if the modeller has the talents they can be built. If that facility is not available I believe, from enquiries, that each coach will cost around £250.00 to get built and painted.

The number of RTR locomotives in SR as opposed to BR(S) is very limited. There are the Hornby SR coaches and the two brake vans Mr Sztencel refers to plus a limited edition of some wagons from Bachmann.

The other major railways are far better provided for in 00 gauge and indeed, have always been in that happy situation – the lists of GWR items in particular emphasise the difference.

I am sure that there are many modellers apart from Dr Ford and myself who, for many reasons, including physical ones, cannot add the kit-built locos we would like to our collection

and look to the manufacturers to provide us with what we want.

GERALD FUNNELL

REMEMBERING GRAHAM JENKINS

I am writing to you on the advice of Mr. Nigel Adams, Chairman of the Tywyn & District Model Railway Club. A short while ago sadly we lost Mr Graham Jenkins, who was a founder member of our club and a staff member of the Talyllyn Railway.

We have had a run of 100 Dapol 7-plank wagons done for sale in his memory, and Nigel suggested that you might be good enough to mention it for us in your magazine. The wagon will sell at £7.90 with all the profits going to the Trust Fund which was set up by the Talyllyn Railway for the benefit of his baby daughter, to assist with her education and so forth. Hope that you can help us.

R.HEY,

Treasurer, Tywyn & District Model Railway Club, 108 Plas Edwards, Tywyn, Gwynedd LL36 ODA.



DCC – AND GAINSBOROUGH

As a modeller who dabbled in two-rail in the early 1960s (and gave it up in favour of overhead for one polarity and both rails for the other – it gives perfect operation), I would like to add my support to the anti-DCC brigade.

Are the manufacturers really telling us that, in exchange for a three-figure sum, our layouts will work any better? How many modellers have the ability to work more than one train at a time? How many modellers would want to work more than one train at a time? I can do it on my old-style layout with one train on the main circuit and one on the branch, but what is the point? I engage in the hobby for my personal pleasure, not because I want to prove anything. I get enough of that in everyday life.

The manufacturers should sell their locos analogue-ready but with a DCC socket for those who are that way inclined. If they try to force us down the DCC path I suspect that a lot of people will vote with their feet, ie no sales.

JOHN G. NELSON

PS It was nice to see an article in the May issue about a model railway (at Gainsborough). The usual diet of chocolate-box dioramas makes for nice photographs, but they are both boring to operate and boring to read about. Would it be possible to run an article on Gainsborough's timetable and operating practices? Railway modelling is unique in that it is the only modelling hobby where you can replicate prototype operation, and you rarely see anything in the British modelling press about it.

WEST MIDLAND MEMORIES

I've been playing with model trains and, subsequently, railway modelling for over seventy years. In all those years I've been influenced in one way



or another by the man to whom your Australian contributor, Ian Simpson, paid homage in the May issue of RAILWAY MODELLER. I mean Edward Beal. At first, as with thousands of people throughout the world, the influence was through his books. In the years before his death we became friends.

The *West Midland* layout, in the design of which Ted and I co-operated, was featured in the October 1988 and March 1989 issues of RAILWAY MODELLER. The articles generated a mass of correspondence and a generous gift of five of the original *West Midland* Exley coaches from one source and some of the original bogie wagons from another.

Then came a move to a small Rectory (yes! – another railway parson!) into which it was impossible to fit the old layout. Add to that the appearance of a new 'live-in' grandson and all hope of a model railway evaporated. Fortunately, a fellow West Midlander, Vic Harman, came to the rescue. He transported the layout with the old *West Midland* stock and locos to his home in Lincolnshire.

Our grandson grew up and, not surprisingly, developed an interest in railways. He had a 6' x 4' layout built in his bedroom using Peco Setrack. This was in our retirement home. At the age of fifteen he moved to be with his mother in Perth, Australia. His locos and stock went with him and, at the age of 75, I was left with the layout. It occupied far too much room in our small bedroom so, after removing the track the baseboard was cut so that one part formed an L shape and the other, the Muddle Puddle (fiddle-yard). This modified baseboard and the reclaimed Setrack provided the raw materials to begin yet another, but very modest, *West Midland* layout.

The layout depicts a small seaside

terminus – Tedby Stephen. Tedby for obvious reasons. Stephen because, in his retirement, Ted Beal ministered at St. Stephens in Edinburgh. The buildings, with one exception, are based on Ted's designs. The railway is the LMS – Laurenceston, Methven and Southern. The line feeds into a four-road fiddle-yard and traverser.

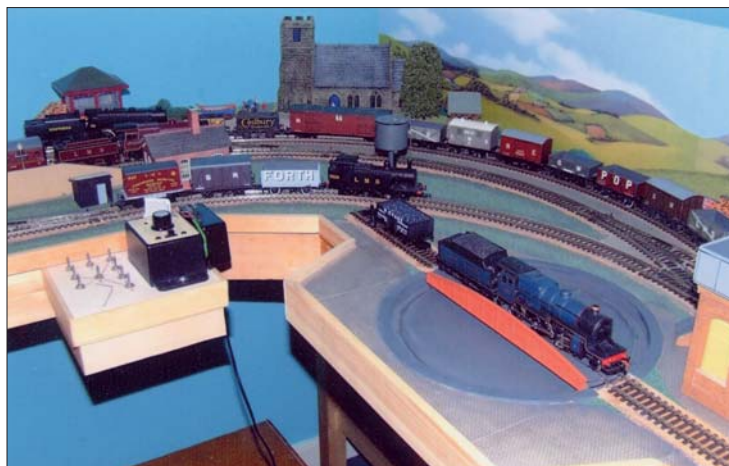
My photos show nearly all there is. The terminus awaits a scenic backboard and suitable representations of buildings. The Station buildings are modelled on Ted's designs in his *Scale Railway Modelling Today*. I've tried to use the sorts of brickpapers used on Ted's layouts – but supplies are drying up. The Goods Depot is based on that designed by Ted and built for R.W.Vacy-Ash by Albert Kenyon.

The designs for the turntable and signal box appear in Ted's *Railway Modelling in Miniature* vols.1 & 3. The water tower is based on the one that used to be at Port Dickson on Theo Pearson's vast 3-rail, 00, *North Midland Railway* (1000 gallons of real water in the docks!). The freight train is made up of wagons using Merco Litho papers, some designed by Ted in the 1930s. I have never yet found another example of the Cadbury wagon! The loco on the Turntable is a Lima 'Crab' bought in 1983. It features a mixed traffic livery devised by Ted and myself.

The treasure is the lime works constructed by Edward Beal, just visible on the right-hand side of the top photo.

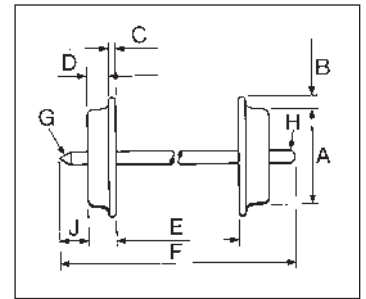
So, having started my working life on the footplate with the 'other' LMS, I never dreamt that I would end it as a priest – still playing with model trains! But, I'm back with the *West Midland*: over the years I've made many good friends, Ted's photo smiles benignly over Tedby, and I still enjoy it all.

KEN NEWBON



LATEST REVIEWS

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Latest Class 66 liveries in N from Graham Farish

Graham Farish has released its latest liveries for the N gauge Class 66: this is our first opportunity to inspect one, the initial releases having proved very popular – and rightly so!

Joining EWS No.66 135, Freightliner No.66 610 and GB Railfreight No.66 701 is Freightliner No.66 522 (illustrated, ref.371-378, £77.95), EWS No.66 200 *Railway Heritage Committee* and GB Railfreight No.66 709 *Joseph Arnold Davies* in all-over Medite livery.

Our sample was finished expertly in the deceptively simple Freightliner livery. No.66 522 carries a non-standard livery to mark the company's partnership with Shanks Waste Management, and is dedicated to the 'Binliner' trains from east London to Calvert, on the erstwhile Great Central. The paint job, carried out at the LNWR Crewe Works, dates the machine from late 2004 onwards. Other points of note on the GF model are the crisply silvered window frames, the neat door handrails with representations of the fixing bolts, and the 'rust'-coloured exhaust



Performance is smooth and quiet, and is aided by the model's weight of around 100g. Running-in is advised in the instructions. Directional lighting is fitted, and it illuminates briskly when voltage is applied. The headlights are in 'day' configuration (top and offside), and are unswitchable to the 'night' setting of top and nearside.

Below the finely detailed 'Plimsoll line' with its characteristic sandboxes to the correct shape and position, the GF 66 displays the cooling pipes and

associated junction boxes, and a very good pair of bogies. These – be warned – clip into the rest of the drive system, and on our sample were prone to falling off! The bogies include the standard N gauge couplers, and one of them even features the sensor for the AWS equipment.

The detail parts bag consists of brake pipes and the lower halves of the air dams.

These ubiquitous prototypes have certainly been treated well in N.

For N

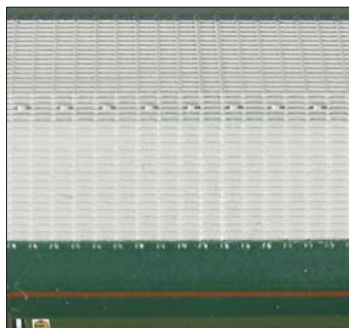
SAMPLE SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
In text

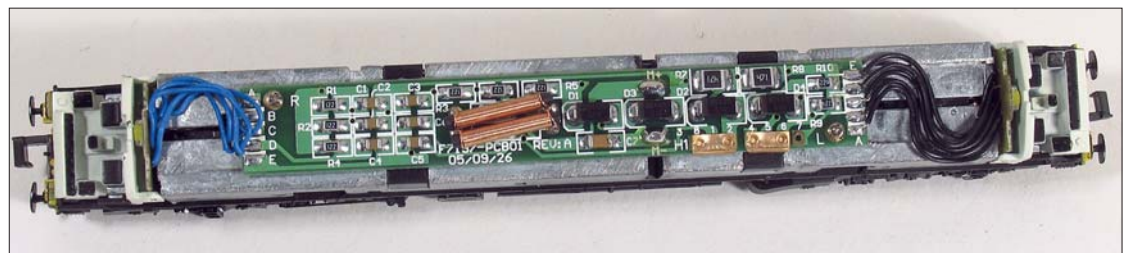
WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



silencer with subtly blackened outlet hole. Staying atop the roof, the requisite pods and hatches are present and correct, and the radiator grille is sharply moulded.



The superstructure unclips from the chassis to reveal well-detailed cab interiors, clipped to the ends of the cast metal frame. On the upper surface is a DCC decoder-ready PCB, and the model comes with instructions on fitting a decoder.



Selection of new steam locomotives in 00 from Hornby



Notwithstanding the fact that Hornby has quite a "Southern-centric" 2006 programme, the other ex-Big Four companies are still blessed with new versions of existing machines, a few of which are seen here.

For the East Coast Main Line modeller is A4 Pacific No.60029 *Woodcock* (ref.R2535, £105.00) in late BR condition with correct (ex-A3, 1928-pattern) type of corridor tender and 34A (Top Shed) shedplate, which dates the model to pre-June 1963, when the 'Streak' moved up to Peterborough New England.

Gresley 'cousin' A3 4-6-2 No.60073 *St. Gatien* (ref.R2536, £105.00) trails a Great Northern coal-rail tender, early BR emblem and single chimney.

Shedplate is 52B Heaton, and the machine was named after the winner of the 1884 Derby.

Across to the ex-LMS, preserved Stanier 'Lizzie' No.46203 *Princess Margaret Rose* (ref.R2559, £105.00) is finished in the glorious maroon revival livery, with LMS-type lining, as applied to the real thing from 1990 – she never wore the colour in BR service.

Despite their ubiquity, only four Stanier 'Black 5' 4-6-0s were named by the LMS, one of which being Armstrong-Whitworth-built No.(4)5156 *Ayrshire Yeomanry*, modelled here in BR lined black with late crest (ref.R2555, £93.50). The Hornby artwork for the nameplate includes a stab at the tiny *Earl of Carrick's Own* sub-

title – well done indeed! – and naturally is of the correct St. Rollox style of lettering.

For GWR followers, two Collett 'Castle' 4-6-0s have been released, both of which represent locomotives renamed after wartime aircraft: the Vickers 'Wimpy' name adorns the flanks of No.5075 *Wellington* in GWR livery with shirtbutton monogram on the tender (ref.R2459, £93.50, not illustrated), and sister No.5077 *Fairey Battle* is offered in BR early emblem finish (ref.R2551, same price).

Finally, the latest version of the mixed-traffic Collett 'Grange' 4-6-0 is No.6816 *Frankton Grange* in weathered plain BR black with early emblem (ref.R2548, £99.99). It bears the name

of a Shropshire stately home, and also an 87E (Swansea Landore) shedplate.

All are attractively finished, and run equally well, and fully up to the high standards of previous issues. DCC sockets (NEM652) are present on all.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES
In text

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



New items from Peco

The latest in the range of N gauge HAA-coded merry-go-round coal hoppers from Peco is the post-privatisation version, with EWS maroon cradle (ref.NR-303, £11.80). The model, of No.357012, has fine legible printing down to the servicing panel on the right-hand side of the cradle.

Proper lubrication of mechanisms (following the manufacturer's guidance, of course) is an essential part of model locomotive maintenance. Peco has released a new lubricant, branded Power-Lube (ref.PL-64, £4.75), to do just that. It has been formulated by Electrolube Ltd. of Derbyshire, and is essentially a modern replacement for

the liquid which sailed for many years in the Peco catalogue, under that company's title. The new jars feature fine nozzles for ease of application in confined spaces. It should be available from your local Peco stockist or from the Peco Technical Advice Bureau at the address below.

For N and all scales

MANUFACTURED/DISTRIBUTED BY
Pritchard Patent Product Co.,
Underleys, Beer, Seaton,
Devon EX12 3NA

PRICES in text.



Private owner wagon commissions in 00 from Dapol and Bachmann



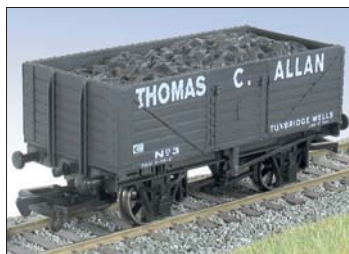
The Tutbury Jinny has commissioned 125 sets of grain hoppers from Dapol to commemorate the traffic of malt and grain to the breweries of Burton-upon-Trent. It is the first time Dapol has used its hopper moulding for a private owner livery. Price £19.99 plus £1.00 postage and packing.

The Tutbury Jinny, Tutbury Mill Mews, Tutbury, Nr Burton-upon-Trent, DE13 9LS.

1E Promotionals has commissioned two more private owners, 'H.O. White' of Banbury and 'Wiggins' of Northampton. 250 certified examples are available, price £7.50 each plus £1.00 postage from the joint distributors, KRS Model Railways of Leighton Buzzard, and GE Models of Sheringham.

KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds LU7 0BA.

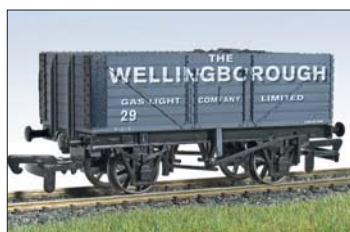
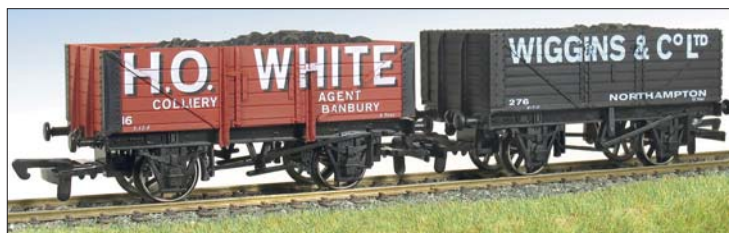
G.E. Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.



Ballard's latest commission with a local theme is 'Thomas C. Allan' of the firm's home town, and based at the goods depot pre-1939. Price is £8.50, P&P £1.00 per order.

Ballard's, 54 Grosvenor Road, Tunbridge Wells, Kent TN1 2AS.

The Kitmaster Collectors' Club has released its third Dapol private owner commission, representing the 'Wellingborough Gas Light Company'. Wellingborough was home to the



Rosebud factories. 128 certified wagons have been produced price £7.95 each plus £2.50 postage. Please make cheques/POs payable to 'Kitmaster Club'.

The Kitmaster Collectors Club, 109 Head Street, Halstead, Essex CO9 2AZ.

Buffers of Axminster has no fewer than eleven Bachmann private owner commissions, a representative selection of which is shown here.

In alphabetical order, the wagons are as follows. SECR-type ply-side vent van of brewers 'Arnold &

Hancock' of Wiveliscombe; 5-plank open 'A.F. Chainey' of Yeovil Pen Mill; 7-plank open 'Thos. J. Clarke' of Weymouth; 5-plank open 'Goodland & Sons' of Taunton; 7-plank open 'Basil King' of Bournemouth West; 5-plank open of namesake 'W.J. King' of Bishops Lydeard; 7-plank open 'S. Loney' of Wellington; 7-plank open 'Thos. S. Penny' also of Taunton; 5-plank open 'Ralls & Son' of Bridport; 7-

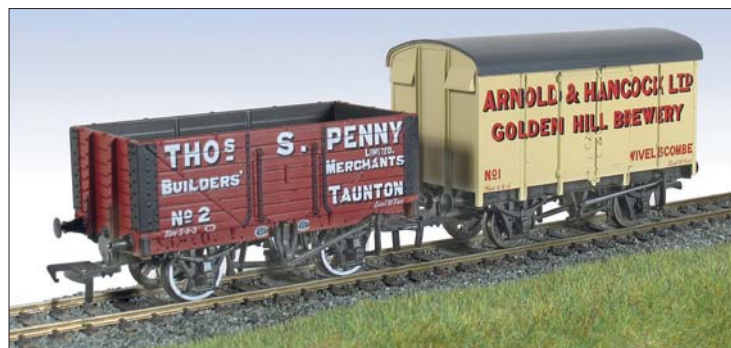
plank open 'W.H. Thomas & Son' from Axminster and Lyme Regis; and 7-plank open of namesake 'William Thomas', also of Wellington. Each wagon is limited to a run of 500.

Prices are £7.50 each. P&P is 50p per wagon (minimum postage £1.00), and the full set can be obtained for £85.00, postage extra.

Buffers Model Railways Ltd., Colston Cross, Axminster, Devon EX13 7NF.

The Train Shop, Morecambe has acquired the remaining stock of two private owners with a local connection: Bachmann 14-ton tank wagon 'Jas. Williamson' of Lancaster and Dapol peak-roof lime wagon 'Richard Briggs' of Clitheroe. Price £6.50 each, post and packing usually £2.00.

The Train Shop, 23 Pedder Street, Morecambe, Lancashire LA4 5DY.



45' containers from Bachmann



Modern modellers cannot, it seems, have enough containers on the layout, either standing around, on lorries or being transported on flat wagons. Bachmann has a useful selection, including the 45' 'Dream Box' pair illustrated. ('Eucon' containers are also listed, ref.36-101, same price.)

The package includes separate locking bars, crisply moulded in silver plastic, for the modeller to install. The painting and lettering on these

models – they are not identical – are first class, with inscriptions, warnings and dimensions clearly printed.

For 00

SAMPLE SUPPLIED BY Bachmann Europe PLC, Moat Way, Barwell, Leicestershire LE9 8EY

PRICE ref.36-102, £8.80

Hornby Master Cutler premier box set in 00

Last month, by way of an entrée, we illustrated the four-coach add-on pack of Hornby Gresley coaches for its *Master Cutler* premier box set. Here is that set, in all its glory!

Centrepiece of the set (ref.R1074, £225.00) is Gresley A3 Pacific No.60052 *Prince Palatine* in early BR express blue livery and fitted with a Great Northern coal-rail tender. The locomotive honours the 1911 St. Leger winner, which also *inter alia* won back-to-back Ascot Gold Cups in the following two years. The model carries no shedplate (the LMS-derived practice took time to spread so soon after nationalisation) but No.60052 was a Leicester Central resident in 1950.

Three coaches are supplied: corridor third No.E12612E; corridor first No.E11011E; and corridor brake third No.E10097E.

Sufficient pieces of Hornby sectional track are supplied to produce a double-track oval requiring a 'footprint' of 1575mm x 1143mm. It features a



crossover and short siding complete with buffer stop. The track is intended to be deployed on the TrakMat supplied in the box, which has ballast and other ground detail printed in full colour.

Control is via the HM2000 two-track transformer/controller: naturally all wiring, track clips and mains lead are included. A Hornby Virtual Railway CD-ROM is also in the set, to inspire the lucky recipient to take the next step along the road.

For 00

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE
In text

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Latest version of SR 'Lord Nelson' 4-6-0 in 00 from Bachmann

This is the latest version of this firm's rendering of the famous Maunsell 4-cylinder 4-6-0s. It is a nice model but has not been elevated to the Blue Riband class and therefore does not have sprung buffers, metal feed water pipes and other adornments associated with that name.

The BR express passenger livery with the lion-on-wheel crest reminds the writer of those he saw during the 1950s – all but 30851 were copped during that period, mostly at Waterloo.

Naturally this was over a decade after Bulleid introduced the major alterations, replacement cylinders and Lemaître multiple blast pipes etc which so transformed the locos' original disappointing performance. One believes that only No.865 had its unique 135 degree crank setting altered to 90, and that the rest puffed at eight beats to the revolution for the rest of their lives.

From a modeller's point of view the only noticeable sign of these modifications is the large Lemaître chimney and it is a pity that on the model this is not drilled out, but rather conspicuously blocked in at rim level.

The cab interior is quite nicely



detailed with separate wheel reverser and glazed side windows.

The locomotive bogie is sprung and both swivels and has side-play. Tender bogies are not sprung but have well detailed sideframes. The tender top features well modelled coal, the three distinctive reservoir tanks, twin water fillers and tool tunnel.

Tension lock couplers in the manufacturer's style are permanently fitted front and rear.

Wheels and valve gear are realistically blackened, lining, lettering and

nameplates are very good, and the 71A shedplate is there.

Locomotive brake gear and tender footsteps are provided for the purchaser to fit, but not so locomotive front steps which would undoubtedly be impossible for sharp curves.

The model is loco-driven by a can motor mounted horizontally in the fire-box and driving the centre coupled axle via worm and wheel. The maker's minimum recommended radius is 18" second radius.

Fitting a DCC decoder requires dis-

assembly of the chassis, presumably due to its split-frame design, and there is space at the rear to locate a decoder of type 36-551 or smaller. The instructions with the model recommend using a 1amp rated decoder and obtaining further advice on installation from a Bachmann retailer. (See also the *Shows you how* DCC decoder-fitting booklet, published free with the October 2005 issue, copies of which are available from our Technical Advice Bureau.)

This is a nice model of a handsome locomotive that will awaken pleasant memories for many.

For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
ref.31-408, £81.95

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Mill Lane Sidings BR Shock open body kit in N

Mill Lane Sidings has released its second wagon kit for N gauge. (The first, for an LMS insulated van, was reviewed in August 2005.) It is a body kit for a BR Shock Open.

Specifically, the kit represents one of a batch of 100 Dia.1/036 13-tonners, built at Ashford in 1950. The body, vacuum cylinder and small trapezoidal sheet rail protecting plate are all moulded very crisply by Parkside Dundas. The arrangement of parts on the sprue means there is a spare vacuum cylinder for the bits box. Plastic strip is provided to act as blanking pieces for the ends of the Peco ref.NR-

121 10' wheelbase chassis (not included, but available from Mill Lane for £1.95 per kit if required) and also to represent the spring guards, beneath the side doors on the real things. These are, handily, pre-cut to length. A piece of fine brass wire is supplied to act as the sheet rail, and templates are provided to aid its shaping to fit the wagon.

Full instructions are provided, as are waterslide transfers by Robbie Burns: these are coloured to match the Phoenix 'brown' bauxite (1948-64) or later 'red' bauxite (post-1964) period paint shades. The kit to cover the for-

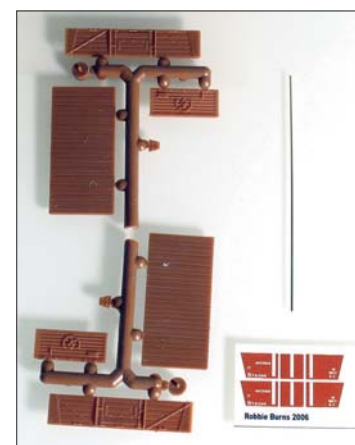
mer era is ref.MLS15; the latter era is ref.MLS16. (Remember to state which kit is required when ordering.)

A useful kit for the steam/early diesel modeller in 1:148 scale.

For N

SAMPLE SUPPLIED BY
Mill Lane Sidings, 7 Mill Lane,
Rainford, Nr. St. Helens, Lancashire
WA11 8LW

PRICE £3.90ea plus 60p P&P per order. Please make cheques/POs payable to R. Bardsley.



16T mineral wagons new to Graham Farish range in N



Following its range of new N gauge private owner wagons, on brand new 9' wheelbase chassis (reviews pages *passim*), Graham Farish has turned its attention to the post-war steel-bodied types, the numbers of which were legion in the 1950s and 1960s.

Early batches were built by various contractors to a Charles Roberts design, with sloping sides, and side,

end and bottom doors. The GF model (ref.3767-450, £4.75) represents B8128, a Roberts-built wagon. A version with a fitted underframe is also offered, ref.377-451, same price.

A further step along the trail is represented by the straight-side wagon with side, end and bottom doors, to Diagram 1/102. The model (ref.377-250, £4.75) is based on B38066, which

was built by ROF Woolwich.

Finally, Diagram 1/114 is represented by fitted B68900, the first of a batch of 100 built at Derby in 1951. As fitted stock, it carries the bauxite livery, and the brake gear under the model (ref.377-226, £4.75) is very finely represented.

The bodies are moulded crisply, and are full of detail. The bauxite body has

a top-flap above the side doors, and it and the Dia.1/102 wagon carry tiny versions of the hook points under the lips atop the bodysides, where sheets could be secured if needed.

Fine-spoked metal wheels are fitted, as are the cumbersome by comparison standard N gauge couplers, on sprung mountings.

For N

SAMPLES SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moot Way, Barwell,
Leicestershire LE9 8EY

PRICES

In text

WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.

Emerald Models bus details

Emerald Models has launched a range of Irish PSV destination blinds, registration plates and advertisements, produced in conjunction with Alphagraphix, in 1:76 (£1.90ea) and 1:50 scales (£2.40ea; 1:43 same price).

In 1:76 scale they will suit the EFE models of the Leyland Titans used in Ireland. A sheet to cover Irish road vehicles from the 1940s-1970s will also be available. The sheets are printed on

glossy paper, and can be attached using glue sticks.

For 1:76 and 1:50 scales

AVAILABLE FROM
Emerald Models, 4662 Kingston
Road, Unit 58, Scarborough,
Ontario M1E 4Y7, Canada

PRICES in text. P&P £1.50



New scenic items from Noch

Noted German scenic accessory manufacturer Noch has launched its new range of Profi-Plus handmade trees, as announced last year, right on schedule. We illustrate an oak (*quercus robur*) (ref.20820). It stands an impres-

sive 17cm tall, and the spread is 17cm. The size is intended to be suitable for TT and 00.

Each tree in this range is an individual handmade creation. The thickness and formation of the trunk has been the

subject of particular attention in each case, along with the structure of the branches and the overall shape. To achieve the natural look, the trees have been shaped and the foliage applied by hand. In addition, both trunk and

branches are hand painted to replicate the original as realistically as possible. As can be seen, the results are convincing.

The trunk has a flat base to enable the tree to be fixed into the layout landscape easily.

The range also includes acacia (*acacia farnesiana*), marsh oak (*quercus palustris muench*), and summer lime (*tilia platyphyllos*).

Noch has also released a useful complement to the 'Water-Drops' and '2K Water-Gel' produced last year, in the form of 'Water Effects'. This is a viscous white material which dries clear and flexible, and is ideal for use in conjunction with the drops and gel to create rapids or waterfalls. Because of its viscosity it can be applied directly to steep areas of scenery to make a waterfall, for example. For rapids, the Water Effect can be applied in 'stripes' on top of the water base using a coarse brush. Drying time is approximately 24 hours.

Water Effects is supplied in handy 125ml plastic bottle.

For 00/TT/all scales

DISTRIBUTED BY
Gaugemaster Controls,
Gaugemaster House, Ford Road,
Arundel, West Sussex, BN18 0BN

PRICES

TBA.



BR Mk.IIa open second in 00 from Bachmann



Hot on the heels of the Mk.II TSO (see last month), Bachmann has released versions of the Mk.IIa variety. Outwardly very similar, the IIa type boasted folding gangway doors, and air braking; the underframe detail on the

model faithfully follows this different path.

The models released so far are blue & grey No.5353 (above ref.39-360) with half the seating area designated as non-smoking; E5361 with early Inter

City (i.e. no hyphen) branding and fully non-smoking accommodation (ref.39-361); and No.5410 in late-period Network SouthEast finish (below, ref.39-362) with incomplete non-smoking coverage: Bachmann has clearly followed a prototype with replacement windows or stickers having been peeled away.

Also new to the late 1980s NSE scheme is Mk.II No.5162 (left, ref.39-352), also with partial non-smoking sticker coverage.

In all other respects, the models are fully up to the high standard set by the initial release.

*SAMPLES SUPPLIED BY
Bachmann Europe PLC, Moat Way,
Barwell, Leicestershire LE9 8EY*

PRICE £22.45ea

WHEEL DATA

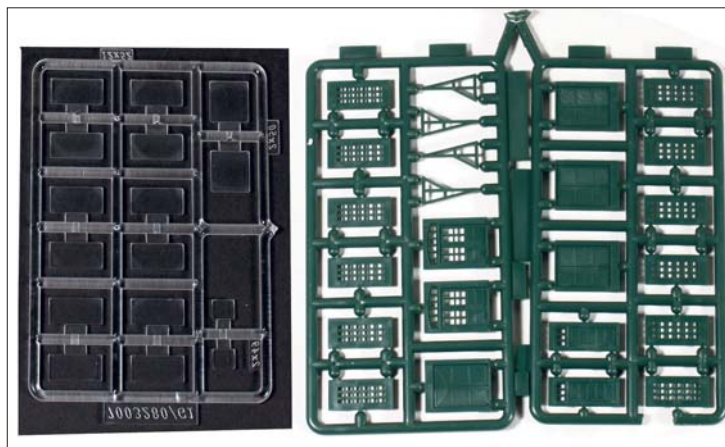
*B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.*



Cornerstone N scale modular component packs

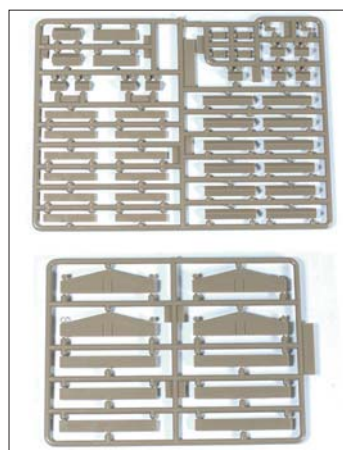
In its Cornerstone kit series, Walthers has produced some potentially versatile packs of construction components moulded in styrene which the creative modeller should find very useful when designing and making a structure to suit a particular site when no proprietary product is suitable or will fit. These are parts for scratchbuilding without the scratch, so to speak!

The first pack illustrated (ref.933-3281) is described as 'small walls, windows, and doors'. The walls are moulded in light brown plastic, the doors and window frames in mid-green; there is also clear glazing. Parts are neatly formed, with good surface detail (but not exaggerated), and there is no flash. The feed sprues are on the part edges and will require simple trimming to ensure a neat join.



The pack provides four small wall panels with window openings, four small wall panels with double door openings, four small plain walls, two small wall panels with a door and a window, two brick window inserts, two double doors, two standard doors, four freight doors, four canopy supports, twelve small windows, and glazing for all the window and door frames.

The second pack (ref.933-3284) is 'wall columns and caps'. It contains twelve corner pilasters, twelve side pilasters, nine outside corner cornices, two inside corner cornices, four peaked roof cornices, six large flat cornices, two small flat cornices, four cornice connectors, and two chimney sides, all moulded in 'stone' colour.



The blister packaging can be popped open and resealed, which makes it useful for storing parts once they have been cut from the sprues.

Liquid styrene solvent is recommended as an adhesive, and the only tools needed are a sharp craft knife and a file or sandpaper – plus some imagination!

A standard instruction sheet is provided in each pack (c.A3 size, double sided) that is full of suggestions and practical modelling tips for using these products. It also helpfully illustrates and lists the contents of all five packs currently in the range as an aid to planning.

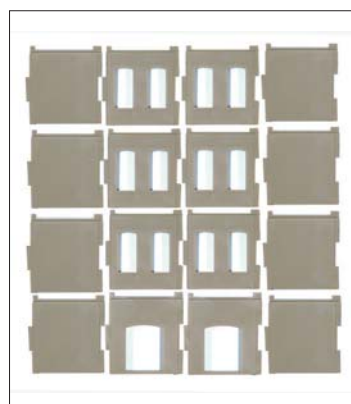
The other packs already available provide flat and peaked roofs (ref.933-3280), large walls and windows (ref.933-3282), and foundations and loading docks (ref.933-3283). More are expected in the near future.

These items are attractively priced and usefully fill a gap in the market for N scale structures; they should find many applications, notwithstanding the fact that they are not to the US/Continental N scale of 1:160 not 1:148.

For N

*AVAILABLE FROM
Osborns Models, 2-4 Marcham Road,
Abingdon, Oxfordshire, OX14 1AA.*

*PRICE
£5.50 per pack.
Postage & packing extra.*



Book Reviews

Diesels on the Southern

Michael Welch
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics
LE10 3EY.
190mm x 240mm 80pp
Hardback £14.99
ISBN 0711031118

Diesels and Southern Region can hardly be considered synonymous considering the SR policy of electrification stretching back to pre-war days and, paradoxically, its operation of the last steam operated main line (to Bournemouth and Weymouth) in Great Britain. Nevertheless, the Southern did recognize the value of diesel traction, as evidenced by the appearance of 1Co-Co1 No.10201 from Ashford Works in 1950. In later years of course SR had the Type 3 1550hp 'Cromptons' and various types of DEMUs for main line and cross country services. The several variations of the Type 3s are well represented and of the units, 'Berkshires', 'Hastings', 'Hampshires' and 3D 'Oxted' units are illustrated on various duties, but the 'Tadpoles' do not get a look-in.

Those icons of Southern Region, the electro-diesels, are not well represented, with Class 73 E6005 (now preserved) depicted at Feltham shed in the last picture of the book and E6044 pictured prominently at Ramsgate depot but not even mentioned in the caption. The larger but notably less successful Class 74 conversions do not appear.

As the title of this attractive and nostalgic album is *Diesels on* (rather than *of the Southern*), we can hardly complain that there are shots of 'Hymeks' and 'Warships' to remind us of the once occupied territory west of Salisbury and, more pleasantly, that there is a splendid portrait of the borrowed Stratford Brush Type 2 No.5518, immaculate in 'Royal' livery, at Tattenham Corner.

An interesting little collection of

Below: RSH-built 204hp diesel shunter No.11222, pictured on Eastleigh shed on 26 March 1960. Built in April 1957, it survived until October 1968.

Photograph: Frank Hornby.



shunters makes an appearance including the real Southern Railway 350hp 0-6-0 No.15202 (one of three) built at Ashford in 1937. Others include D2279 at Norwood Junction, Drewry D2295 on Custom House Quay at Weymouth, D2280 at the back of the shed there, Doncaster-built D2082, again at Weymouth, D2989 (R&H) at Southampton and D2275 on the Hamworthy branch.

This album supplies a nice bundle of nostalgic pictures for enthusiasts and modellers alike.

Reservoir Builders of South Wales

Harold D. Bowtell
and Geoffrey Hill
Industrial Locomotive Society
Hon Publications Officer,
77 Station Crescent, Rayleigh,
Essex SS6 8AR.
240mm x 170mm 130pp
Hardback £14.95 plus £2 P&P
ISBN 0954072626

This is Book Six in the series *Dam Builders in the Age of Steam*. Harold D. Bowtell (1915-1999) died with less than 60 percent of the book drafted and Geoffrey Hill has painstakingly brought it to completion.

The main chapters cover the following subjects: Railways of Cardiff Corporation in the Valley of the Taf Fawr, Cardiff's Llwynon Project in Cwm Taf, the valley of the Taf Fechan, Cray and other projects for Swansea Corporation and Ystradfellte for Neath RDC, Pendryn: a modest project using two gauges for Mountain Ash UDC, The Abertillery & District Water Board in the Grwyne Fawr Valley, Newport's Protracted Schemes at Wentwood & Talybont, Other Projects using Railways for Aberdare, Pontypridd & the Rhondda and the Ebbw Vale Area, Other Water supply Projects during the Railway Era.

The text recalls the tales of men and machines engaged in the construction of the dams and reservoirs to provide water for the growing communities of South Wales. Many of these installations were situated in the more remote areas of the Brecon Beacons and the Black Mountains. An extensive network of temporary railways, of both standard and narrow gauge, was laid down to carry equipment, materials and workmen.

The text is supported by detailed maps and an excellent selection of archive photographs. The latter depict not only locomotives and rolling stock and the rudimentary railways upon which they ran but also the sites themselves, at all stages of construction and complete, the personnel and personalities, and the enormous scale of the natural landscape which inevitably surrounds it all.

Summing up, this thoroughly researched work looks at a variety of industrial steam locomotives set against a social and civil engineering background.

The book can be ordered from the address above, making the cheque payable to 'IRS'.

It is worth noting that the book's five predecessors cover the following regions and originate from publishers as annotated. All are by Harold D. Bowtell: *Manchester and the Peak* (Oakwood 1977), *Yorkshire Pennines* (Oakwood 1979), *Bowland Forest and Craven County* (Plateway 1988), *Yorkshire Dales* (Plateway 1991) – and *Durham's Dales to the Border* (Plateway 1994).

Glyn Valley Tramway Coaches and Goods

Bernard Rockett
Theodore Press,
Orchard House,
Manor Farm Lane, Oldbury,
Bridgnorth,
Shropshire, WV16 5HG.
210mm x 150mm 40pp
Softback £6.45+£1.65p&p
ISBN 0952322331

Having produced excellent works of reference on Glyn Valley Tramway passenger and goods stock with drawings in the larger scales (7mm and 16mm), it is only logical that the author and publisher should turn their attention to providing a composite volume with drawings in 4mm scale.

After a brief historical introduction, the book describes in detail all the stock which ran on the GVT from the 1870s to the last days of goods traffic in 1934, in both the horse-drawn and steam eras, with private owner wagons included as well as company vehicles. The origin and history of each type is followed from manufacture through the years of service. A time line chart shows when which vehicles were in use.

Each vehicle is illustrated with side and end elevations, while a plan is given for some, and selected details are shown separately, usually at twice size, though there are fewer than in the large scale books. Principal dimensions are tabulated. If careful conjecture has been employed to create a convincing representation, this is stated – a commendable and responsible historical approach.

There is also coverage of the early and late lining and lettering styles, and coach numbering.

The line work on the 70 drawings is consistently clear and accurate, with shades of grey used to differentiate significant features. The drawings have not simply been scaled down

from the larger versions but redrawn for optimum clarity.

Overall, one is struck by how small these vehicles were.

There are no photographs – for these, the previous publications must be consulted. A list of published references is provided. Despite a mention in the acknowledgments (presumably carried over from the larger scale version), there is no coverage of available models in 4mm scale.

Potential modellers should find in these pages the information required to recreate GVT stock accurately.

The work on GVT coaches with drawings in 16mm scale has now been released in a second, revised, edition. (ISBN 0952322382, 44pp, £11.95 + £1.65 p&p). To accommodate the larger drawings in this scale it is A4 and landscape format.

The drawings have been completely re-drawn with the addition of texture and shading for greatly enhanced results. Details have been emphasised and clarified throughout. The internal construction of one vehicle is fully explored, with scale drawings.

The collection also includes historical notes, a survey of coach numbering, seating arrangements, train formations, and a time line chart showing which vehicles were in use when.

In addition, there is a comprehensive discussion of the liveries used over time, and the painting styles of several coaches are described and illustrated to show the changes.

Model sources and materials specific to 16mm scale are quoted, and there are photos of selected models.

The Neath and Brecon Railway

Gwyn Briwnant Jones, Denis
Dunstone and Tudor Watkins
Gwasg Gomer, Parc Menter
Llandysul, Llandysul,
Ceredigion SA44 4JL.
253mm x 170mm 204pp
Hardback £25
ISBN 1843234521

We believe that this is the first full-length history of the Neath and Brecon which was a relatively small concern, even by the standards of Welsh pre-group railways. Few lines of its size however have been associated with such an assortment of characters, surviving numerous financial conflicts and management disasters, some of which cast a fascinating light on Victorian business methods.

The line, part of which survives to this day, ran through romantic and beautiful countryside but the rather unexpected crowning personality of the story is the internationally renowned opera singer Dame Adelina Patti who lived in a mock castle at Craig-y-nos for over forty years, had her own private waiting room at the station, and contributed much to the N&BR.

The railway was dominated by the Midland and the authors devote a chapter to the many complex financial and operational relationships between the large company and the small one. In the surprising manner of railway histories, however, in the end it was the Great Western which absorbed the

N&B at the Grouping, thus gaining some 40 route miles, 15 locomotives, 44 carriages, 120 goods vehicles, 12 service vehicles, 280 staff and a horse.

Neither of its terminal stations was its own, most of the line was single, and there were no tunnels. The authors have compiled an interesting chapter on the Neath & Brecon's stations, halts, goods facilities and general infrastructure. A chapter on the locomotives includes the early Fairlie 0-4-4-0s *Progress* and *Mountaineer* which enjoyed very short working careers on the Railway.

The book is a model history of a minor railway, with well-chosen archive photographs, maps, ticket, timetable and advertisement facsimiles, and some delightful watercolours of the line by one of the authors.

Brunel's Royal Albert Bridge

A.R. Kingdom
Forest Publishing, Woodstock,
Liverton, Newton Abbot, Devon
TQ12 6JJ.

210mm x 136mm 32pp
Paperback £2.95
ISBN 1873029136

This booklet is No.5 in the *Railway ARKives* series and commemorates the bi-centenary of the great engineer's birth by focussing on one of his great achievements.

The main body of the text is taken from the booklet entitled *History of the Royal Albert Bridge*, originally published by Wood & Tozer of Devonport. The nineteenth century style of writing and reporting is attractive and naturally very appropriate for this subject. The two main topics covered are Floating the First Tube (1 September 1857), and Floating the Second Tube (10 July 1858). This contemporary reporting is detailed, accurate and colourful and transports the modern reader back to that short period when the eyes of the civil engineering world were trained on a Cornish village.

Mr Kingdom has followed this text with a postscript giving salient points in the history of the bridge from 1859 to date. There are also four previously unpublished photographs of the bridge taken by J.B.N. Ashford soon after the gauge change of 1892.

Brunel

A railtour of his achievements

Vic Mitchell
Middleton Press, Easebourne
Lane, Midhurst, West Sussex,
GU29 9AZ.

240mm x 165mm 96pp
Hardback £14.95
ISBN 1904474748

This is No.13 in the *Great Railway Eras* sub-series, and typically celebrates the works of I.K.Brunel in the bicentenary of his birth.

Much has been written on Brunel, and many of the illustrations found here will be quite familiar to students of the great engineer and indeed of the GWR. For the newcomer to the subject, however, Vic Mitchell's collection

Right: Keighley & Worth Valley Railway-based BR Standard Class 2 Mogul No.78022 'on holiday' at Sheffield Park, Bluebell Railway, on 25 October 1992.

Photograph: Frank Hornby.

provides a condensed history and geography which will leave the reader wanting to know much more. With this in mind, the book contains a useful indexed list of relevant views of stations and structures to be found in other Middleton Press volumes, but a wider bibliography would undoubtedly have been of great value.

The views are in journey order from Paddington and include not only many of the well known sites and structures (e.g. Royal Albert Bridge, Starcross atmospheric pumping house, Swindon station etc), but also many which will be less familiar to new students, like the 'one-sided' stations at Exeter, Taunton and Reading, the many 'chalet' roadside station buildings and a selection of Brunel's work in Wales.

A very familiar photograph (3.27) relating to the gauge conversion of 1892 unfortunately suffers from a misleading caption. In fact it depicts one of the first standard gauge trains to depart Plymouth Millbay station on that momentous weekend.

This is an interesting and well produced pictorial overview of I.K.Brunel's railway legacy.

Freight Train Operation

for the railway modeller

Bob Essery
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics
LE10 3EY.

282mm x 213mm 96pp
Softback £14.99
ISBN 0711031428

This book follows logically and usefully upon the author's *Passenger Train Operation for the railway modeller* which was reviewed in our issue for December 2005 and likewise upon its predecessor, *Railway Operation for the Modeller*, which launched the series, reviewed September 2003.

Bob's erudite but eminently readable text is based on his wide experience and knowledge of both the railway industry as it was, and the practical reality of railway modelling as it is.

Subjects covered include the development of freight traffic, rolling stock and loading methods, private owner wagons, freight terminals, classification of trains, and locomotives specifically developed for freight services.

The text is supported by an excellent selection of b/w photographs and line drawings. The former depict wagons, locomotives and freight trains from a variety of locations and eras and the drawings show track plans of collieries, private sidings, exchange sidings etc. The modelling side of things is well represented by photographs taken on the late David Jenkinson's 0 gauge layout.

A useful bibliography and a list of references and sources complete this worthy addition to the author's series of books for the railway modeller from this publisher.



The Power of the BR Standard 2-6-0s

Gavin Morrison
Oxford Publishing,
4 Watling Drive, Hinckley, Leics
LE10 3EY.
273mm x 215mm 112pp
Hardback £19.99
ISBN 0860935892

This is a new book in the *Power* series and follows upon Gavin Morrison's previous volume on the LMS 2-6-0 designs of Hughes and Ivatt, mentioned in March 06 reviews.

The engines discussed and illustrated in this volume are 76xxx Class 4MT, 77xxx Class 3MT and 78xxx Class 2MT. All three designs, produced under CME R.A. Riddles, were based upon the earlier Ivatt 2-6-0s for the LMS.

As with previous volumes in this series, the book is conveniently arranged in regional section per class, and in this case it goes thus: Class 4MT on SR, on the S&D, on ScR, on ER and NER, and on LMR. Class 3MT on ER and NER, on ScR and on SR. Class 2MT on WR, on NER, on LMR, on ScR and on SR. An additional section deals with the Moguls in Preservation.

The photographs are from a number of top-class railway photographers and the captions are detailed and dated. As the BR Standard 2-6-0s had relatively short working lives because of the rapidly changing times in which they operated, a comprehensive photographic record of them, such as this, is all the more valuable for modellers and historians.

The Beginner's Guide

to 2mm Finescale modelling

Mark Fielder ed.
The Two Millimetre Scale
Association, available from
Owen Adams, 20 Church
Crescent, Sutton, Tadcaster,
North Yorkshire LS24 9BJ.
207mm x 147mm 72pp
Paperback £4.00 + 75p P&P.
ISBN 0951837354

Fully revised from previous editions, this booklet takes the reader step-by-step through baseboard construction, trackwork, rolling stock and locomotives, concentrating on conversions of existing N gauge products where applicable. The book also covers the construction of a small 'worked exam-

ple' layout, *British Oak*. The diagrams and photographs throughout are well reproduced, and the text is clear and well organized.

Many new products in this field which have been released over the past year for Association members include more wagons and coach bogies, a comprehensive range of freight bogies and (soon to be available) a multi-media Class 08 locomotive kit. Therefore it seems a good time to join and perhaps commence modelling in this scale. The booklet is available to members and non-members alike, and is of particular value to beginners in 2mm finescale, particularly perhaps to those graduating (as many apparently do) from N.

Video Reviews

Right Track 4

Detailing and Improving RTR, locomotives and coaches

Activity Media
3hrs 15 mins £18.99 inc. P&P

Tony Wright takes the hobby a step further by showing us how to add details, improve, modify and personalise ready-to-run rolling stock.

Locomotives from Hornby, Bachmann/Graham Farish are tackled to make these already fine models distinctively special. Models include a 'County', 'Britannia', Black 5 and Jinty. The degree of modification is appropriate to the amount of detail already featured on the loco and nothing is overdone.

The work continues on a selection of coaches including Pullman cars and Gresley and Thompson conversions using etched brass sides. Simple improvements are also examined in close-up detail leaving the viewer in no doubt about how, for instance, to change a coupling from a large tension-lock item to something more realistic.

Tony's relaxed approach both inspires confidence and deals with the practical aspects of each task in a simple and clear way. Close shots of soldering and using a mini disc cutter take away any apprehension felt by a newcomer to serious surgery in metal and plastic.

Add this to other DVDs in the series and build a worthwhile library of modelling expertise that you can call upon at any time.

Contact **Activity Media, 7 Conway Drive, Flitwick, Bedfordshire MK45 1DE. Telephone 01525 759047.**

Hornby Britannia rules! Plus DCC news



Hornby has set itself a challenge with the latest 4mm scale release, the 'Britannia' class No.70030 *William Wordsworth*. Judging by the photographs the firm has released recently, it is probably the finest 4mm scale model it has produced to date and has set a standard that will be difficult to exceed.

Also imminent is the Hornby DCC system featuring the *Select* and *Elite*

control units. The *Select* will be a very competitive £70.00 and the *Elite*, with an even higher specification, will be £140.00. Also in the wings is a four-function loco decoder for under £10.00 and a four-throw decoder, incorporating a capacitor discharge unit for less than £30.00. We hope to review these products in due course.

Contact: **Hornby Hobbies Ltd., Westwood, Margate, Kent CT9 4JX.**

100mph simulator at York. Have a go!

A full-size replica of a new First TransPennine Express Class 185 train driver's cab has been installed at the National Railway Museum. Its prime use will be to assist with the training of the 315 drivers employed by First TransPennine Express.

If you have £275.00 available for a two-hour session, you too can take advantage of the facility until September when the simulator will be moved to the new maintenance depot

at York. The profits will go to the Museum. The simulator recreates a number of driving conditions to test potential drivers and provides a very realistic computer-based experience.

The simulator session price includes a meal and individual instruction, but you must book in advance.

If this interests you and you are over 18, contact the Museum on **01904 686263** or **www.nrm.org.uk** for more information.

Pete's Railway Days

The Isle of Wight Gauge 0 Group and members of the Train Collectors' Society will stage Pete's Railway Days on July 29 and 30. The venue is Glenhurst, Alverstone Road, Apse Heath, Sandown, Isle of Wight PO36 0LE. Opens 11.00.

The five main ingredients of the show are the large LGB™ layout on the lawn, the Playmobil layout, finescale 0 gauge running around the garden, the indoor displays and children's play trains. Refreshments are available too.

There will be up to ten trains moving at any one time and the public will have the opportunity to operate three of them and use some other controls.

The layout is lit throughout and is particularly enjoyable during the evening until its close at 22.00.

The admission is free but donations to charity are welcome.

Further information is obtainable from Pete Dugher on **01983 402117** or James Day on **020 8209 1589**. **railwaydays@btinternet.com**

Hove Engineerium purchased

Bonhams has announced the purchase, by private treaty, of the Jonathan Minns Collection of Archaeological Artefacts, minutes before this unrivalled collection was to be auctioned in 500 lots.

Mike Holland, a local businessman who lives near the British Engineerium in Hove and who recently saved a local school from closing, made the winning bid. Mr. Holland said he is planning to keep the collection together at the

Engineerium, having paid a substantial undisclosed figure just before the auction to save the collection from being broken up.

Dr. Jonathan Minns, a world renowned expert in the field of mechanical antiquities, founded the Engineerium in Hove 32 years ago, and has been running the Victorian pumping station as a museum until lack of funds forced him to close earlier this year.

Stapleford steam 2006



The 10 $\frac{1}{4}$ " gauge historic Stapleford steam railway has the first of its twice yearly open weekend events on June 17-18. Stapleford Park is near Melton Mowbray, Leicestershire.

The locomotives include a GWR 'Saint', LMS 'Jubilee' and the mighty NYC Niagara 4-8-4 and NKP Berkshire 2-8-4 running through nearly two miles of scenic parkland, featuring replica tunnels of Box and Primrose Hill. G gauge steam will also be present.

In addition to the railway there will be a showman's engine and fairground organ, traction engines, vintage vehicles, trade stands, exhibits, licensed bar and catering.

The event is in support of LOROS, the Leicestershire and Rutland Hospice.

They do it all again on August Bank Holiday Sunday and Monday 27-28. See *Societies & Clubs* for full details, or visit **www.fsmr.org.uk**

LT kits at Radley Models

In the May RAILWAY MODELLER we featured *Scrubs Lane*, a London Transport layout in 00. Those inspired by this might like to know that the Harrow Model Shop range of kits has been taken over by Radley Models and greatly expanded.

A new catalogue is available from

Radley for £1.00 that lists its stocks of London Transport and Metropolitan 00 scale kits in metal and resin, plus ready-to-run items.

Contact **Radley Models, 3 Ross Road, Poulner, Ringwood, Hampshire BH24 1XG. Telephone 01425 479377.**

Treemendus trees

Treemendus trees are constructed from high-grade steel wire which is then coated with a special bark to leave a very strong and durable, yet flexible tree.

They are mainly made to commission, but are also supplied from limited stocks. They are available in any species, season and scale, even in half-relief.

They can be supplied with a brass planting 'plug and socket' to enable easy installation and removal in exhibition or portable layouts.

Trees can be created from photographs to model a specific example. Treemendus trees prices depend on the particular specification; a guide price is approximately £10.00 per vertical inch. The whole range will be at the Gauge 0 Guild's Telford Show on September 9-10.

For more information, call Anthony Reeves on **0161 973 2079** or e-mail **treemendus@hotmail.co.uk**



Treemendus, 112 Church Lane, Ashton upon Mersey, Sale, Cheshire M33 5QG.

SHOP NEWS

OPEN

Back 2 Bay 6, Telford

It all started in back 1997 when Steve Warrington was in the Army working as a radar technician. He had a great interest in railways and decided to run a mail order business. In 1999 he left the Army and continued the business on the exhibition circuit.



But in March this year he opened Back 2 Bay 6 where garden railways play a major part. Apart from G scale and On30 there are diecast models, American 1/20th scale imported products and dolls house goods.

Steve stocks and supplies Accucraft, Hartford Products and much more.

It is good to find a shop selling something different in addition to the usual ranges of high quality items. The mail order service continues.

Incidentally, the machine outside the shop is a historic pump from an old tile factory!

Back 2 Bay 6, Unit B26 Maw's Craft Centre, Jackfield, Ironbridge, Telford, Shropshire TF8 7LS. Telephone 01952 884785.

Going Loco Ltd., Lytham St.Anne's

New shops reflect the fact that the hobby is continuing to grow at a healthy pace. Apart from being close to the sea, Going Loco is another new reason to visit the Blackpool area.

After a career in computing, Michael Costello recently opened the shop, in an Edwardian flavoured area of Lytham, with stocks of 00, N and some G scale products; the garden railway scene is definitely growing well.

Going Loco Ltd., 23 The Crescent, Lytham St.Anne's, Lancs FY8 1SZ. Telephone 01253 725870.



Heljan Class 47 for Tower Models



Later this year, Heljan will produce a special version of its 0 gauge Class 47 exclusively for Tower Models.

Only 100 will be built in this limited edition. They will be finished in two-tone green with a small yellow warning panel, in 'as built' condition. The standard Heljan production models will be available in either blue or two-tone green livery, but with both yellow end panels and cab windows (above).

All will be fully finished with working lights, illuminated headcode panel and working fan. They will be powered by twin flywheel-fitted motors.

Delivery is anticipated for the end of this year or the first fortnight in January 2007.

For full details contact: **Tower Models & Co., 44 Cookson Street, Blackpool, Lancs FY1 3ED. Telephone 01253 623797 or 623799.**

Any volunteers for the Great Central?

The Great Central is looking for volunteers to help open its shop at Loughborough Central during the summer months.

This is the UK's only double-track, main line heritage railway where full-size steam engines can be seen passing each other.

It is a very social environment with

visitors coming and going, not to mention steam trains passing the window. No previous experience is necessary because training is available.

Several hundred volunteers give their time to all departments so if you are interested, contact David Pladgeman, Retail Outlets Manager on **01509 230726.**

Camrail 2006

On July 22 and 23 The Titfield Thunderbolt is staging Camrail. Now in its tenth year, the show will again be at the picturesque St.Margaret's Hall in the centre of Bradford on Avon, alongside the river. Full details will be found in *Societies & Clubs*.

The show celebrates the minor railways of Britain in miniature and all the profits from the show will go to the Railway Children charity.

If you go by car, follow the signs to the short stay car park signposted 'Swimming Pool'. The long stay car park is in the Railway Station. Bus travellers can use the X5 or X6 from Bath bus station. Cyclists can use the

Kennet and Avon towpath between Bath and Devizes; follow the road or paths to the town centre from the towpath by the Tithe Barn. The hall is on the left as you reach the river bridge.

Light refreshments will be available and there is a selection of pubs and cafes in the town. The exhibition is fully open to wheelchairs and has full disabled facilities.

For more information, contact Simon Castens on **01225 470079** or **simon@titfield.co.uk** Latest information on **www.titfield.co.uk**
The Titfield Thunderbolt, The Old Railway Station, Limpley Stoke, Bath BA2 7JG.

Historical information from Bachmann

At its customers' request, Bachmann has introduced a system to help UK modellers match locomotives with their applicable coach stock.

It is based on the Epoch method of historical classification used on the Continent. After much discussion, the nine Periods are as follows:

- 1 1804-1875, Pioneering;
- 2 1875-1922, Pre-grouping;
- 3 1923-1947, Big Four: LMS, GWR, LNER, SR;
- 4 1948-1956, British Railways steam era (early emblem);

- 5 1957-1966, British Railways (late crest);
- 6 1967-1971, British Rail Corporate Blue Pre-TOPS;
- 7 1971-1982 British Rail Corporate Blue Post TOPS;
- 8 1982-1994, BR Sectorisation;
- 9 1995 onwards, post privatisation.

The classification has been launched on the websites **www.bachmann.co.uk** and **www.grafar.co.uk**

Each locomotive will be accompanied by a symbol to indicate the historical period it represents.

Corgi on tour

As a part of the Corgi 50th anniversary celebrations, the Corgi Roadshow will tour family events throughout the country, including the Great Dorset Steam Fair on August 30-September 3.

A truck, packed with toys and models, will offer kids of all ages the chance to get on board and see toys from childhood, a Blitz experience, a journey into space with Star Trek or go out on the road through Corgi's 'Sights and Sounds' range.

There are other game attractions featuring 'snakes and ladders' and Postman Pat. You can also access Corgi's 50th anniversary microsite and racing car game.

For the steam enthusiasts, Corgi presents a showcase of selected models from the Vintage Glory of Steam collection.

For further information about Corgi and the roadshow visit the website at **www.corgi50.com**

Roundhouse Penrhyn trio

Three models, based on *Charles*, *Linda* and *Blanche*, the 0-4-0 saddle tank locos from the Hunslet Engine Company are the latest G scale products announced by Roundhouse Engineering.

They operated the main line slate trains between Port Penrhyn and the quarries. They underwent many changes during their long working lives. The models are very impressive with great casting detail and a particularly fine internal valve gear. All new

Roundhouse models include boiler fittings with a water gauge and boiler top-up valve to allow one to remain in steam all day. A conversion kit is available to allow them to work on 32mm and 45mm track. Prices range from £1350.00 to £1650.00.

For full details, contact **Roundhouse Engineering Co. Ltd., Units 6-7, Churchill Business Park, Churchill Road, Wheatley, Doncaster, S.Yorks. DN1 2TF. Telephone 01302 328035.**



ACE Trains news



The latest version of the ACE Trains 0 gauge A3 (E/6) Locomotive series is this British Rail c1950 Express Blue version, which is now available. Pictured here is No.60090 *Grand Parade*. Other names available in this

livery are *Diamond Jubilee*, *Blink Bonny*, *Papyrus*, *Windsor Lad*, and *Flying Scotsman*. All models have banjo domes and corridor tenders, priced at £685 including VAT.

All E/6 models are at present for three-rail operation being fitted with the ACE twin-motored all-g geared axle-driven chassis.

Further versions of the A3 include LNER Doncaster Green, Wartime Black and British Rail Brunswick Green with and without deflectors. All BR green versions will be fitted with a double chimney.

Further details from **ACE Trains, PO Box 2985, London W11 2WP Telephone 020 7727 1592, Fax 020 7792 4029, e-mail trainsw11@aol.com** or see www.acetrains.com



Bachmann supports MR Scotland

The Association of Model Railway Societies in Scotland has announced that Bachmann Europe have agreed to become an 'official supporter' of Model Rail Scotland.

Support will also come from Hornby and *Model Rail* magazine to enable the organisers to provide a better service to visitors.

Plans are well advanced for the 2007 exhibition which will take place at the SECC Glasgow on February 23-25, when it is anticipated that a limited edition Class 158 in the First Scotrail livery will be launched.

Visit the website www.modelrail-scotland.co.uk if you would like to know more.

New garden book

Garden Railways from the Ground Up is a new book dedicated to building a garden railway. The author is David Pratt who is a consultant and builder for the Discovery Channel television series *The Garden Railway*, now out on DVD.

The large format 96page publication has stunning photographs, all in full colour. It deals with planning and building, getting started with the construction, right through to electrics, DCC, motive power, detailing, planting and making contacts via the internet, Clubs and Societies.

Copies can be ordered from **Garden Railway Specialists** on **01844 345158** www.grsuk.com or from the publisher on **01983 875202** david@bembridgeiow.fsnet.co.uk

ModelZone special

A number of limited edition models are forthcoming from ModelZone in its Exclusive Series.

A Grafer N gauge set of three Kent 'Coal Traders' private owners is issued. From Bachmann comes a Class 108 DMU, Class 47, set of three grey BR mineral wagons and a set of three weathered bauxite BR vent vans.

Several models are in the pipeline and these will be confirmed in due time.

To keep fully up to date, visit www.modelzone.co.uk

Spotlight for Hartlepool

On July 15-16 the Hartlepool MRC will hold an exhibition at Manor College of Technology in Hartlepool. The proceeds from the show will go to funds for two spotlights for the Drama Production Team.

There has not been a model railway exhibition in Hartlepool for fifteen years, according to local knowledge. Amongst the layouts will be *Colditz HBf* which featured in our sister magazine CONTINENTAL MODELLER.

A total of fifteen entries, that cover N, 00, H0 and 0 gauges in British, European, Japanese and North American practices, is expected.

A trophy will be presented for the best layout. It will be named the Diane Leigh Trophy in memory of the wife of Chris Leigh, Editor of *Model Rail*, who sadly died a short while ago.

If you would like more information, contact Malcolm Priestman on **01429 871952** before 8.30pm.

Lineside Delights animals in G

The latest releases in 16mm (G scale) garden railway products are a round-top corrugated pig ark in resin and plastic, pigs and an animal trough in whitmetal. The chicken house is planked wood effect resin complete with stand, chicken run and whitmetal chickens, plus rabbits and sheep.

For a catalogue, contact: **Lineside Delights, 7 Coralberry Drive, Weston-super-Mare BS22 6SQ. Telephone 01934 513537.**



Railway wildlife

The new operating season at the Sittingbourne and Kemsley Light Railway featured a display of wildlife to be found on and around the track.

The display was a great success and covered the wildlife visible from the train and living at both the SKLR sites.

Contributions came from various wildlife organisation, but especially thanked was the Kent Wildlife Trust

which organises the 'Gardening for Wildlife' competition.

The display is at the Kemsley Down refreshment room and is open when the railway is open. Trains will run every Sunday and Bank Holiday until the end of September and on special event days.

For full information, call **07944 135033** or visit www.sklr.net to receive at timetable.

ABERGWYNANT-2
Neil Rushby concludes his article

8750 PANNIER
Chris Gwilliam builds a Scorpio 7mm scale 'matchbox'

KNOTTS WHARF
A finely detailed rail and canal scene by Brian Fayle

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AUGUST 2008
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AUGUST 2006

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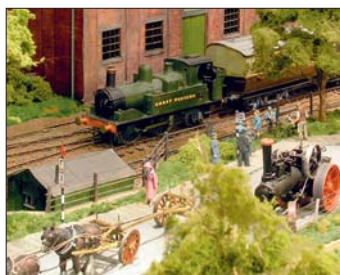
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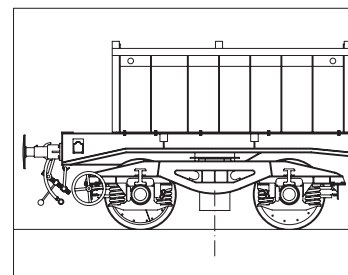
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7mm Midlands Rail/Canal Scene

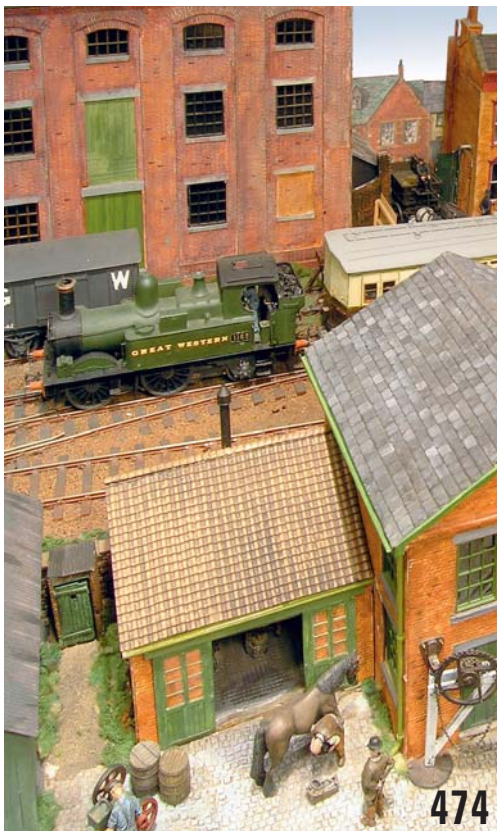


GAUGE 1 IN THE GARDEN
Main Line Action



SCALE DRAWINGS
BAA/BCA Bogie Wagons





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RAILWAY MODELLER

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 Published on the second Thursday of the preceding month.

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RAILWAY MODELLER

Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

General & Advertisement Manager JOHN KING

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Classified Advertisements NICOLE CHARLTON

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Diamond Jubilee

No, A3 fans – not No.60046, we mean ours!

We are proud to mark the 60th anniversary of our associated company, the Pritchard Patent Product Co. this month. Although the actual month during which Peco passed this milestone was April, we have 'kept our powder dry' until now because of a very special event.

With the anniversary looming, thoughts here turned to a suitable way in which to commemorate six decades of dedication to the model railway industry, either by way of manufacturing – our track and wagons are made here on site – publishing, or our permanent exhibition of model railways for all home locations. Strangely the editorial department's suggestion of a world cruise for the hard-working magazine staff appears to have been overlooked (!), but eventually a plan was hatched.

We are pleased to announce that over the Sunday and Monday of the August Bank Holiday weekend we will be holding a model railway exhibition – our first, and possibly not the last. Full details will be found in Societies & Clubs, the Peco advertisement and website: admission to the exhibition is free (once an admission ticket to Pecorama has been purchased), and as usual the gardens will be open, all day each day, with the regular attractions to enjoy, after you have toured the show!

Several of the layouts attending will be familiar to readers of the magazine. Narrow gauge is covered by *Bryn Y Felin* and *East Quay Chapel Pill*, both by Angus Watkins (RMs November 2000, and October & November 2002 respectively) and also John Thorne will have part of his *Ditton Railway Company* system, which we toured in the March, May, July and November 2005 issues. Also booked to appear are *Llanmarth Pant Mawr Yard*, BR Western Region in the Valleys by Kevin Gallagher (RM September 2002), *Iron Mould Lane*, industrials in a small space by Richard Lear (RM February 2001), *Aberdaugleddaw*, diesels in the far west of Wales by John Anderson (RM April 2005), and *Ashminster*, a 'Right Away' entrant for January 2006 now in the care of Richard Hampson.

As a further attraction, it is anticipated that the entire Beer Heights Light Railway fleet will be in action over the two days, so it's all in all an event not to be missed!

Vintage transport enthusiasts are reminded that there is a Routemaster service linking Pecorama with the Seaton Tramway: the bus makes nine round trips each day on Sundays and public holidays until 3 September.

PPM50 Competition – update time

We hope those readers who have picked up the gauntlet to model one of these railcars, as announced in our June issue, are making good progress: we have included a brief selection of further photos in this issue with which to spur you on even more.

Don't forget that the closing date is the end of October, and the days are already shortening, so don't let up!

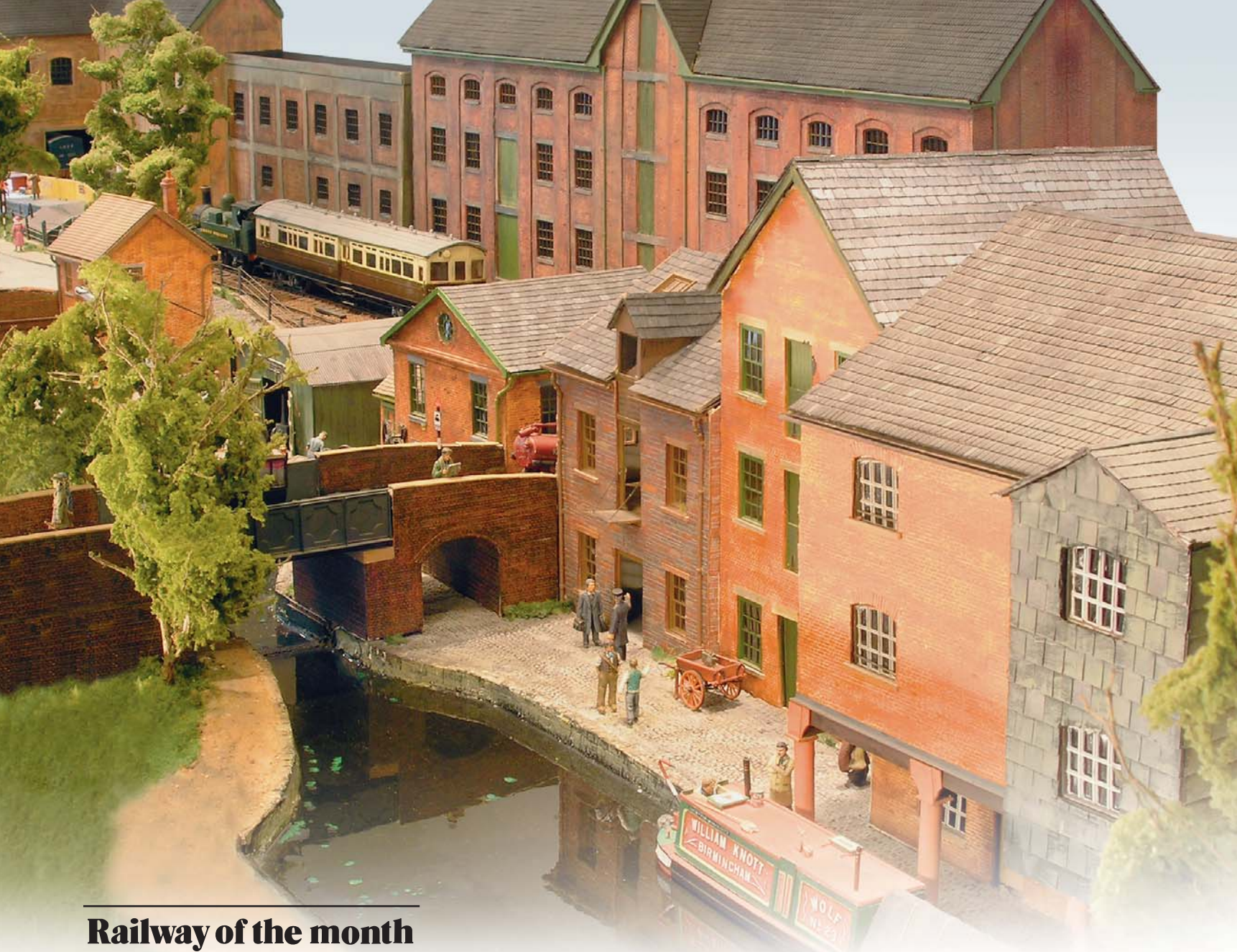
The great outdoors

This being the August issue, we have a trio of garden railway features to interest and inspire you. They are quite different in concept and execution, but all have achieved their aims well. One is a 'traditional' type of garden line, in 16mm scale and representing narrow gauge practice, whilst another emphasises the enjoyment of outdoor railways, over exact-scale modelling. The link between all of them is live steam: whilst there's nothing wrong with electrically-powered models in the garden, you just cannot beat the real thing!

The final line of the three is our 'in-house' live steam SM-32 line here at Pecorama, which has had a well-earned refit after 14 years in the rugged south west weather. The new baseboards use the popular decking timber found in many garden centres these days, and the buildings have been cast from plaster, using home-made moulds to make the parts. Read more about the refurbishment on pages 514-516.

Cover: Welsh Highland 0-6-2T 'Russell' with train on the Rivelin Glen Railway.

Photograph: Steve Flint, Peco Studio.



Railway of the month

Knott's Wharf

A West Midlands canal scene in 7mm scale

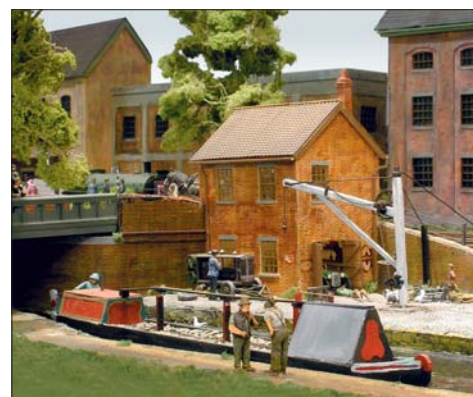
This mix of railway and inland waterway was built in Canada by **BRIAN FAYLE**.

The *Knotts Wharf Canal & Railway Company*, to give it its full title, is a successor to *Harlyn Junction*, which appeared as Railway of the Month in RM January 1970. *Harlyn Junction* was an exercise in nostalgia living as I did then, and still do, in Canada. It was a permanent layout, as are the majority of layouts on this side of the Atlantic. House moves dictated that my next layout would be portable and I moved up scale from 00 to 0. *Camelot* was a 30' by 2'6" on nine sections GWR branch line terminus that was taken to a number of shows. These were the only times all sections were assembled together as I only had room to put seven of the nine up at one time at home.

Eventually *Camelot* was taken apart and the time came to design a new layout. I based the track plan for this on a North American classic, *The Timesaver*. The setting was a tidal dockside with a large warehouse. The idea of basing a layout set in England on a North American idea

I think the figures speak for themselves. Excellent detail enhanced by a technique calculated to bring it out.

Photographs by Jeffrey Fayle.



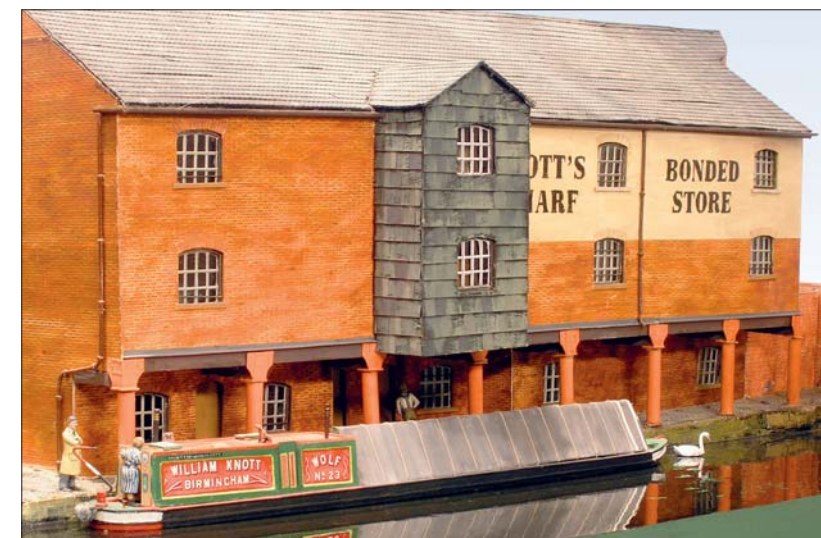
These two buildings help screen the tracks as they enter the fiddle yard and soften the sharp edge of end of the fiddle yard where it projects out into the end section of the layout.

appeared to me. I had once spent a great two-week holiday at a cottage overlooking the canal lock at Great William Street in Stratford-upon-Avon so I decided to replace the tidal wharf with a canal.

My memories of railways, when I was growing up in England, were that the railway always seemed to be 'over there'. I decided to try and convey this impression to viewers of my new layout. Whilst *Camelot* and *Harlyn Junction* had rural settings, the new layout was going to be set in the industrial Midlands. Many sheets of paper later I ended up with a plan showing the canal along the front edge and the railway behind it. *The Knotts Wharf Canal & Railway Company* was underway.

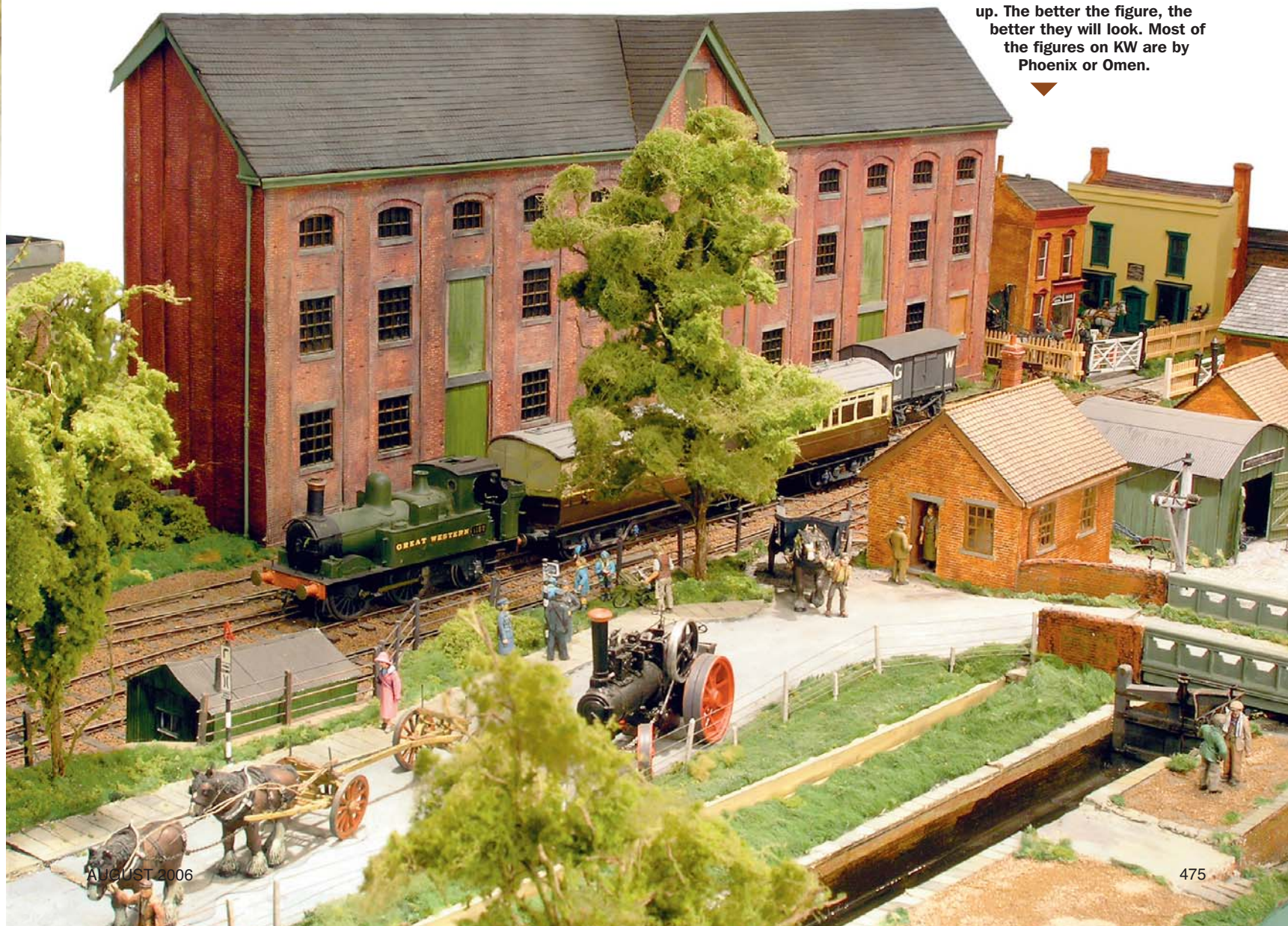
Lightweight construction

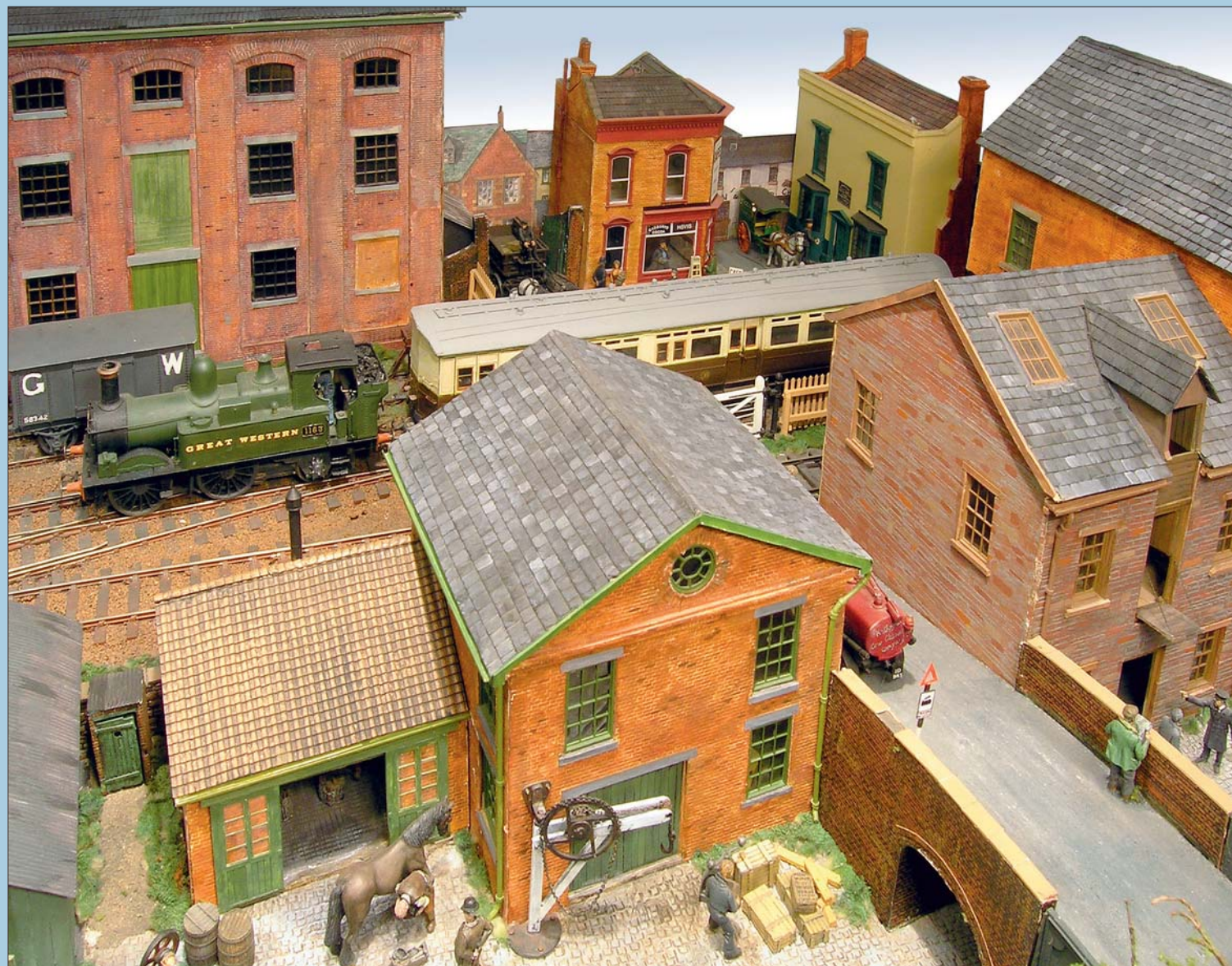
I had liked exhibiting *Camelot* but was not enamoured of the labour of assembling and disassembling the number of sections and their separate supports. The new layout was going to be constructed of lightweight sections with built-in supports. I decided to use 1 1/2" foam insulation as a base and supported this on an egg box structure of 3" x 1/8" plywood. Sides and ends were made from heavier ply and with some 1" x 3" pine at the ends. The centre section was 5' long and was supported by two pairs of legs that folded up underneath. The 3' and 4' end sections locked onto this and only needed a pair of legs each. The whole assembly is strong and light. The centre 5' x 3' section weighed about 30lb when finished. I could put up the layout and take it down myself.



The bonded store is quite an impressive building and I enjoyed making it. There are some more swans behind the bank of the canal on the right. I suspect that when you look at this picture your eye will be drawn to the one that is visible and you don't really notice the end of the layout. The discrete use of white objects is another way to control how people look at the layout.

Andy Duncan's cart horses plod along with the timber wagon in tow. The horses and wagon parts were all painted black first and then drybrushed with the colours. At that time I was using the thick stuff from the bottom of unstirred tins of Humbrol enamel as my starting point. I now use artist tube acrylic paint. Look at the figures in the distance and see how well their detail shows up. The better the figure, the better they will look. Most of the figures on KW are by Phoenix or Omen.



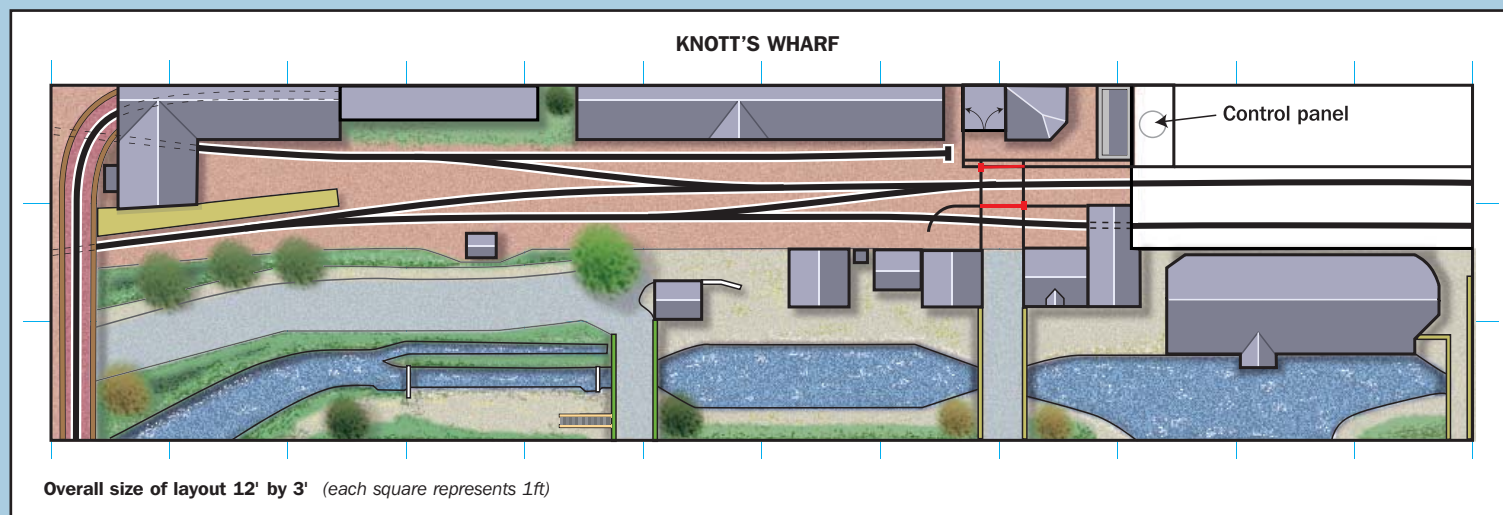


▲ The autotrain, with 517 Class 0-4-2T No.1163 (DJB kit) and its Metalmodels autococh, is the ideal passenger carrier for a small layout like KW.

Once the baseboards had been made I decided that the canal level at the bottom of the lock would be base. Bits of the 1 1/2" foam and some 1/2" softboard were then moved

around until the next level was the one the track was on and a third was in front of this at the top of the lock. Whilst I was playing around with the ground levels I made mockups of the buildings starting with the big warehouse. This is a classic Edward Beal style structure. I needed another large structure to go in front of the fiddleyard and a visit to Stourbridge and its Bonded

Warehouse provided the answer. A bridge was put in to hide the joint in the canal where two sections came together. The other joint would be at the edge of the top gates of the lock. My Stratford lock had a road bridge just below its lower gate and so I added a bridge to my model one. At first I thought of putting an elevated road across the left end of the layout but decided on a narrow gauge



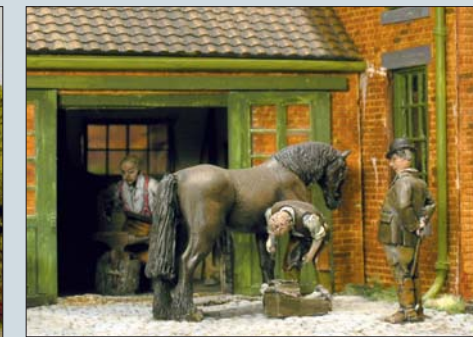
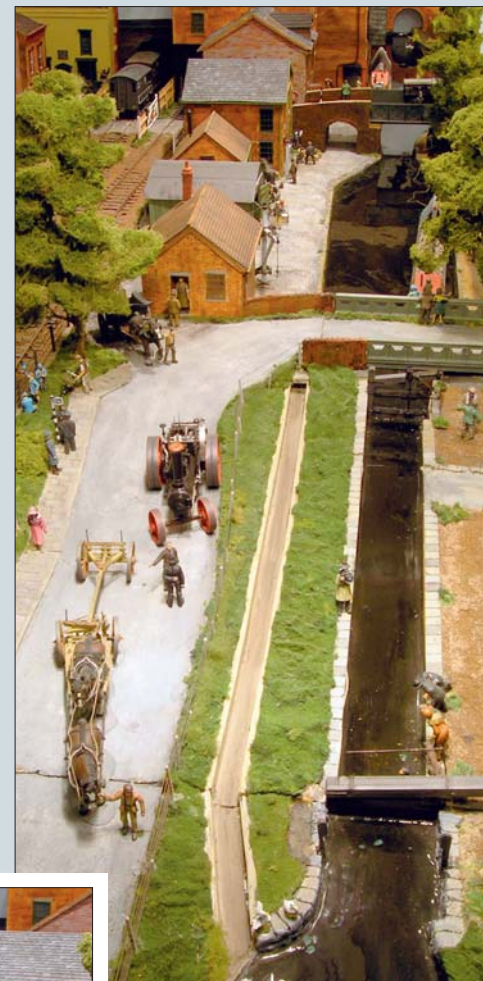
Overall size of layout 12' by 3' (each square represents 1ft)

A general view of the lock area from on high. I really must get around to putting some water in the overflow channel on the left. The row of trees on the left separates the railway from the canal area and effectively doubles the apparent depth of the layout. In this view you can also see why the balance beam for the lower gate needed replacing.

rail line as it took up less space. Little did I know that this short section of 0-16.5 would eventually lead me to deserting standard gauge for narrow gauge but that is another story.

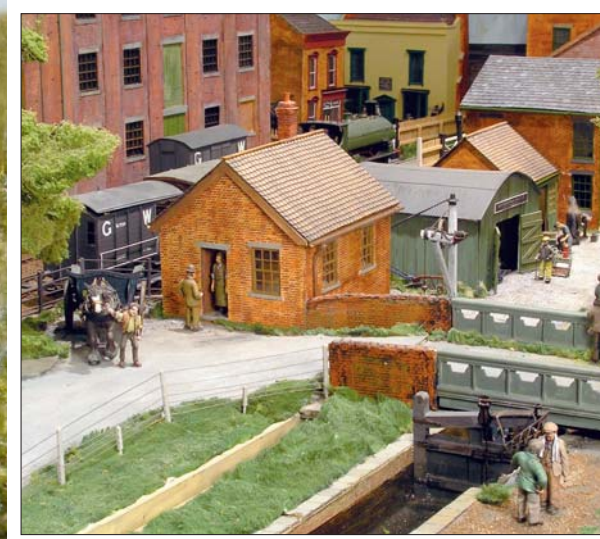
Viewing angles

The buildings to fit between those already mentioned were designed to take the eye round to the back, for those on the right, and to the front, for those on the left. In order to break up the view from the front, trees were planted along the edge at strategic places as indicated on the plan. Another row was planted between the road and the tracks. As a result of all these manoeuvres, the viewer is forced to look at the layout in little



▲ The Phoenix squire takes the gold medal for detail in a figure. Put the magazine, with this picture showing, and put it on the floor. Now look at it. I hope you will agree with me that there is very little that 'gives the game away' and you can still see the detail in the figures quite clearly.

The end of the line is under the bridge. The Burrell-type steam roller is made from one of the short lived series of kits by Bassett-Lowke of Wellingborough. The kit was a joy to build. It was painted black first as was the Duncan 3-man living van for the crew. The fake fur grass shows up nicely in the foreground. The sky backdrops were painted using Tamiya light blue and white spray paint over a dark blue base coat, and a series of 'cloud' shaped stencils, using a technique known as 'Friskit Masking'. Simple and effective. (See New London Industries, San Antonio, Texas at <http://www.walthers.com/exec/page/manuinfo/v519>) The narrow gauge line, and its Wrightlines 0-16.5 Ruston, on the bridge became the forerunners of later narrow gauge layouts and a severe case of Narrow Gauge Madness.



▲ The railway really is 'over there' in this view. The buildings between the canal and the railway were carefully designed to lead one's eye up around to the back away from the projecting bulk of the fiddle-yard. This view also shows how close the bridge was to the end of the lock. The locks in this area had single not double gates so the lock did not dominate the foreground as much as it might. Again note how clearly the figures in the distance can be seen. The short Toad is something to bear in mind if you have short sidings and run rounds. A standard Toad was just too big for Knotts Wharf.





Two locals in front of the fancy lower lock gate. The bridge really is that close to it.

will look to the side for another potential threat. I must thank Les Scanlon, psychiatric nurse, and black-base figure painter, for this, and other insights, into how we look at things.

Trackwork and structures

The track is Peco laid on a cork base. The points are operated via rod and tube by H&M motors mounted along the back. The ballast, and other items, are held in place

by acrylic matte medium diluted with auto windshield washer fluid. The matte medium does not dry as 'solidly' as the more usual PVA glue. If track has to be removed, the ballast comes off the sleepers fairly easily and a soak in Windex window cleaner will help the process along. A soak in this will clean brushes with dried out acrylic paint on them. The grass is fake fur coloured green with assorted spray paints. This came from *Camelot*. On *Harlyn Junction* I used branches from potentilla shrubs for tree armatures and I still use them!

The buildings are made from card and foamboard. The brickwork comes from Howard Scenics and the Alphagraphix corner

store was given a cover of this as well. Some time was spent giving the brickwork a varied colour mainly by dry brushing over a base colour. DAS modelling clay was used for the stonework along the canal edge and for the stone setts on the wharf. The setts themselves were indented using the end of a piece of rectangular brass tubing. Definitely a job to be done bit by bit. The water in the canal was poured using Envirotex epoxy after the canal bed had been tested for leaks by filling it with water! The main area by the bonded warehouse ended up with a very slightly irregular surface instead of the usual flat one mimicking beautifully the ripples from a light breeze. The only problem was there were a few high spots for some reason which completely destroyed the effect. After about a month of wondering what to do I put some dabs of green acrylic artist's tube paint on these to represent floating weeds. Problem solved.

Black-base figure painting

Over the years, looking at photographs of model railways, I had been impressed by how the figures, if present, invariably 'gave the game away' even when the rest of the scene is realistic. They seemed to be flat and lifeless. A chance encounter at a show, where someone was demonstrating a wargaming technique of painting figures

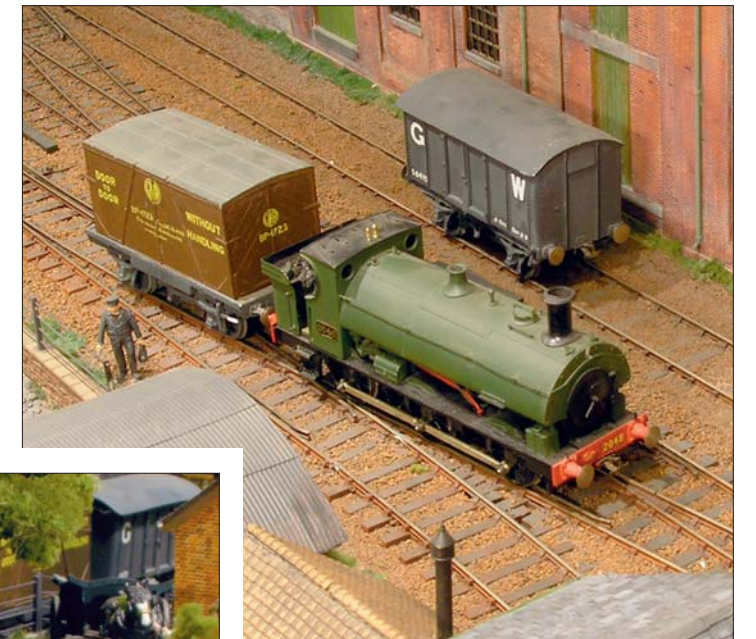
The railway is just visible 'over there'. Lots of people are busy doing things giving many points of interest.

bites and the railway is indeed 'over there'.

Another way to control how the viewer looks at the layout is by making use of the fact that we are constantly, subconsciously, looking for threats. Anything that could be coming towards us is a possible threat. To prove this to yourself take a look at your layout. Pick a vehicle that is coming towards you. Now turn it around and have another look. The odds are that you will glance at it instinctively and move on. It is no longer a threat. Move it over to the back edge facing you and have another look. Again the odds are you will look at this and not at the background behind it. This is because your brain has told you it is not a threat and you

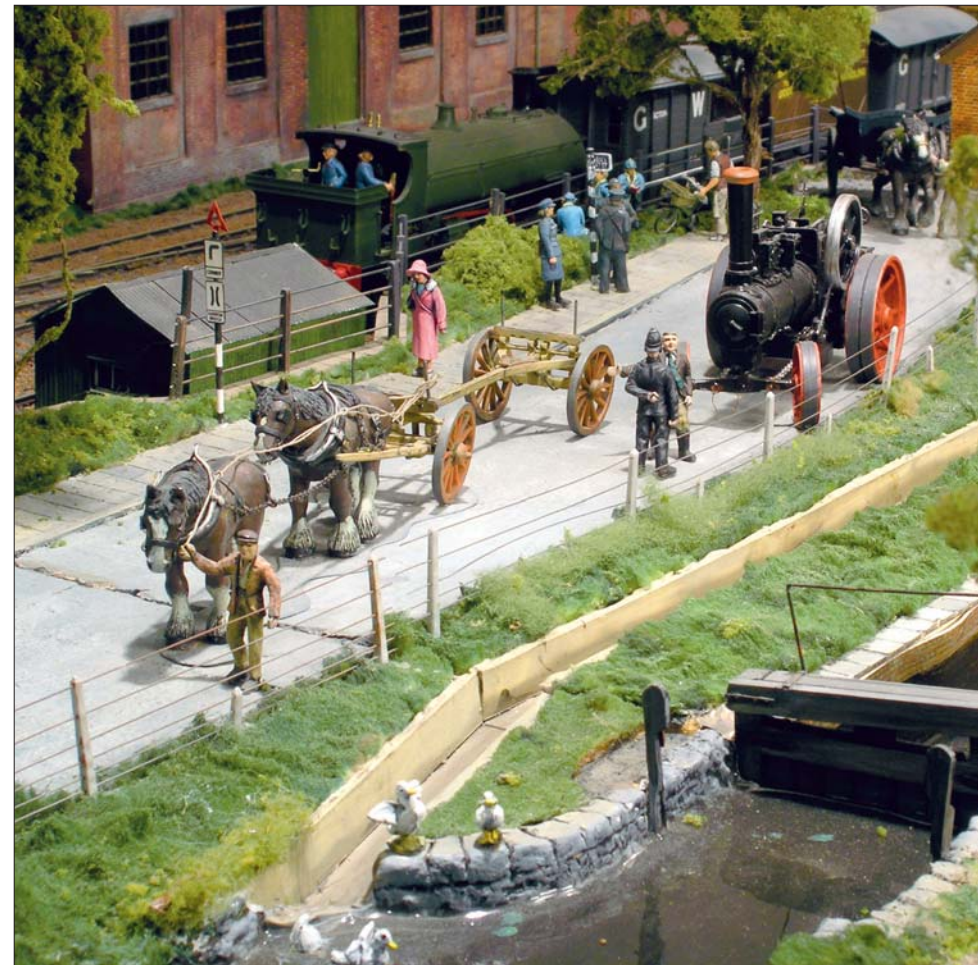


The lawnmower is a beautiful Edwardian two-man type made from a Classic Commercials kit. It is in for repairs. There are something like 24 lost wax castings and other bits in it. After I had painted the assembled model black adding the colour probably took a few minutes. The black took care of the areas I couldn't reach.



Underhill 2021 Class saddle tank No.2048 earns its keep. It is powered by a Portescap motor and is a very nice runner.

The Burrell traction engine is another Bassett-Lowke of Wellingborough kit. The black base undercoat just tones down the red of the wheels.



black first and then drybrushing on the highlight colours, impressed me with the lifelike look that resulted. This led to many experiments and to my refining the technique. A detailed 'how to' is fully covered on my website <http://www.brifayle.ca>. There are about 75 figures on *KW* and I hope you will agree that few of them 'give the show away'. They are carefully arranged in little cameos so that even if the train is not running there is plenty to see. The black-base/drybrush technique is used on other items to produce a weathered look very quickly.

Stock and operation

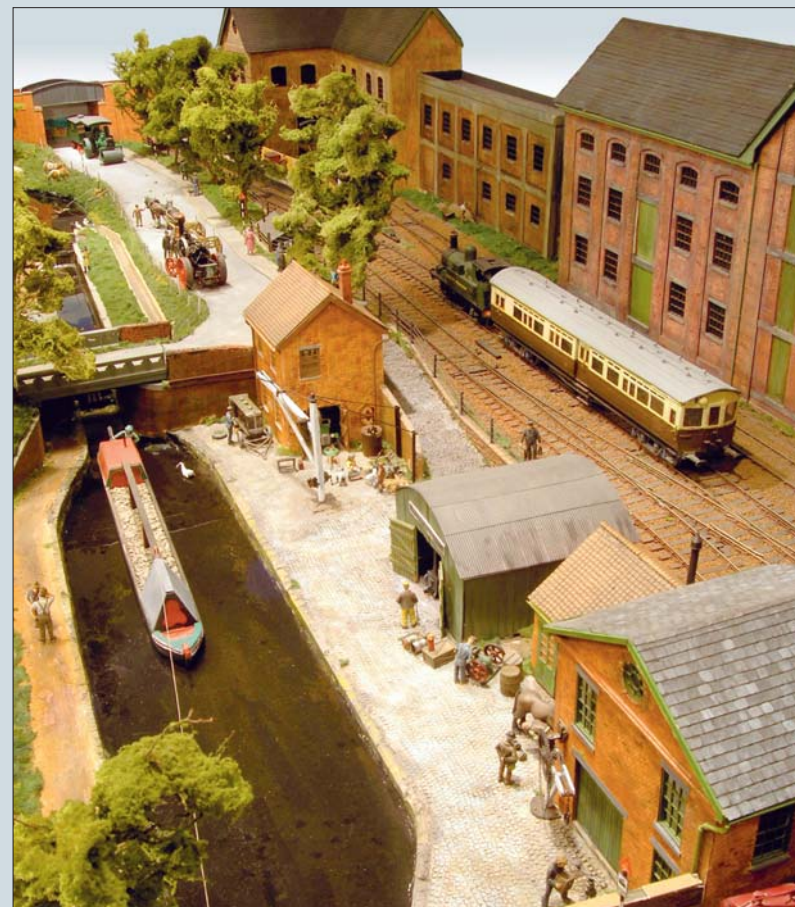
The actual operation of the railway, in many ways, is a minor part of my railway

The detail on some of the figure castings is amazing. It all comes to life when dry-brushing the colours over the black base coat. The schoolboys are amongst my favourites. From the look of them the loco crew have not had the black base treatment.

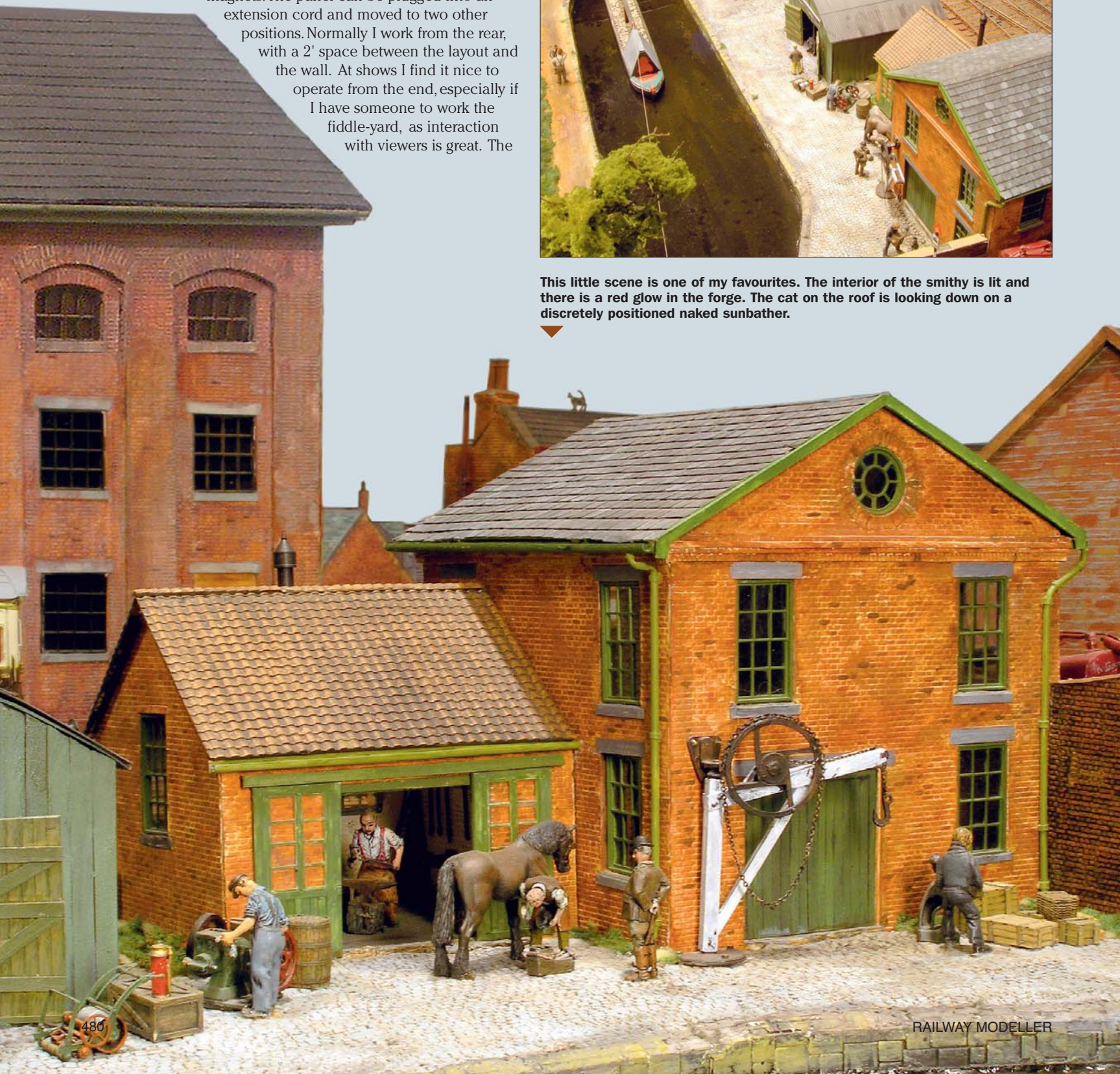


modelling. It is the setting of the scene that I enjoy as much as the operation. The locomotive roster consists of an Underhill 2021 Class 0-6-0ST, and a DJB 48xx Class 0-4-2T. The 0-4-2T is used with a Metalmodels autocoach for the push-pull passenger service. The 16' dia AA7 GWR Toad (Connoisseur) is ideal for a limited space layout and serves the goods traffic. With the short sidings and run round loop trains are short, so the number of goods wagons needed is limited. In order to add some operating interest the siding in the fiddle-yard belongs to the gas works. This has a DJB B4 0-4-0T that scuttles out to drop off and pick up wagons.

The local modellers are used to the Kadee® 'delayed coupler dance' so the B&B couplings, with their delayed uncoupling as they are pushed over an electromagnet, baffled them to begin with. They work very nicely and make shunting a joy. The control panel, in the fiddle yard, has a Pentroller, momentary contact switches for the points and push buttons for the uncoupler magnets. The panel can be plugged into an extension cord and moved to two other positions. Normally I work from the rear, with a 2' space between the layout and the wall. At shows I find it nice to operate from the end, especially if I have someone to work the fiddle-yard, as interaction with viewers is great. The



This little scene is one of my favourites. The interior of the smithy is lit and there is a red glow in the forge. The cat on the roof is looking down on a discretely positioned naked sunbather.



Lots of activity in this bird's eye view looking at the railway 'over there'. Just for a moment remove the trees. I think you will then see what an important part they play in breaking up your view. You are forced to look around them to see the details in the photo. The same holds true if you were looking at the layout itself. The Victoria Warehouse really is a magnificent structure. A long time was spent getting the brickwork to look nicely weathered.

The autotrain again. The trees visually separate the railway from the front of the layout. Their armatures are branches from a Potentilla shrub with Woodland Scenics polyester fibre draped over them. Various colours of green foam were then dropped on and fixed in place with hairspray. Whilst the trees are almost certainly not anatomically correct they look like 'trees'! Note how effective the fake fur grass is. It is linear not lumpy like so much other so-called grass.



Almost the whole of the railway part of the layout is shown here tucked away behind the trees and the buildings. Note how the L shape to the far building takes the eye round the corner.

front position is used at home if I just want to sit and see the autocoach shuffle back and forth.

Transportation

The construction of *Knotts Wharf* proceeded pretty smoothly and many a happy hour was spent adding detail to the layout. Trouble appeared when it came time to take the layout to a show. To get the 3' wide sections out of the house they had to be turned on their side. This I knew would have to happen and I had made the large buildings and backboards removable. Setting up and taking down at a show took a long time because of this so I decided to fix as much as I could in place. In the end I only had to make three removable segments. Rolling stock and road vehicles are also removed for transport. Transporting these larger pieces might be a problem but I decided that if I could not manage to do this *Knotts Wharf* would stay at home. Needless to say I did come up with a suitable method of transporting the layout.

Conclusion

Knotts Wharf is a joy to photograph. A recent house move has put the layout into storage so all I have to look at now are my photos. I hope you enjoy looking at them as much as I do.





The Rivelin Glen Railway

Radio-controlled live steam in the garden

DAVID MASON describes his 16mm scale outdoor narrow gauge system.

I know it has become a bit of a cliché to start a layout article with details about one's childhood model railway memories, but it happens to be just as appropriate in my case too. It was in the late 1940s when, as a small boy, I was introduced to model railways. My father bought a Hornby tinplate 0 gauge set which was assembled in the front room of our house on holidays and special occasions. Looking back, they were such simplistic toys compared to today's sophisticated electronic playthings, but I bet we got just as much enjoyment and pleasure – if not more – from them in those halcyon days.

Above: Welsh Highland 2-6-2T *Russell* and train pictured beside the fountain at Rivelin Glen station.

Right: the author in his element!

Opposite page: 0-6-2 *Sheaf*, a model of a Fowler used in the Australian sugar industry, ambles across the viaduct towards the steam-up area with a freight train.

Photographs by Steve Flint, Peco Studio.





The years passed by and on leaving school, I joined the then British Railways in the Civil Engineering department based in Sheffield. As a consequence, I became involved in bridge maintenance and reconstruction on 'the real thing' for most of my working life. Modelling was never far away though, and over the years I built indoor layouts in 00 gauge and later N gauge, also dabbling a bit in 0 gauge.

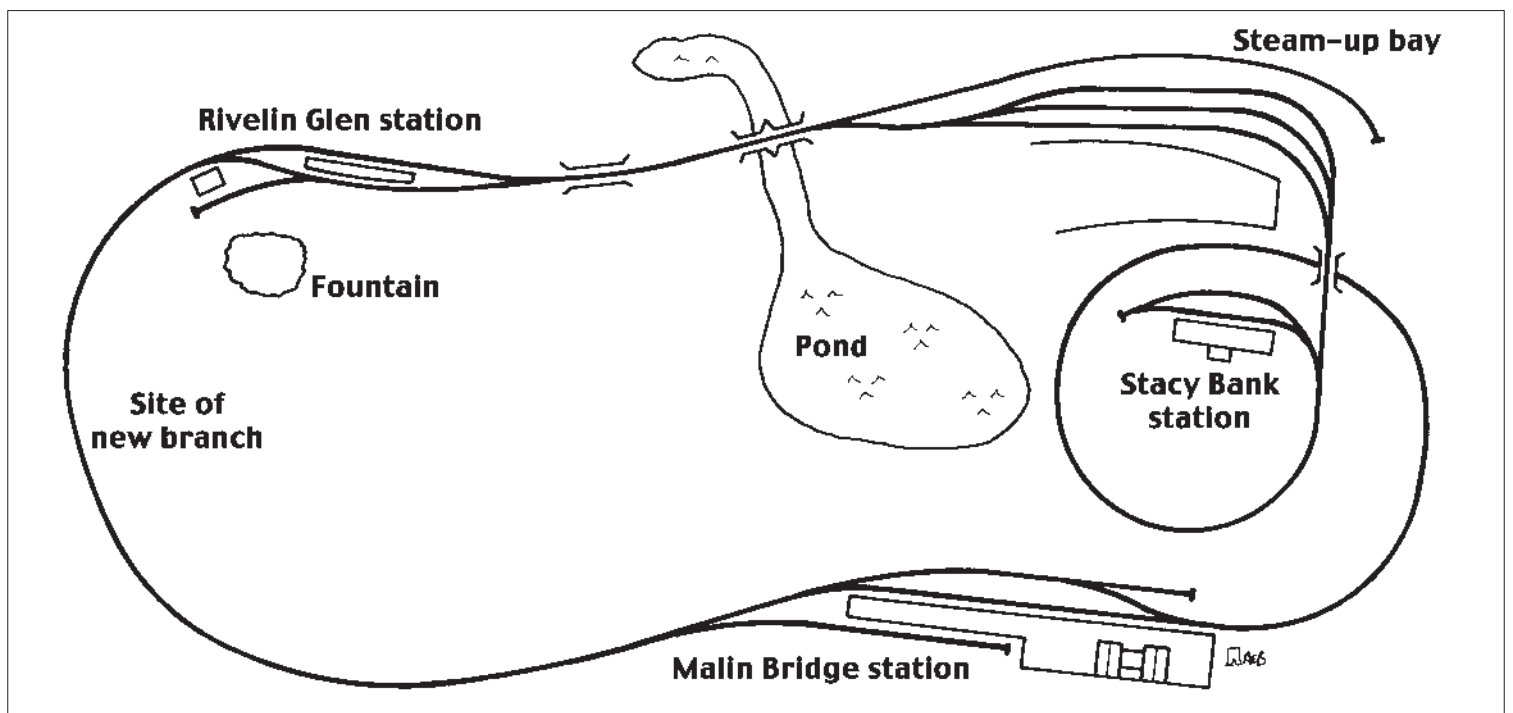
However, it wasn't until Rick Collett, a work colleague, invited me down to see his garden

railway layout that a significant change of direction happened. I was very impressed by his narrow gauge radio-controlled live steam trains that snaked around his garden, in and out of the shrubbery, that I decided to try my hand at it myself.

Thus smitten, my first purchase was a 16mm scale 32mm gauge Roundhouse 'Jack' 0-4-0 saddle tank locomotive, a live steamer powered by a butane gas burner. Of course, I had a locomotive but no track on which to run it. At

this point I have to confess that I didn't have a 'master plan' for a garden layout; it just evolved piecemeal, bit by bit.

My property is actually built on a sloping site, with the garden dropping away on a steady downward gradient. I had intended to cut back some of the slope to provide a larger flat terrace on which to develop the garden and this involved constructing a small retaining wall, some of which was decorative using natural rock and some of which was built up





This page: Malin Bridge station plays host to *Sheaf* and (lower views) *Russell* and freight and passenger stock respectively. Part of the spiral is also visible at the foot of the page.

Right: the gradient to the steam-up area is evident in this photograph.

Below right: *Russell* curves past the site of the branch extension.

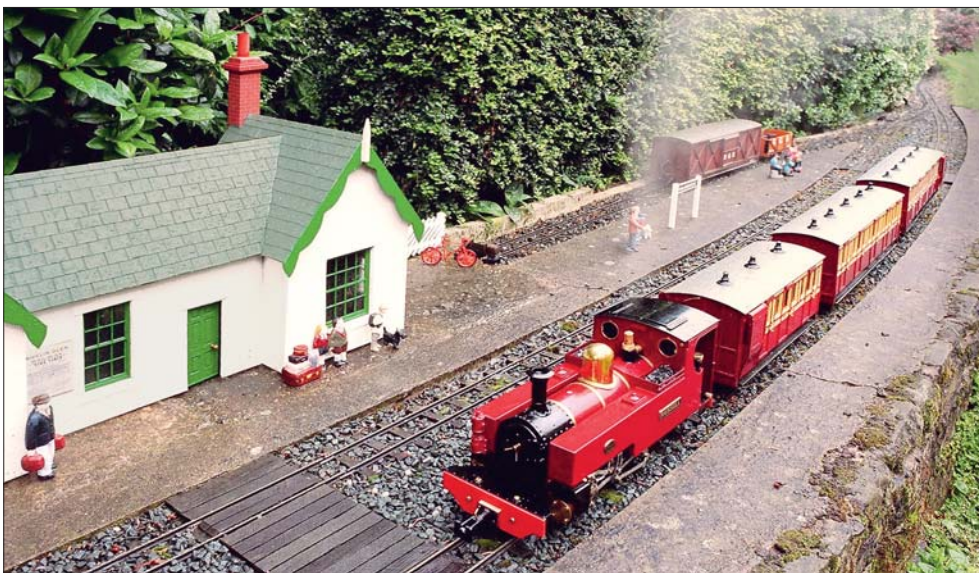
using blockwork. All along this wall I built a flat concrete top which became the trackbed. There is no getting away from it: a garden line does require some sort of heavy-duty earthworks if you aim to have a permanent trackbed of sorts.

Thus with the wall created and the new terraced area for the lawn, a simple end to end railway was created running from the corner known as 'the steam-up bay' to the first station at Rivelin Glen. The run was about 30' in length and included two bridges; a smaller bowstring girder one and a larger timber span across a tumbling water feature created in the slope.

Eventually the line was extended right around the perimeter of the lawn on a very steady falling gradient to a new terminus station at Malin Bridge on the far edge of the flat terrace. There it remained for a period of about two years: Malin Bridge was about 10" lower than the steam-up bay and thus a little planning was now necessary in order to link up the two ends of the railway without a severe incline.

A spiral grade was then constructed as the final phase, and the end-to-end railway became a continuous run for the first time. An extra station was built into the spiral called Stacy Bank.

The track I use is homemade: the rail is spiked to 1/2" square timbers cut to length for sleepers. This sleeper depth allows a thick layer of ballast to be laid which helps considerably with the track stability. Ballast is a mixture of limestone grit, sand and cement, laid





dry and sprayed with water. Each length of track is made up in 1m lengths and joined with fishplates, leaving a small 1mm expansion gap. My track built and laid in this way has proved to be very robust and has survived the rigours of the weather in this part of Yorkshire very well.

I currently have three locomotives from the Roundhouse stable; the original 0-4-0 saddle-

tank, *Russell*, a 2-6-2 tank based on the Welsh Highland prototype, and *Sheaf*, a Fowler 0-6-2, based on an Australian sugar railway locomotive. Passenger coaches are made up from Brandbright kits, representing a generic British narrow gauge design, and wagons are scratch-built, some built by my brother Peter Mason, with Brandbright wheels and couplings.

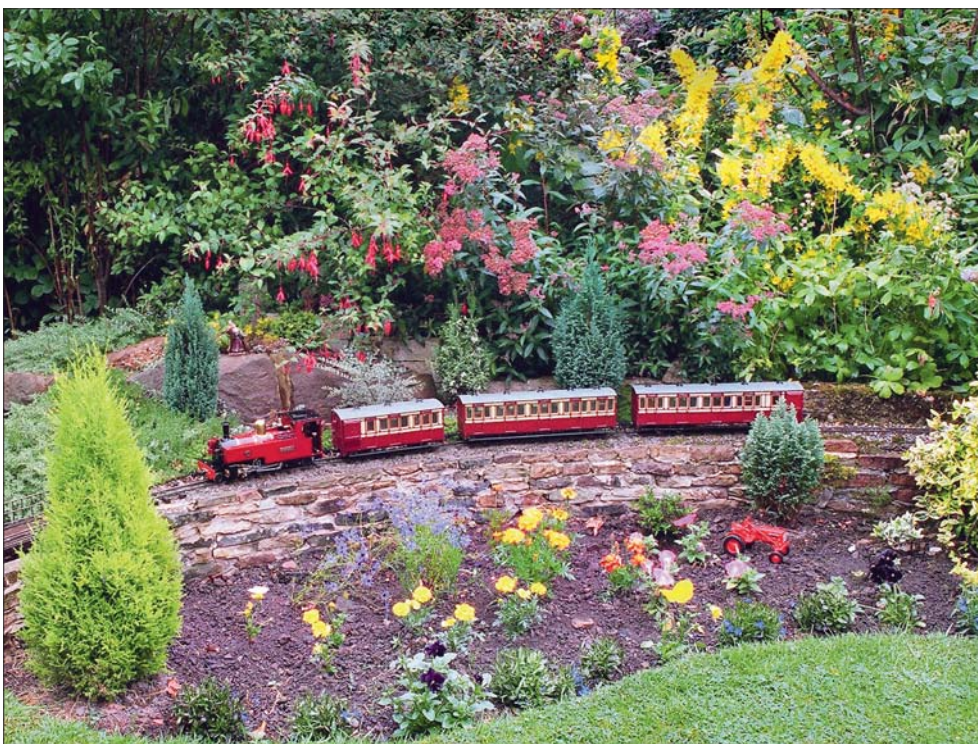
What buildings there are are simple free-

lance plywood structures painted to weather-proof them. The original timber bridge across the tumbling water feature was replaced by the four-arch stone viaduct seen in the pictures. This was constructed just like a full-size one in that I built timber centring for the arches and constructed the arches themselves around the timber former from Bradstone blocks, sand and cement.

The planting of the garden is done to complement the railway wherever possible, miniature conifers are used mainly in areas adjacent to the tracks with larger shrubs and bushes acting as a backdrop.

I don't mind admitting that ever since I was converted to outdoor model railways I have never looked back. Operating sessions can last a whole afternoon, or equally, I can do a quick hour of running on the spur of the moment should the fancy take me. Additionally, I am a member of the Yorkshire area group of the 16mm Association, an organisation with an immense sense of camaraderie in which members take turns in hosting 'running sessions'. These are a particular joy in the summer season and an excellent way of meeting like-minded enthusiasts to chat about railways over a glass of wine by the barbecue.

So, the journey from a small circle of track in my parents' parlour to a huge circuit of track in the garden has taken many decades, but looking back I must say that it has been an enjoyable one. There are plans for an extension also: the falling gradient at the top end of the garden is soon to incorporate a junction to a lower level branch and a new terminus.



8750 Pannier

Assembled from a Scorpio kit in 7mm scale. Part 1

A 'Matchbox' to revive memories of South Wales, evoked by **CHRIS GWILLIAM.**

When I was a kid in the 1950s I used to spend hours perched on top of a massive bunker in a corporation yard overlooking the East Usk marshalling yard at Newport, Mon. The shunting was almost invariably in the hands of 57xx or 8750 class 0-6-0PTs, which we young spotters nicknamed 'Matchboxes'. Back at home I attempted to recreate the scene on my 8' x 4' model railway, using a Gaiety 57xx mazak casting on a Triang 'Jinty' chassis, and for the shunter's truck a much butchered Rovex single bolster wagon with a balsa deck and a cardboard toolbox. It was not hugely accurate, but at least the wagon's black and yellow BR livery was correct, as not having a camera I had made sketches on site, which I suppose was fairly thorough for a 12-year-old.

Even after dark I was aware that the marshalling yard was still hard at work because I could hear the bark and whistle of a pannier and the clang of loose-shunted wagons from my bedroom a few hundred yards away. So I've always had a huge affection for these powerful and efficient machines.

No.9664, allocated to 86A (Ebbw Jcn) shed for most of its life, was built at Swindon by BR in 1948, and was a particular favourite, largely because I once had a trip up the Wye Valley branch behind her the year before the line closed. Now wind the clock forward almost 50 years, and once again I'm attempting to create those scenes of my childhood.

It was of course pure nostalgia which led me to purchase my second pannier model; this time not a primitive one-piece casting but the sophisticated Scorpio Models 7mm etched brass multi-kit, which allows you to build any of the variants of the GWR large pannier. Now some of you may know that for the past ten years I've been a professional modelmaker, but don't assume that this makes me a dab-hand



at building engines, because I'm not. Coaches and wagons are my area of expertise, and I have steered clear of erecting engines ever since my struggles with indifferent kits when I was still modelling in 4mm, and I am still terrified of electricrky, quartering, crank pins and other accoutrements of this black art.

No.9664 is in fact my first ever 7mm loco-building project, and it's taken me over nine years to creep up on this kit: I bought it at the GOG Telford show when it was first issued (so new that it didn't even have instructions until a month later) thinking that it would be a good starting point for etched kit loco-building – no messy outside valve gear to contend with, and just a simple 0-6-0 wheel arrangement. What could be so difficult about that?

When I got my purchase home I opened its box, took one look at the flat brass etches which needed forming into the complex curves of the pannier tanks, and promptly put it back into its tissue paper. When the instructions arrived by post I was further discouraged

by the lack of a blow-by-blow script, though there were some exploded drawings showing some but not all of the castings and smaller etches, numbered silhouettes of the etched panels and a parts list.

The paperwork has been revised since, and you now get a good drawing of the backhead and its whitemetal castings, sketches of the lost-wax parts, an extra page of drawings showing early and late versions of the dummy valve-gear, and a sketch of the driver's side of a 9701, but there are still no images of many of the whitemetal castings or evidence of where many of them fit, and there is still no sequential script.

It was clearly a kit which was highly detailed, but with crucial bits of information missing it was equally clearly not an ideal choice for a first-timer with little instinct for what goes where. So for years the box languished at the back of my modelling 'to do' cupboard. But in 2005, with my retirement looming and the pressure of building coaches for clients easing, I finally dragged the kit back into the light of day.

At the ALSM Pontefract show I sought the advice of John Cockcroft at his loco-clinic, having been inspired by his excellent articles in the model press. I also bought the new Seven Model Design M2 shunter's truck to spur me further on to build an engine to push it. So this article is simply the record of one average modeller's travails.

I then spent a pleasurable week or two going through my library digging out references to panniers, which you might consider to be armchair modelling, but in my experience it's time well spent, be it for a humble wagon or a sophisticated loco. In the case of this kit the research was vital. Such a long-evolving class of engines, generically but somewhat inaccurately called the 57xx Class,



Left: the off-side of the 8750 class. The red inner frames are just visible, as is the true-to-life coal on the roof where depot staff missed their mark. The weathering is intended to portray a loco which works for its living but has not been abused.

Below left: No.3700 is one of the 1936 batch of 8750 Class. Pictured c.1963 at Liswerry, the eastern end of the East Usk marshalling yard, working a down transfer freight. Like 9664, it spent much of its working life shedded at Newport Ebbw Junction. It appears to have a non-standard upper lamp iron mounted on top of the bunker beading, and a variant pattern of tank filler clasp. Livery is post-1957 BR unlined black with late crest, with the yellow C route availability disc first applied in 1950.

Right: the nearside of the finished 9664 in natural daylight. The low winter sun picks out a lot of the intricate detail which marks this out as a high quality kit.

Below right: the brass ashpan has been fitted to the nickel silver frames between second and third drivers, and the bunker end is to the right. Masking tape on the crank pins prevents the nuts from unravelling into oblivion. The motor will drive the rear axle. Adding brake shoes this early was a big mistake.

Photographs by the author.

shows many detail differences (and no doubt some in-service modifications too) and you need to work from photographs to ensure conformity to prototype.

My friend Mark Vretto, who is an authority on South Wales just after nationalisation, furnished me with a photo of my chosen engine, No.9664. This loco is strictly speaking an 8750 Class. On this example the variables include top-feed and associated pipework to and from the injector (many others had no top-feed), kink in tank handrail to clear this pipe, three spare lamp brackets to rear of centre splasher (not two or ahead of splasher), fireman's bunkerside steps and associated side/roof handrail, from new on this example but retro-fitted to early locos, taller whistle shield, again retro-fitted to many earlier engines, welded (not riveted) tanks, curved roof shoulders with no overhang, and cast (not fabricated) brake hangers. The generously provisioned bags of bits in the kit enable you to build any of these variations and much more besides.

First impressions

The kit is extremely good value for money; I only paid £110 nine years ago and at the time of writing you can still obtain the original multi-class kit as the one I bought for a modest £135, though I understand a price increase may be due in the near future. But nowadays you can also get a version with fewer parts which will build just the modern panniers (57xx or 8750) for £110, and Scorpio has since introduced two more pannier kits, an 850 Class and a 2021 Class, at a very modest £95 each.

Scorpio's original multi-kit enables you to build any of the nine variants of the GWR large pannier or ex-saddle tank conversions, from the Wolverhampton-built 645, 655 and 1501 classes, through the Swindon-erected



1813, 1854, 2721 and 57xx to the last style of rounded-off cab-roof 8750 Class introduced in 1933 and perpetuated by BR until December 1950, and even including the 9701 Class condensing locos. If you model pre-1914 choose your running number with care, as many conversions from saddle to pannier tanks did not happen until after the first world war, and the kit will not make up into a saddle tank, though a separate multi-class kit for the early saddle tanks is now available.

Whatever sub-class you choose, you will have a big heap of etchings and castings left over; in fact you are half-way to another complete engine, and at one time Scorpio sold a supplementary pack so you could make an early version having used up all the more modern parts, or vice versa, though it's not currently on the market. But if you've built a 57xx/8750 from the multi-kit you can buy another 57xx/8750 kit and back-date it using your left-overs, which saves you £20.

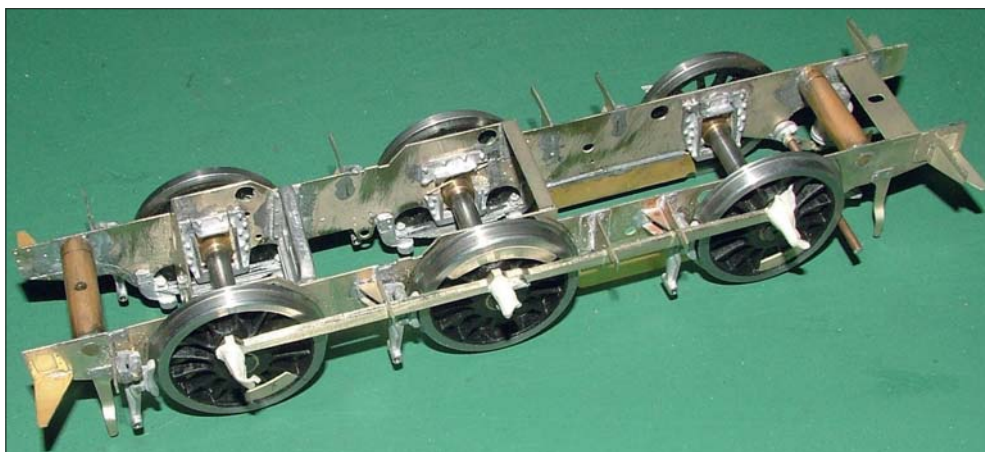
I had also asked Scorpio to source a suitable motor and gears and the firm came up with a Mashima 1833 and a set of Ultrascale gears with a Top Gear motor mount, then £17.95 for the lot, plus three pairs of Slater's ref.7855W 14-spoke wheels, now £14.45 per pair. For some early classes you need ref.7855GWR 16 spoke driving wheels; check instructions. If it's your first engine you'll also need an Allen key (ref.X78001: £2.15) to tight-

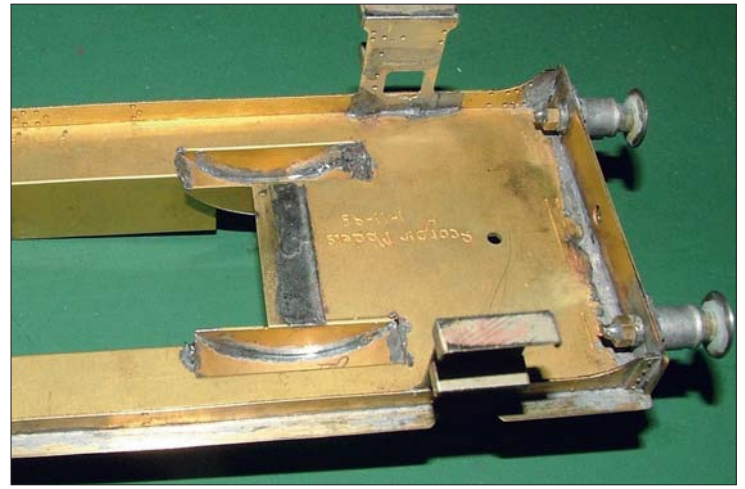
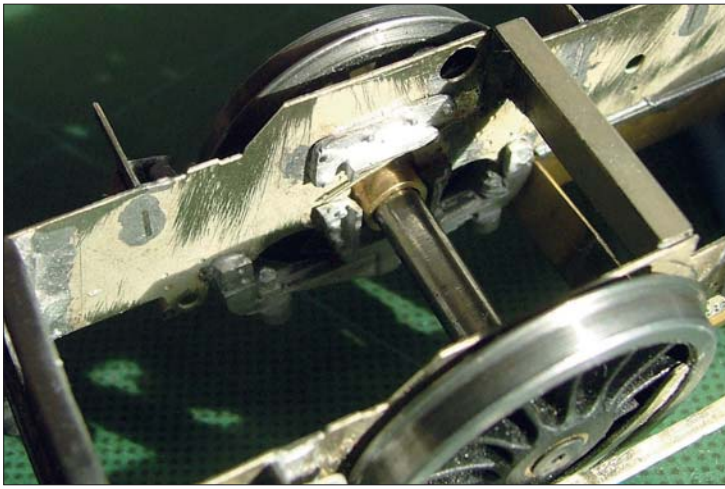
en up the wheels on their axles. When I reopened the box after its slumber I also bought in a set of Premier PR215 coupling rods for about £11, as I was not confident that I would get a tidy enough result by sweating together the multi-layered rods in the kit. Another purchase was a set of plunger pickups from a stall at a show – I forget which – for about a tenner, as I had never had any success with the wiper variety in my 4mm years.

On the recommendation of John Cockcroft I bought an 'axle alignment tool' – ie a set of re-useable extended axles with taper-ends – from MetalSmith for £11.50 to ensure that the coupling rods and frame holes lined up accurately. No.9664's brass number-plates, smoke-box number and shed-code disc were etched to special commission by Severn Mill Nameplates for £25. ABS sold me castings of a driver and fireman for a couple of quid.

Frames

Thus tooled up I made a start on soldering the frames. 'At least I can solder tidily' I thought cockily, and promptly made my first error in trying to join up spacers and motion plates one at a time to both frames which introduced distortion in the somewhat skinny 18 thou nickel silver, so I unsoldered and started again, adding all the cross-members to one frame, then marrying them up to the second frame, with much better results.

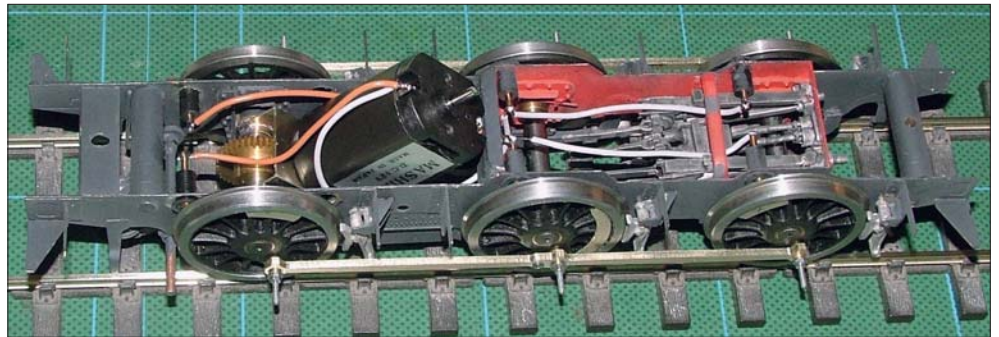




Another tyro mistake was failing to drill holes for the plungers while the frames were still on the mother-etch; it would have been simple enough to lay a wheel over the frame-etch and mark spots for drilling so that the plungers can touch the rear of the steel tyres. Drilling with the frames assembled was far more difficult. I would have done well to file oval holes for the centre-axle bearings at the flat stage as well – more on that a bit later. I decided that the optional beam compensation on the rear two axles looked over-complex for a beginner, so I did not elongate the rear axle holes, limiting vertical movement to the central axle only.

Following John Cockcroft's advice a short length of 0.7mm brass wire was soldered by one end only to the inside of each frame above both centre bearing-holes, so that the unfixed end of the wire presses down lightly on the rim of the bearing and tends to keep the wheel in contact with the track but allows it to rise if need be. This has repercussions for the whitmetal cosmetic horn-guides, which have to be cut in two and have a section of metal removed to allow room for the sprung wire. However, the movement of the centre axle later gave me some running problems when I installed the motor, and I eventually glued the centre bearings solid – it was probably my cack-handedness in filing an over-generous pair of holes rather than any inherent flaw in John's idea. Anyway, the loco ended up with a rigid chassis.

My progress was encouraging, if slow, as I spent as much time poring over the sketches and parts lists trying to identify components as I did actually building, though it became evident that the parts are numbered in (roughly) build-sequence order, which was of some assistance. Whatever you do, don't cut parts out of the fret until you need them, as there are hundreds of them and you'll get in a frightful muddle. I spent an hour or so pencilling part-numbers onto each etched component needed for this version of the engine and marking a number and an 'unwanted' cross on all the spare bits so that they could be put aside for a possible future project to construct an early pannier. I also ticked off each part on the parts list and drawing as it was added to the growing model. The lovely milled coupling rods from Premier proved to be a wise purchase,



and with the MetalSmith axles inserted in the bearings and the rods pressed onto the tapered axle ends, I was able to reassure myself that I had a symmetrical chassis.

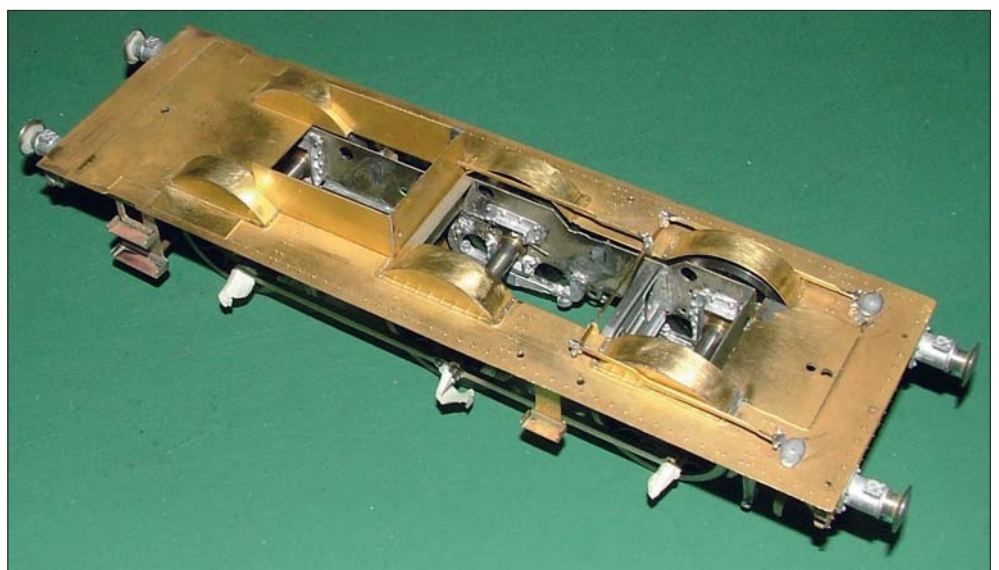
Some hours later on my first slow-but-steady attempt, to my great surprise I found I had a rolling chassis with wheels and coupling rods in place, though with no gears or motor as yet. This probably says more about the accuracy of Scorpio's superb etched artwork than it does about my loco-modelling skills! And my fears about quartering were mollified when I discovered that the Slater's axles have square ends. But which side leads, I wondered? In a letter to the Great Western Study Group Newsletter No.94 (winter 05/06) Brian Morgan writes that on GWR locos, when the RH cranks are at the bottom the LH ones should be on the centre line, facing front – thanks for the tip,

Top left: the centre driver sits in a hole in the frames which has been elongated vertically, and a spring made from 0.7mm brass wire has been soldered to the frames to press down on the bearing, thus providing some elementary springing. The cast horn-guide has been cut in half and some metal has been removed to make room for the wire. A hole for plunger pick-ups is visible near the top of the frames.

Top right: the buffer retaining nuts have been secured with a dab of solder. This is the bunker end. Note the off-set vertical rivet marks on the footsteps, which are handed pairs. The tops of the splashers needed some trimming.

Above: the motor installed.

Below: the footplate is checked for fit against the chassis. A set of dummy valve gear will be inserted to the right of the centre axle.



Right: all the sevens, and other 'Matchboxes' at Reading shed on 19 August 1951.
Photograph: Philip J. Kelley.

Centre right: now preserved at Tyseley, No.7760 (North British, December 1930) was seen at Oxford shed c. 1958.

Bottom right: two photographers, two panniers: Nos.9754 and condensing 9701 at Old Oak Common shed, date unknown.
Photographs: the late Les Pickering, courtesy Bob Brown.

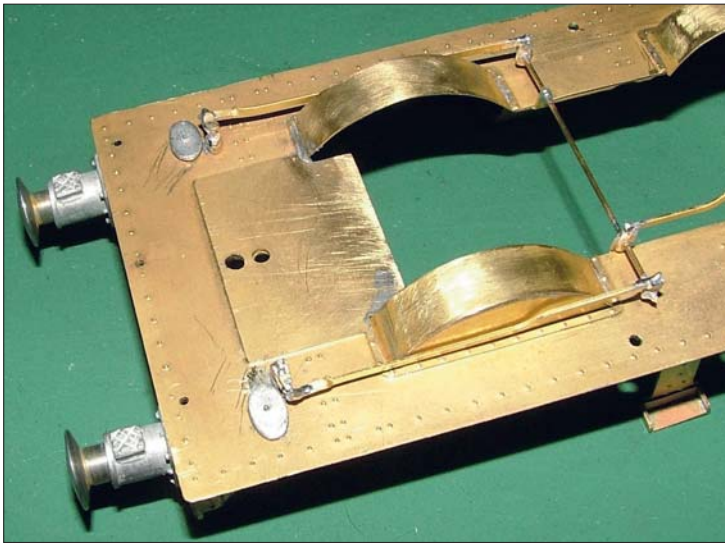
Brian. If I were doing the job again I would have held off soldering the etched footplate support brackets and etched/cast brake supports until after I had the wheels running freely, as they rather got in the way, and it would also have been easier to check coupling rod clearance if these parts had been added later; a tiny amount of nickel silver and white metal had to be filed back to ensure that nothing snarled up.

Balance weights (of which the kit has a bewildering variety) were added to the wheels, using prototype photos to identify the correct shapes and to place them across the appropriate spokes. The holes on the etched brake support brackets for the cast hangers need opening up to 1.3mm to take the spigots on the castings. But don't fit the brake shoes yet – I did and lived to regret it, because once you have assembled a free-running chassis it has of course to be disassembled for the wiring, pick-ups and gears to be added and for the frames to be painted. With brake shoes in place it is also very difficult to remove the wheels and I broke the castings trying. Adding the shoes after final re-assembly of wheel-sets would have been so much better.

Also with the benefit of hindsight I should have removed some metal from the brake shoes before fixing them anyway, as the fit against the wheels is very close and there is a danger of shorting. I'm told that someone makes plastic alternatives, but I'm not sure who. I jettisoned the whitmetal casting for the main brake crossbar which runs between the two rear footplate-steps and substituted a stronger steel rod as an alternative.

At this point I put the chassis aside for the time being so I could build the footplate and tank body and check that there was room enough for the motor/gearbox before any final decision was made. After taking advice from loco-building friends Martin Jeffrey and Richard Spratt I decided that I would fit the motor to the rear axle so that the gearbox would be out of sight behind the ashpan, with the motor angled forward at about 65 degrees from horizontal and filling the firebox void. Eventually it turned out that though we had made the logical choice of position for the motor, with a double-ended shaft it was too tall and touched the underside of the firebox casting, and I used a slitting disc to remove most of one shaft, thereby kissing farewell to any chance of fitting a flywheel. I heeded Martin's advice to hold the shaft with a small pair of snipe nose pliers inboard of the cutting point, to act as a heat-sink so as to avoid damage to the motor.





Footplate

There's a half-etched top layer with rivet detail which I soldered to the full thickness lower layer, having riveted and folded down the valances and folded up the splasher sides. Note the remarks on the drawing in the kit confessing to the hole for the chassis/body fixing screw being in the wrong place and needing re-drilling, and the small piece of unwanted brass sheet beneath the smokebox needing removing; both jobs easier done while the etch is still flat.

Other than that the basic footplate was plain sailing, being akin to a wagon or coach under-frame in terms of the folding and soldering techniques required. Once again the fit of the parts was excellent, and the only modification I found I needed to make was to remove 1mm from one end of all the half-etched splasher tops to get them to fit snugly before I seamed them up from underneath.

Sprung parallel buffers were fitted simultaneously with the buffer-beam overlays; tapered variants are supplied for earlier classes. The sandbox linkage is quite complex but I had some close-up photographs of preserved locos I took a couple of years back with this project in mind which helped a lot.

Steps were soldered behind the valances, and note that the cab steps are handed – the vertical row of rivets needs to be closer to the

Above: the forward sandboxes are worked by a complex series of rods and cranks operated from the fireman's side of the cab. The new hole for a body-fixing screw is the one to the left on the smokebox saddle mounting plate.

Above right: the sanding gear on preserved No.5764, pictured at Minehead in 2003. Linkages were the same on 8750 Class engines, but note the differing position and number of brackets for spare lamps on this example as compared with 9664.

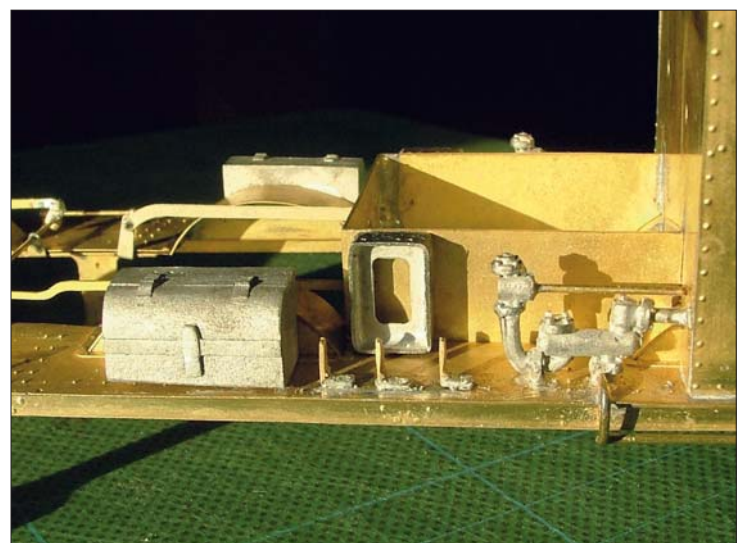
Below: the fireman's-side injector on 5764. The lower pipe runs across the footplate then descends through a notch rather than going through a hole on the footplate surface. 9664 has the same arrangement.

Below right: the nearside injector casting and 0.9mm upper brass pipe have been soldered in place. The cranked 1.3mm pipe beneath it disappears behind the steps. Note the two small washers to represent a fixing bracket and pipe-junction. Three lamp irons for spare lamps have been soldered on and the formerly upside-down toolbox has been corrected. This part of the model will be discussed in the next instalment.

smokebox end. Cast sandboxes are soldered to the rear of these steps, and again they are handed with the filler-cap off-set towards the smokebox. Having failed earlier to drill 1.3mm holes for handrail knobs above the forward

steps, that job was done now. The long steam and vacuum pipes (1.3mm straight wire) run the full length of the loco, tucked into the 90 degree angle between the footplate top and the valance, and cranked to disappear beneath the valances where they begin to curve. The drawing in J H Russell's *A Pictorial Record of GW Engines Vol.2* (full booklist at the end of the next instalment) shows where they were fixed, and I simply attached them with tiny blobs of solder at these points, and glued on cosmetic fixing brackets later, using fragments of plastic sheathing stripped off some 3-core wire. Another time I would buy some brass tube of 1.4mm internal diameter, and cut it into short pieces slid over the wire to represent the fixings. Nuts to fix body and chassis together were soldered above the revised front hole and the rear hole, and a check was made to see if the chassis and footplate assemblies would marry up. I found I had to remove a tiny amount of material from two of the footplate support brackets, but otherwise all was well. I superglued toolboxes alongside the centre splashers, and put the footplate aside, having decided to postpone any vulnerable fine detail until I had built the tank/smokebox assembly and checked that everything joined up neatly.

To be continued.



Exbury engine duties

Or 'bottom right for the Isle of Wight'

RICHARD KIRKBY dovetailed loco workings for his 0 gauge layout into real life movements.

Over the years discs or lamps, on the front of an engine, have been used to show a variety of information. They have been used to show destination; they have shown the route to the destination; they have shown urgency (break-down train proceeding to scene of accident/Royal Train); and they have shown the type of traffic from fast passenger to pick-up goods. On the Southern they were used to

Right: Eastleigh-based D15 No.465 on Duty 340 heads the 9.30am from Waterloo, south towards the Isle of Wight.

Lower right: photographed from much the same position West Country Light Pacific No.21C128 *Eddystone* on Nine Elms Duty 98 which returns vehicles to the Island from London to form the Up evening Mail from the Island. What are now the rear three vehicles will go through to Waterloo, the GWR clerestory bogie van will be left behind at Basingstoke and go forward to Reading and the rest of the Great Western system and the pristine Maunsell all-third just behind the tender will be left behind at Newport to help clear the Island of its visitors this coming Saturday (in the 1950s and 1960s 50,000 passengers arrived on and left the Island every Saturday – the peak being 68,000 in the summer of 1956).

Below: ex-LBSCR H2 Class Atlantic No.2423 *The Needles* on Brighton Duty 741 stops in the down loop platform for an engine change.

Below right: Isle of Wight-based O2 No.W29 *Alverstone* restarts the ex-Brighton train and will take it on to Sandown. (Bottom right headcode on the Island is correct for the Newport-Sandown via Merstone route.) The letter B on the headcode tells all concerned that this is the Brighton train; simple but effective!

Photographs by Paul Mills.



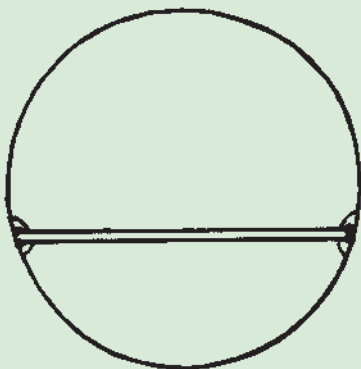


show the destination and the route to be used and the headcode discs also often carried a number. This number was the 'Duty Number' of the engine for the day and showed what it was

Headcode disc construction

Before the brass drawing pin has its pin removed it is best that any small pattern on its convex (outer) surface is removed. This can be done with either a fine file or sand paper. Next remove the pin with jewellers snips or similar. About a third of the way from what will be the bottom there is soldered a short piece of brass or nickel silver wire from one side to the other. This acts as the strap which will fit over the bracket on the engine. I normally fill some of the concave side with plasticine in order to make a tighter fit of disc on the bracket. It is then only necessary to paint the outer side of the disc with white paint and to apply the numbering.

I have used numbers which originated from Marks and Spencer's inspection numbers attached to items of their clothing (you will find they are about the right size for gauge 0) but usually I have used rub-down lettering. Edding transfer ref.1814 Helvetica Halbfett 3.2mm 12pt is the one you will see on the photographs.



scheduled to do that day. (We would probably call it programming nowadays but that word was not in use 60 years ago.)

The Southern had three operational areas to be covered by its headcode disc system. These were the Western – which comprised those lines from Waterloo spreading towards Plymouth, Exeter, Weymouth, Bournemouth, Southampton and Portsmouth. The Central Section could be described as London to Brighton, Littlehampton and Chichester whilst the Eastern Section was – in shorthand – London to the Kent Coast. Thus it was that when the layout (*Exbury*) started to come to its present state a decision had to be made on what Southern headcode(s) were to be adopted to show the traffic passing through the station on its way from the old ex-LSWR main line to Bournemouth towards the Isle of Wight over the Solent Bridge (see RM Jan 2001 p.8).

The first consideration was that the headcode selected should be simple. Whilst it is easy enough to solder the brackets to the front and rear of a model on which to place the discs it is obvious that the fewer of these fragile projections there are, the better. It is also relevant that one does not want to have to solder up too many of the drawing pin heads, with their retaining strap, to use as discs. For details of the discs' construction, see the panel.

Out of a very old box in the roof space of our house fell a copy of one of my childhood 1950s ABCs which showed the Southern headcodes and it has been this source document from which the headcodes used on the layout have been extrapolated. Bottom right, with the disc being placed over the left hand leading buffer as seen by the driver, was chosen as being the furthest bracket from the operator in most cases and therefore the least likely to be disturbed by any operational (coupling up etc) requirements.

It was next necessary to study that old ABC and select journeys which could be reflected by 'bottom right' without conflicting with

Above left: Eastleigh Duty 303 and Maunsell 'Scotch Arthur' No.785 Sir Mador de la Porte is coming into the Up loop platform with a train of bogie gangwayed vans to be refilled with Passengers Luggage in Advance (PLA) before coming south again next weekend. This was a huge business in the 1940s and 1950s.

Above: grubby but green M7 0-4-4T No.676 takes the mid-day Push-Pull from the Bay at Exbury and heads south to the Island. This was part of Eastleigh Duty 338.

those which had already been used in real life. Trains which are scheduled to come and go between the old ex-LSWR main line and the Isle of Wight (i.e. from Waterloo/Nine Elms to Isle of Wight destinations) get the bottom right disc. There is, however, other traffic. There is the hourly Portsmouth Harbour to Ryde Pier Head stopping at all stations – with a Fratton engine normally in charge – whilst there is also the daily Brighton to Bournemouth/Isle of Wight (and return) which, splitting at Southampton, has the Brighton engine taking the train on to Exbury whilst an Eastleigh engine takes the rest of the train on to Bournemouth. (The Brighton engine comes off at Exbury and is replaced by an Isle of Wight-based O2; the Brighton engine being turned and prepared for the return journey.)

Quite quickly, therefore, our imagination has invented three headcodes. All have the 'bottom right' disc, which is lazy, but efficient! The train from Brighton has another disc over the other buffer whilst the Portsmouth/Ryde shuttle has the second disc at the foot of the chimney. Having allocated headcode discs to the traffic which the layout claims to operate, attention then turned to allocating 'duty numbers' to the engines which would haul this traffic. Here it is necessary to know which numbers were allocated to which sheds.

The layout was interested in engines shedded at London (Nine Elms) for the trains which came to and from the Isle of Wight from London and which did not change engines en



Above: Isle of Wight engines at rest on Exbury shed with their headcodes in place waiting for their next journeys. (The nearest is ex-LBSCR E1 0-6-0T No.W3 Ryde in its proper fully lined-out Southern livery which it carried from the end of WWII to being painted black by British Railways.)

Above right: Fratton-based T9 4-4-0 No.732 on that shed's Duty 351 runs into the station with one of the stopping at all stations hourly Ryde Pier Head to Portsmouth Harbour trains.



route. Next we had the 'local' engines. These would be based at Eastleigh and would have taken over trains which split at Southampton – the London (or Bournemouth based engine) would take the train on to the West – whilst the Eastleigh engine would trundle the train over to the Island. Brighton would be the shed which provided the engine for the daily Brighton/Bournemouth/Isle of Wight train and Fratton, of course, would provide the engines for the Portsmouth/Ryde hourly service.

It turns out that the Duty Numbers which concerned us were allocated as follows: Nine Elms 1-102, Brighton 735-779, Eastleigh 271-345

and Fratton 350-366. In real life the system was complicated by the fact that whilst 'Duty XYZ' on a weekday might be a series of local push-pull trips, on a Saturday it might be an out-and-back inter-Regional trip and on Sunday an excursion to almost anywhere. Whilst it was usual for a depot to schedule a particular engine for a week at a time for a particular duty (sometimes the allocation could be for months) there was always the inevitable boiler washout or whatever which resulted in a different engine taking over a particular set of duties.

What was a duty? Here are a few examples for an ex-LSWR L11 4-4-0 based at Eastleigh in 1939. Locos were 148/157/159/171/174/408/440. Six weekday turns, mainly passenger to Portsmouth, Fawley and Andover, also to Reading on Mondays only and a long goods

Below: 'Scotch Arthur' No.30791 Sir Uwaine stands in light steam on Eastleigh shed on 26 March 1960, having worked an inter-regional train to the south coast – or perhaps part of the Brighton-Exbury/Bournemouth duty...?

Photograph: Frank Hornby.

turn to Dorchester. Saturdays: a passenger to Bournemouth and back with vans to Basingstoke. Sundays: 9.42am Fareham-Bournemouth and 5:35pm Bournemouth West-Eastleigh.

Even more specifically, pre-WWII Eastleigh duty No.281 comprised the 9.44am Eastleigh-Waterloo, 5.09pm Waterloo-Basingstoke and 7.35pm Basingstoke-Eastleigh. Duty 282 was Fish Vans to Portsmouth Harbour with fish from Grimsby on its way to the Isle of Wight by the next paddle steamer (I passed them on my way to school each morning when they had arrived at the Harbour station and they *stank*); passenger Portsmouth-Romsey-Eastleigh, 11.58am Eastleigh-Basingstoke and 6.50pm Basingstoke-Southampton Terminus, and Duty 283 was 7.34am Eastleigh-Romsey, 8.00am Romsey-Bournemouth Central, 11.45am Bournemouth-Brentford vans and 7.54pm Waterloo-Salisbury.

It is hoped that the captions to the accompanying photographs will explain what the author has convinced himself is suitable for the traffic on his layout and, if they convince him, well – no one else is to blame!



MR 0-4-4T for S

A scratchbuilding project in 1:64 scale

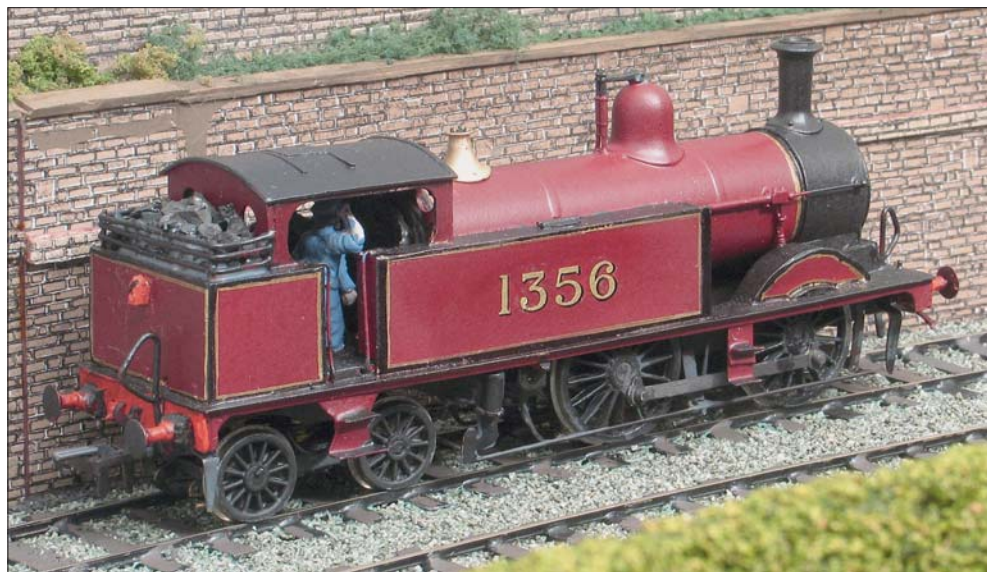
STEPHEN RABONE has produced a small Johnson passenger tank to run on Halifax Midland.

Readers of my article about my S scale layout *Halifax Midland* (in the June issue) will have seen the photos and read about the scratch-built Midland Railway 0-4-4T that I've built. I've always felt that building a model from basic materials was beyond my capabilities; in reality once I'd started it was by no means difficult. Our Editor, therefore, thought that an article about how I constructed the model might tempt others, in whatever scale, to have a go themselves. Whilst the model was built in S scale the constructional methods are directly transferable to both 4mm and 7mm scales. Without doubt the degree of satisfaction I've obtained from building this model exceeds anything I've ever done in over 40 years of modelmaking.

It was inevitable that I was going to have to scratchbuild a locomotive one day for my S scale layout. Many MR locomotives are available in this scale courtesy of Alan Gibson, but one I particularly wanted was the Johnson-designed 0-4-4T to pull a set of suburban coaches. Now, 0-4-4Ts have an evil reputation among modellers but Alan came to the rescue. He'd already produced a set of frames for this type for somebody else and in due course mine arrived. In truth I wasn't really having to scratchbuild the loco chassis, as virtually everything used in it was sourced from other kits or components. On the other hand I was having to make decisions, which up to now had been made by the kit manufacturer – experience gained over the years was now being put to use!

Alan's advice about how to build one as a rigid-framed locomotive has proved invaluable. My track-building standards aren't particularly good so I ordered a set of Alan's 5'3" wheels with EM gauge profiles and I decided to use some 4mm Jackson wheels for the trailing truck with their slightly more forgiving wheel profiles.

I used a Portescap motor with gearbox, and a Comet 4-wheel LMS bogie, which had exactly the correct wheelbase for the 0-4-4T's bogie. Although it's too narrow I used this to my advantage as it allows quite a lot of sideplay on the axles. See Photo 1.



I started construction by opening up the 1/16" holes that Alan had drilled in the frames at my request, using a reamer, thus allowing standard 1/8" top-hat bearings to be inserted and soldered in place. Alan suggested I elongate the rear driving bearing vertically to give a little compensation. Frame spacers came from some spares from one of Alan's other kits. A drawing from Essery and Jenkinson's *An Illustrated Review of Midland Locomotives* was rescaled on my photocopier and I was thus able to work out where to put the spacers with holes to fix the footplate and body – under the smokebox and the coal bunker.

In setting up the chassis I used the 00 gauge frame spacer jigs from Comet, packed out with washers to give the correct S scale width. Once I was satisfied that the frames were aligned correctly, I soldered in four frame spacers. The spacer directly over the bogie also had a pivot hole drilled through it. After cleaning up everything, I assembled the wheels on the bogie with four washers between the wheels and the much narrower 4mm scale bogie. This extra sideplay gives considerable flexibility on my sharp curves – in fact without it the loco wouldn't be able to traverse the curves given its rigid centre pivot. Alan suggested I simply

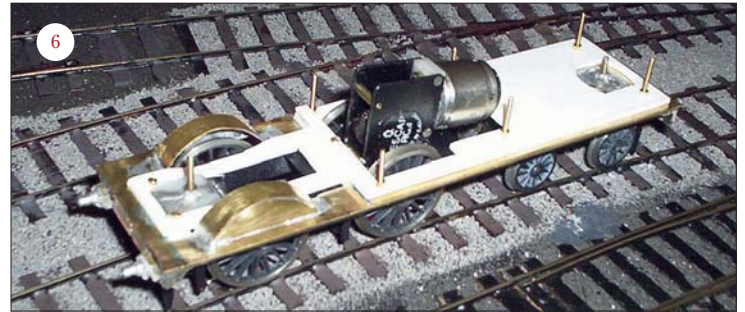
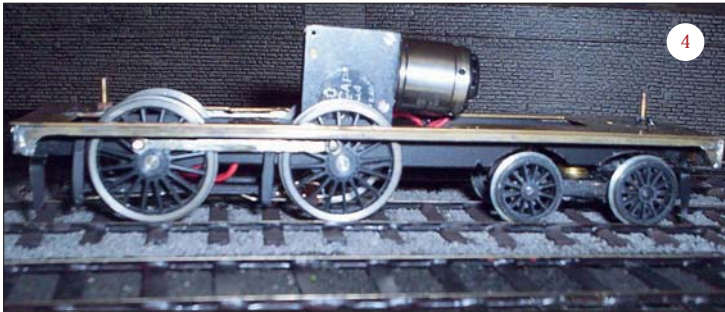
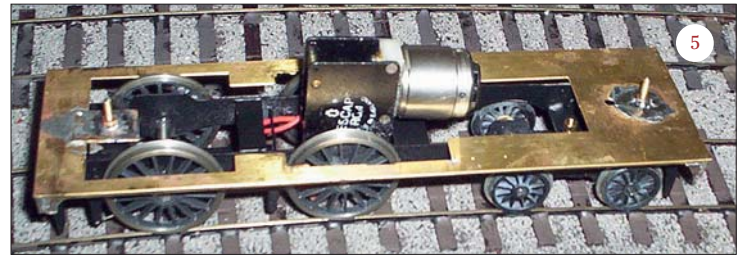
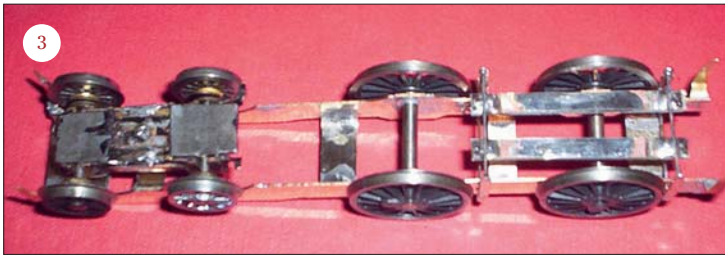
place washers between the bogie and the bogie pivot plate until the frames sat level. His suggestions have helped produce a smooth-running and easily-built chassis. See Photo 2.

I threaded wire through the pre-drilled holes in the frames to support the brake hangers. Some more spares from Alan Gibson kits provided four brake-block hangers; a driving wheel on an axle was used to check clearances. The cross-wires at the bottom of the hangers were added next to give rigidity. I prefer to have the pick-up wires under the chassis where I can adjust them easily, so I soldered some copper-clad sleeper strip to these cross-wires. Once painted black they become almost invisible when the loco is on the track. The copper is gapped so that the section between the cross-wires is isolated from the chassis, otherwise there's a short-circuit when pick ups are fitted.

At this stage I test-fitted all the wheels and track-tested the chassis to see if it ran on the layout without derailing; to my amazement it ran perfectly. The only adjustment needed was some filing away of the brass over the bogie wheels to eliminate the occasional short circuit when the bogie wheel touched the chassis. The final task was to solder in the wheel guards at the ends of the chassis. These were simply brass strip cut to shape.

The next job was to fabricate the coupling rods. Fortunately the 0-4-4Ts had plain rods, so I was able to make some, adapting some spare 4mm LMS Class 5 rods. I put London Road alignment jigs into the bearings and soldered up the rods. Basically, I first took the front left-hand rod of the Class 5 and overlapped it with the rear right-hand side rod, joining them so that the jigs held them in the correct spacing





whilst I soldered them together. I then cut further sections of the Class 5 rods and built up a double rod throughout the entire length. Any gaps were filled with solder and then the whole thing was filed until it looked as though it was a continuous rod. I could, of course, have fabricated rods myself but the task was made so much easier by adapting existing components.

Once these were made and the chassis had been sprayed black, it was time to assemble everything. The rear coupled wheels were fitted first, together with the Portescap motor and several washers as spacers between the frames. Alignment of the wheels was done by eye, the holes in the rods were opened up with a drill and reamer and they were then slipped over the crankpins. To my surprise the chassis rolled without any hint of binding, so power was applied to the motor with a smooth turning of the wheels first time!

Nickel silver pick-up wires were soldered to the copper-clad strips and the motor wires connected. Some lumps of lead were laid on the chassis and away went my 0-4-4 chassis around my layout. It propelled three carriages and about ten wagons comfortably. See Photos 3 and 4.

Having got the chassis running, I decided the next step was to build the footplate. Once again my box of bits came in very useful. I had an Alan Gibson MR 990 Class kit, which I'd originally bought fairly cheaply, with the intention of rebuilding to a Compound. Clearly the straight footplate of the 990 wasn't going to be any use for a Compound so I thought why not use it for the 0-4-4T if it would be suitable? It was!

As it happens, since I took this decision Worsley Works has agreed to produce me a Compound kit and as I don't really need a second 990 I'm going to use this kit as a source of parts.

All that was necessary was to shorten what was the front end of the 990 footplate by about 10mm, and turn the entire footplate back to front. The 990 splashers are almost in the right place although perhaps a touch too deep for the tank locomotive. The one for the rear-

coupled axle needed extending about 8mm forwards (easily modified with a pair of scissors!) whilst the front splashers hole needed filling with a spare piece of brass at the front. The footplate valancing was shortened slightly, before soldering and the curved ends modified to resemble more closely those on the tank locomotive. The final task was to solder on an extension piece for the front securing nut and to drill holes front and rear for the bolts. See Photo 5.

This locomotive was turning out to be more an adaptation of other kits than scratchbuilt! Of course, if I hadn't had the 990 kit I'd have simply cut a footplate from thin brass using a pair of sharp scissors, with holes cut for the splashers. More running trials with lots of weight added to both the front and rear of the chassis suggested that I'd got a nice smooth running and powerful piece of motive power. Now for the body proper...

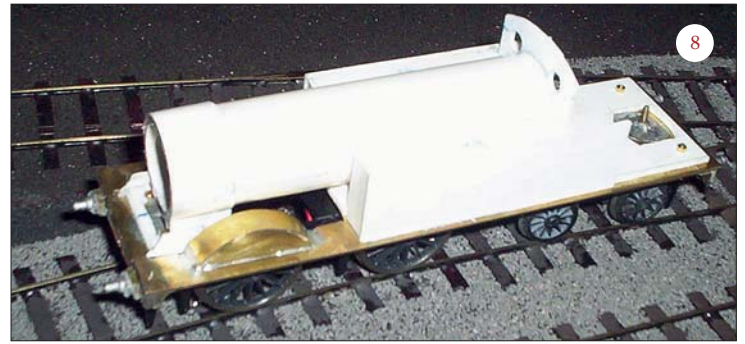
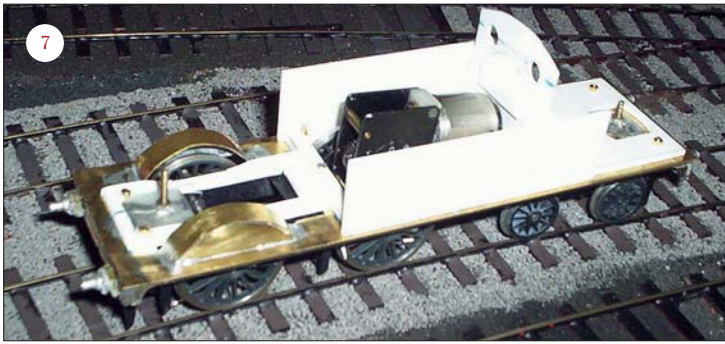
Having progressed this far, I decided initially to build the rest of the locomotive completely from metal. A friendly central-heating engineer had left me some copper and plastic piping with the comment 'Lots of people use this to make model steam locomotive boilers with!' Amazingly, they were exactly the size I needed - roughly 22mm in diameter. I cut some of the copper tubing to the correct size with a slot to accommodate the motor and also produced the front of the cab from sheet brass. These were then soldered together and tacked to the footplate. It was then that I realised I really didn't want to build the body in metal after all. It's one thing to solder together an etched brass kit where the parts have been designed to fit, and another to measure and cut out metal. Put simply I really didn't want to do it, so it was back to the plastic! However, I decided that the splashers had better be brass as they are definitely part of the footplate. A photocopy of the splashers was stuck on to brass, which was cut out using scissors, and soldered in place. Next splashers tops were cut, curved and soldered onto the splashers sides.

The buffers on the MR 0-4-4T were mounted on very heavy mounting blocks (I don't know the technical term) which were a distinctive

feature of the class. I found some whitemetal LMS coach buffers with blackened steel heads in my parts box. They aren't quite correct, but are close enough. For the mounting blocks I used 4mm copper-clad point sleeper strip. Holes were drilled in this to accept the shank of the buffer body and the strip was then cut to the size of the buffer base. This was soldered in place on the buffer beam and the buffer body was then soldered in place on the strip. A good clean up and it was time to start on the plastic construction.

I decided that, as I was going to build the loco body onto a plastic baseplate, I'd better think of a way of securing this absolutely firmly to the footplate. Araldite, on its own, wouldn't be secure enough. What I did was to drill a series of six holes at the front, rear and centre of the footplate through which small bolts would lock the plastic body to the footplate. In addition, I added a cross-piece of brass, just in front of the motor, to give a secure fastening near the front of the water tanks.

The next task was to make and attach the plastic 'base' which would act as the foundation for the side tanks, cab and coal bunker as well as for the smokebox saddle. I used the thickest plasticard I'd got, 60 thou. I cut out two pieces, one for the front of the footplate onto which the smokebox saddle and frame extensions would be attached, whilst the second larger section at the rear would support the side tanks, cab and bunker. Allowance was obviously made, along all sides, for the thickness of the plasticard I'd be using, as well as the narrow ledge along the footplate between the sides of the tanks and bunker and its edge. To ease cutting and reduce distortion I drilled small holes in the corner of the shapes that needed to be cut out. The plastic was roughened on the underside and Araldite smeared thinly over the plastic. After the adhesive had set, I drilled through the holes in the footplate and secured the plastic firmly with small 12BA bolts and nuts. Finally, a further strip of 60 thou plasticard was cemented across the 'foundations' just ahead of the motor to join the two sections of plastic more firmly and the bolts were cut short. See Photo 6.



Construction of the body proper now started with the two side tank outer sides being cemented to the base. A cross-piece joined these together at right angles on the inside of the 'cab'. Onto the front of this I cemented the front of the cab, the two windows having been opened out with a reamer. All plastic used in this stage was 40 thou thick. See Photo 7.

The next step was to install the boiler. Firstly, a length of the plastic tube was cut to length and a slot also cut at the rear to allow space for the motor. A hole was also cut in the base of the tube, where the smokebox would be, to allow the chassis-securing bolt to pass through. I then took a strip of 30 thou plasticard, cut to the correct width for the smokebox wrapper, and wrapped it round a pencil to over-bend it. This was then secured around the boiler using Plastic Weld. The smokebox was then placed overnight in a lightly tightened vice to allow the adhesive to set firmly. Next day I cut a semicircle of 60 thou plasticard to the inner diameter of the boiler and secured this to the correct position on the front of the cab, thus giving a firm location point at the rear of the boiler.

Meanwhile, two strips of 40 thou plastic were laid across the 'foundations'; one just behind the two front bolts and the second just behind the chassis fixing nut. These gave the correct height for the boiler to lie level. The boiler was now secured in place at both the cab end and also on the two strips at the front. To reinforce this joint I added 12mm strips of square microstrip underneath the smokebox.

The smokebox saddle was built up in two parts. Small pieces of 40 thou were cemented on either side of the 'foundations' just in front of the splashers. A note here: the splashers are actually slightly too wide because, having used the 990 footplate, the front face of the splashers are set too far out. As a result the splasher tops have to be extended further

back to hide the wheels – it's a slight irritant but one I'm prepared to accept.

The final stage was to cut and shape some 20 thou plasticard to represent where the smokebox curves down inside the saddle. The model was beginning to resemble a locomotive at last! The next step was to remove the part of the 'foundations' behind the splasher. I'd thought that I'd need this to ensure that the smokebox saddle was firmly fixed in place but it had become clear that the adhesive plus the small bolts are sufficient.

The side tanks were now built up using more 40 thou plastic. The front and ends were added first, followed by the supports for the 'floor' of the tanks. Strips of lead were then added inside the tank and finally the top was cut to fit inside the sides and ends. Finally, a slug of lead was added inside the front half of the boiler. See Photo 8.

Attention was now turned to the bunker, which was built up in a similar way to the water tanks. First I positioned the rear cab wall and then added the sides and rear of the bunker. The water tanks and bunker extend into the cab door area, with the cab itself being noticeably narrower than the tanks and bunker.

The next item I added was the coal-rail assembly. This was drawn out on a piece of card and the whole assembly fabricated from left-over strips from some nickel silver etchings, which were just the correct width. Holes were drilled in the bunker top for the six uprights and the coal-rails fixed in place with Araldite.

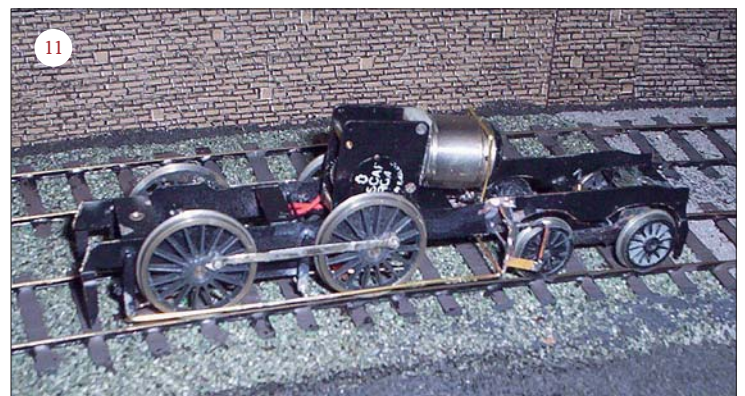
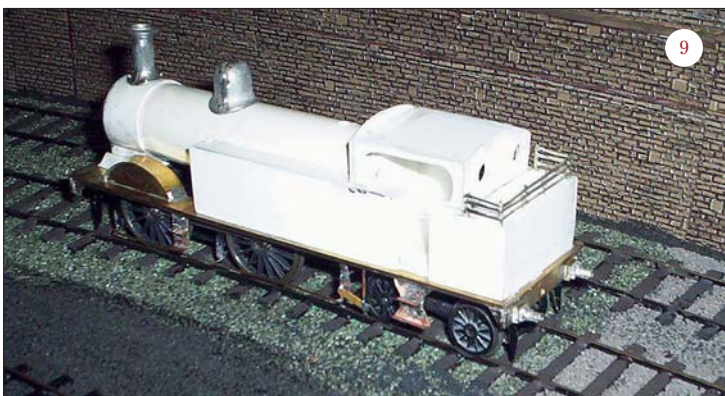
The cab sides were now tackled: to cut this part from plastic looked impossible until I realised I could treat it as a window with round corners. So first I drew out the required opening in a piece of 40 thou and after removing the centre (two horizontal and two vertical cuts, plus four small diagonal cuts were

required) I rounded off the corners with a file. The next step was to cut away the bottom of the 'window' and trim the top edge to leave a strip about 1.5mm wide. This fragile piece of plastic was then cemented in place between the front and rear cab ends. Another rectangular piece of plastic, to form a false cab ceiling, was cut to fit snugly between the cab sides and ends, thus reinforcing those fragile eaves.

By now the model was starting to look like an MR 0-4-4T so I felt it was time to add the boiler top furniture. The chimney problem was solved by taking an S Scale Society Y7 chimney, slicing it into two parts just below the lip, removing about a millimetre from the main body of the chimney, and after filing both parts to fit gluing the two bits together with Araldite. See Photo 9.

The dome is an S scale Alan Gibson casting, which would eventually have Salter valves added to it, whilst the safety valve cover is a 4mm GWR lost wax casting, again from Alan. The chimney and dome have been glued to the boiler but the safety valve was fitted after painting, to avoid a tedious clean-up job.

The smokebox door is actually taken from a 4mm Airfix 0-6-0 cemented on to a piece of 20 thou and fastened to the front of the boiler, although I could have used another Alan Gibson 4mm casting. See Photo 10.



Below footplate level I now added steps cut from brass and strengthened with some L-shaped brackets of brass wire. The chassis has also had the brake pullrods added – the Midland 0-4-4Ts had these outside the wheels, as well as various other bits of ironmongery to connect it all to the handbrake and vacuum brakes. I've gone for the representative rather than absolute fidelity to the prototype. See Photo 11.

I next fitted the couplings to allow loaded test-running. Blocks of plasticard were Araldited to the body behind the buffer beam and to the rear frame spacer of the chassis. These were then built up to the correct height to accept the NEM plug-in coupling boxes for the Bachmann couplings that I use on all my stock.

To my delight, despite the long overhang at the rear, coupling to carriages hasn't been a problem, even on my sharp curves. Neither has the loco any suggestion of 'tail end' wagging. I suspect this must have something to do with the bogie carrying a substantial part of the loco's weight.

The final finishing of the body was now in sight, so I decided to complete adding the various details fairly rapidly. The aim was not to make a super-detailed model so I've limited details to things that I felt were significant, when looked at in photographs, and that would be relatively simple to add. I've decided not to attempt, for instance, to add any rivet detail, even around the smokebox, as I suspected I would not achieve consistent results.

Thus in fairly quick order I added:

- * The curved plate under the smokebox, made from brass and glued in place.
- * The vacuum and carriage heating pipes at front and rear.
- * Lamp brackets front and rear – brass at the front and plasticard on the bunker.
- * Dummy coupling hooks.
- * Handrails to the cab doors and front of the water tanks.
- * Handrails/injector pipes etc. on the boiler, these all being taken from an Airfix 'Royal Scot' and modified to suit.
- * Boiler bands from PVA tape.
- * The Salter valves, Alan Gibson components soldered together at the top on to a disc of brass. This was then attached to the flattened top of the dome with low melt solder.
- * A cab roof ventilator and guide strips, from plasticard.



Above: No.1356 arrives at Halifax Midland with a local passenger service.

Layout photographs: Steve Flint, Peco Studio. Constructional photographs: author.

- * A representation of the boiler backhead.
- * The prominent handbrake on top of the left side water tanks.
- * The water filler tank covers.
- * Sandboxes, attached to the underside of the footplate. See Photo 12.

Finally, the model was given a thorough cleaning and entered the paint shops. Painting followed my usual methods: Halfords car primer (see Photo 13) followed by several coats of Precision Paints Crimson Lake (actually BR Maroon). Lining out uses a Pilot gold marker pen and a Staedtler fine black OHP pen. Transfers are the HMRS Pressfix type. Painting the model in its final colours was somewhat traumatic! The two problems I encountered were that my gold marker pen no longer seemed to give quite such a fine line as in the past. However, this was eventually overcome with careful touching up. I decided to

omit the lining around the cab opening as I found it too tricky to apply without obtaining a poor result.

Overall, despite the various inaccuracies and somewhat poor workmanship in places, I'm very pleased with my first attempt at scratchbuilding. Now, the question is what next? A half-cab 0-6-0T would be nice, and they were in unlined black.

However, I really need a rake of suburban coaches first...

The S Scale Society's 60th Anniversary will be commemorated at Railwells this month. Details in Societies & Clubs.



Gauge 1 in the garden

It does not have a name, but this mature layout is full of rustic character

ROBERT ILES visits a main line built for pleasure and used regularly by a group of enthusiasts.

The small Somerset town near the location of this layout still has its own main line station taking passengers either further west or up to Paddington at very good speed. But on its outskirts, a more tranquil scene is to be found in the garden of Richard Harwood.

A couple of miles or so from the station is a house that enjoys the sounds of people talking amiably about railways over the quiet putter of Gauge 1 steam-powered locomotives. They meander around a total of 450 yards of track, past hedges and under the shade of a 200 year-old beech tree.

Richard originally constructed the railway in Tunbridge Wells, Kent over forty years ago. It moved with him to another house in Kent and then to near Wells in Somerset before he, his wife and the railway finally settled elsewhere in the county. At each location it has grown in size and now occupies about one-third of their substantial garden.

Like many, Richard's railway interest started in boyhood with a clockwork Hornby locomotive. But the real inspiration came when he acquired a Bassett-Lowke *Model Railway Handbook*. His subsequent National Service



Above: *Cock o' the North* thunders through the country station.



Far left: the track winds its way around the spacious garden.



Left: hatches at both ends of the outhouse allow trains out into the garden.

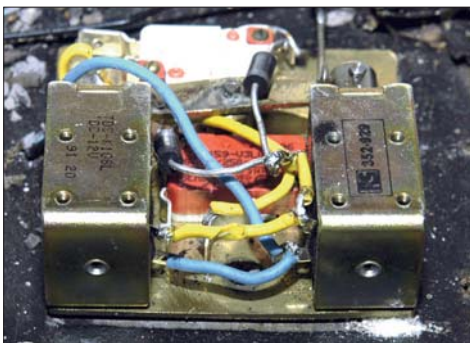
Below left: underneath the arches showing the track support construction.

Below: one of the 'from-to' route-setting control boxes sited around the track.

and long career in computers equipped him with the engineering and electronics knowledge to enable him to get full value from his hobby of large-scale model railways by designing a bespoke control system.

The first look at his layout reveals the sturdy concrete posts on which the track bed is mounted. These give a convenient waist-high viewing level that also permits easy locomotive attention and provides a reasonable duck-under height in most places. The posts are concreted into the ground a few feet apart. They seem to be graduated at different heights, but in fact they compensate for the slight slope of the garden to give a level track





around the circuit. To the posts are screwed 6" x 1" tanalised wood side walls to support a 1" thick, outdoor quality ply track bed. Top-grade roofing felt covers the ply both to protect it and suggest the visual effect of ballast.

A block-built outhouse accommodates a locomotive preparation area which is equipped with a turntable, a basic double island platform station and some short sidings where one or two locos stay between runs.



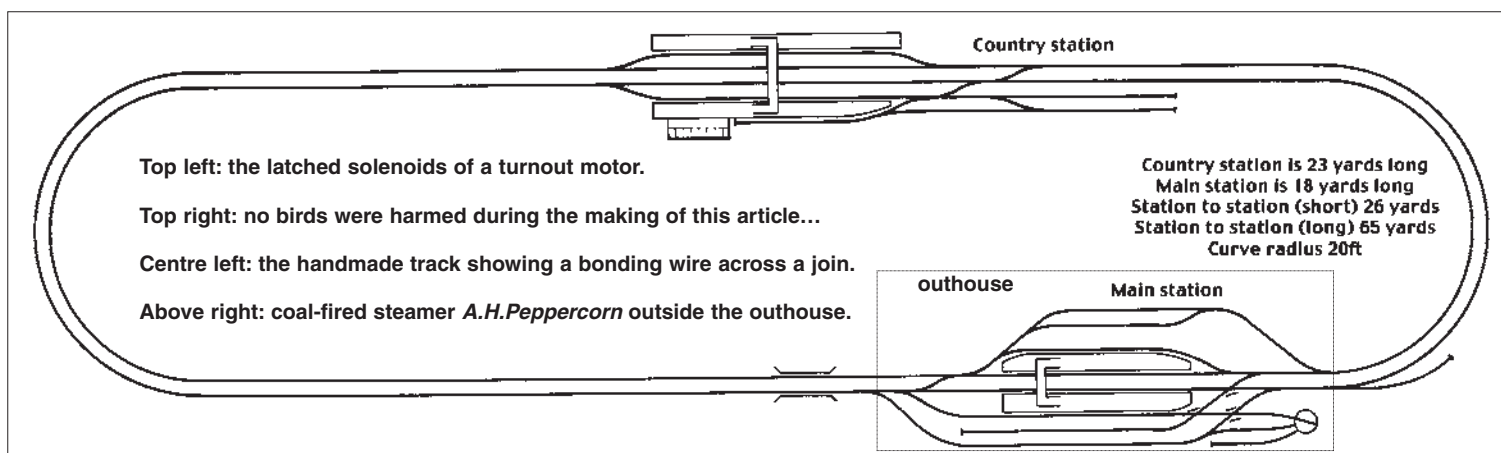
Both ends of the outhouse have hatches to allow the track to enter and leave. In the corner is a small computer that sets the turnouts in pre-programmed combinations to achieve prescribed routes for multiple train operation. These routes are controlled from weather-proof push-button panels at various places around the layout.

Richard wrote the program for the computer to create a 'from-to' system. On any of the control panels, the operator presses a 'from' button and a 'to' button for a chosen route. The intelligent system senses the position of trains on the track and the computer sets the turnouts and semaphore signals for the specified journey. Those with programming skills



can use Delphi or Microsoft Basic to achieve a similar control system. A low specification computer is sufficient, so when you upgrade, this is a good purpose for the superseded machine.

All the track is hand-made from beech sleepers with chairs and rails mostly acquired from Bonds of Euston Road many years ago. The sleepers are treated annually to a coat of creosote or today's less toxic equivalent. The





Left: this M7 is one of two battery-powered locos, the other is an L1.

Centre left: some of Richard's handiwork which is connected to the computer.

Below: that sociable Sunday in May.

Bottom: a look at inside the outhouse at the goods wagons and control box.

Photos by Jolyon Sargent and Robert Iles.

oily creosote, if accidentally splashed on the track, can cause slippage. The rails are therefore cleaned and buffed to create a light key on the surface to assist the locomotives to grip.

The turnouts are also hand-made and those with motors are fitted with latching solenoids that only require power at the time of direction change, thus preventing burn-outs.

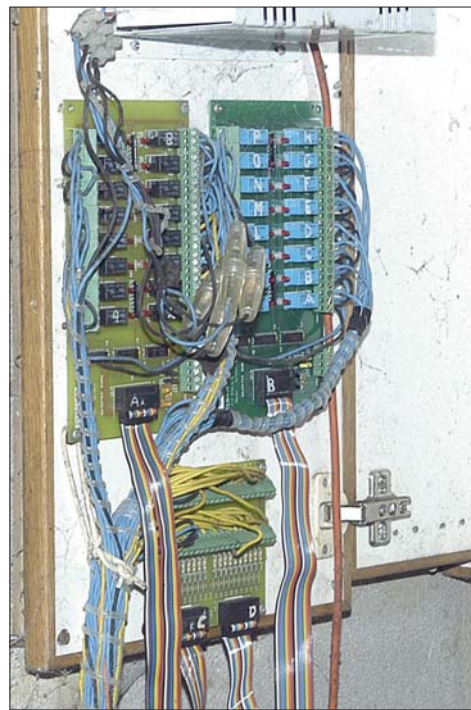
Amongst the collection of locomotives are an M7 and an L1, both battery-powered. Well-used but still very active are an A2 *A.H. Peppercorn* and P2 *Cock o' the North*, both coal-fired steamers; they are scratchbuilt.

The rolling stock, which is also mostly scratchbuilt, is loosely based on both Southern and LNER with an eclectic mixture of coaches and freight wagons. Some coaches and wagons are 15 to 20 years old and are made from a variety of materials including plasticard and brass. Some have sectional cast rubber roofs. The remainder of the coaches are from resurrected kits that someone else did not complete. The bogies are also hand-made in Richard's workshop. All have full compensated suspension.

There are a number of buildings ranging from small huts to a station. The freelance designs are constructed from a combination of hardboard, fibreglass and plastic mouldings. They seem to be weatherproof, but have a naturally-acquired well-weathered finish. The girder bridge is constructed from fibreglass mouldings obtained from more than one source.

The social nature of Gauge 1 means that members of GIMRA meet on occasions at each other's houses to run trains and spend pleasant hours talking, helping each other and enjoying the surroundings. On a Sunday afternoon in May, several like-minded enthusiasts, not all GIMRA members, gathered in Richard's garden to run live steam as they do at intervals throughout the year. Plywood boxes, the size of folded-up wallpaper pasting tables, concealed rakes of coaches in Southern Region green and BR maroon. The smell of hot boilers and the sound of locomotives pattering along added to the atmosphere.

Gauge 1 necessarily demands a large area



to achieve a satisfactory result. But if such room is available, a grand feature can be constructed to complement a large garden. The ancient beech tree dominates the part of garden also occupied by the railway. It casts seeds which have to be removed before a running session; an old vacuum cleaner is used to do this. The buildings are removed between sessions and the control boxes cleaned of spiders. Much of the layout has weathered naturally, and the activity area in the outhouse has its own atmosphere as a result of hours of loco preparation work. This garden railway is functional and ready to receive visiting locomotives and stock. The results of year-round exposure to the elements has had its effect on the track and platforms, but the enthusiasts who meet there do so to enjoy the experience of running and the chance to exchange views.

The railway has no name, but this does not seem important to Richard because he has derived much of the pleasure during construction and on its regular running days.



NBR 'Glen' 4-4-0

A Reid North British classic constructed in 7mm scale

The building of this Borders archetype is described by **IAN FUTERS.**

Over the last ten years or so, anyone with an interest in the North British Railway can count themselves very lucky, especially if they model in 7mm scale. George Dawson introduced a fine range of 7mm etched brass locomotive kits, which he eventually passed onto Connoisseur Models, which has fortunately continued production. Using the LNER and BR classification, the kits available from Jim McGeown include a J35, J36, J37 as well as a C15, J83 and D32. George Dawson then produced an N15 and one or two other people have promised NBR kits but so far have failed to produce them; that is until late 2005, and more of that later.

I had long looked at the D32 with the hope that I could convert it into a D34 'Glen' locomotive. W.P.Reid introduced a family of 4-4-0s for the NBR, which were similar in design with varying details. As one of my interests is in West Highland matters circa the 1950s, a 'Glen' would be a most suitable locomotive, although they had more or less left the West Highland in the early 1950s, having been superseded by more powerful locomotives.

My other interest is in the Border branches of the NBR, and here the D30 'Scott' locomotives were to be found. They were similar in design to the 'Glens', but had slightly larger wheels. Both these classes ended up operating in and around the Borders, so both were high on my availability list.

Originally, George Dawson had said he was to produce a 'Glen', but this was not to be. I looked carefully at the D32 kit I had purchased and reckoned it could be converted into a 'Glen' with a little bit of care. The D32s first of all had a lower boiler pitch. They had been the first of Reid's family of 4-4-0s, and they also had a smaller tender. The tender sides were much lower than the later 4-4-0s, holding only 3,525 gallons rather than the later 4,235 gallons found on the 'Glens', 'Scotts' and others of the Intermediate Class, as the D33s were known.

There was also the little matter of different-shaped spectacle plate windows, different-sized domes and chimneys, different sizes of coupled wheels and some other small details. Also, some classes were superheated and others were saturated. This has a bearing on the boilers fitted to individual locomotives. I can certainly recommend a close look at Book Four of the RCTS *Locomotives of the LNER*.

I have enclosed a small chart outlining these details to aid modellers who may wish to attempt some conversions, but this will be totally unnecessary as we will find out later in the article. In all other respects, the dimensions for each of the Reid 4-4-0s were identi-



cal, or so the records seem to show. The classes covered are D29, D30, D32, D33, and D34. It is also perhaps worth mentioning that these locomotives originally had the distinctive NBR wing-plates by the smokebox door. The removal of these smokebox wing-plates commenced during the latter days of the NBR by the last locomotive superintendent, Walter Chalmers, and continued well into LNER days as the locomotives passed through the shops during general repairs.

Construction begins

Turning my attention to the D32 kit, I commenced work on the tender. Jim very kindly cut me some tender sides to the correct dimensions, which I then had to shape and solder to the tender underframe supplied in

Above: passenger services ceased at Kirkliston, Lothian in September 1930, and the branch itself closed in February 1966. On home turf, NB No.256 *Glen Douglas* pauses on 12 June 1960 with an SLS/RCTS special.

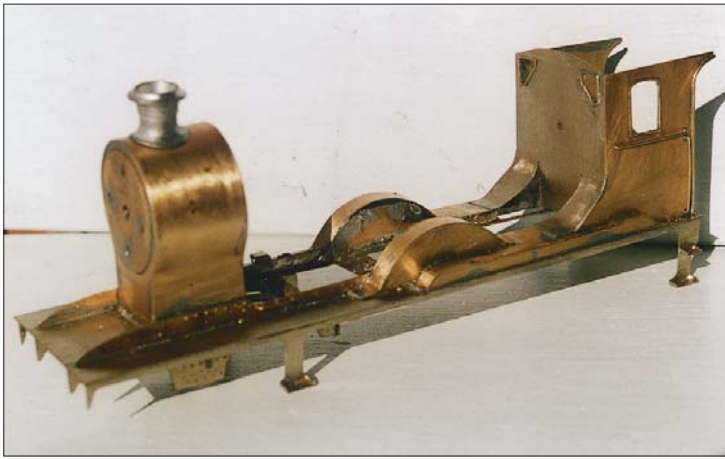
Photograph: Frank Hornby.

the kit. As I said, most of the main components of the Reid 4-4-0s were standardized. I used a piece of dowel to form the curved ends to the tender sides and, using the tab and slot holes as a guide, tag soldered the sides to the underframe. Once I was sure all was square, further fillets of solder were used.

A small brass tender number-plate was fabricated from off-cuts of brass and soldered to the rear of the tender side, as was a handrail, made up from brass rod.

Locomotive Type	D29	D30	D32	D33	D34
Wheel Diameter	6'6"	6'6"	6'0"	6'0"	6'0"
Spectacle Plate	Round	Shaped	Round	Round	Shaped
Chimney	Tall	Tall	Taller	Medium	Short
Dome	Tall	Tall	Medium	Tall	Tall

This table is a very crude description and photographic evidence is essential to establish what chimney or dome is required. My idea of tall or medium might not be the same as yours! There were also differences with saturated boilers (shorter) or superheated boilers (slightly longer). Bogie springs and brakes varied over the years, as did the type of safety valves. Differences with lubricators and the fact that the Westinghouse brake tended to be removed and assorted heights of vacuum pipes make photographic evidence vitally important. If in doubt, consult the RCTS 'Green Book' 4.



The rest of the tender, including the flared edges, was taken from the kit and soldered in place, as was the beading along the tender top and front end. The buffers from the kit were utilised and screw couplings added. It was then given a grey undercoat and shown to Jim who seemed to be following its progress with interest. Was he going to produce a 'Glen' kit I started to wonder!

The locomotive chassis was then soldered up and as the early Intermediates had 6"0" wheels, the same as the 'Glens', this was not a problem. I used Slater's wheels throughout and a Mashima 1883 motor and gear set. It took a fair amount of time to get the chassis running as I wanted, but that was probably down to my ability rather than the chassis design. I hate soldering layers of thin brass into connecting rods, so I purchased a pair from Premier Products. They are worth every penny and cost, which is actually not much really, £11.00. Once I had the chassis running up and down, I could no longer put off sorting out the locomotive body.

Superstructure

There were two main considerations, not counting the boiler fittings. The boiler had to be raised in height by a scale 6" (3.5mm) and a new cab spectacle plate had to be made showing shaped windows rather than the round style found on the D32.

I tackled the spectacle plate first, using the example in the kit as a pattern. The cab sides could then be soldered into position along with the new spectacle plate. In retrospect, this was a mistake, as I did have a slight problem in fitting the chassis to the footplate because I had deviated from the kit's instructions and fitted a different style of motor mount. Anyhow, there is always going to be a certain amount of fettling to sort out when kit building, never mind during conversions to kits. Eventually all was well and I turned my attention to raising the boiler its scale 6".

As it happens, this was much simpler than I thought. Extension pieces were added to the rear end of the boiler where it fits into the footplate. I did a similar operation at the smokebox end in order to raise the height and then it was a case of taking care to match it all up with the spectacle plate. The boiler of course, had to be horizontal to the footplate, and I tag-soldered again until I was sure all was well. All

the usual boiler fittings were added apart from the chimney and dome. Again, Reid changed these around on the 4-4-0s, and you need to check the chart and, dare I say, photographs before you add these parts.

I asked an NBR Study Group member, Pete Westwater to turn me up a 'Glen' chimney and dome, as I believe he has some accurate NBR drawings, or at least the correct dimensions. They were made out of brass, so were extremely easy to fit to the brass boiler. The smokebox door was fitted as were the lubricators on the footplate. To these I added fine fuse wire to represent the oil pipes. I also ran another piece of fine wire from the cab to the smokebox. Heaven knows what this pipework is, but most of the locomotives seem to have it fitted. Like the tender, I detailed the locomotive body up with parts from the kit. The only parts I could not replicate were the bolt-heads on the smokebox and the tops of the front wheel splashers. As it happens, it would appear that not all the locomotives had these features or perhaps they were changed over the years. I do not think it detracts from the model.

Once all the bodywork was complete and the chassis had been yet again tested with the front bogie, the parts were all dismantled and cleaned up. I used Shiny Sinks on the brass and then an etched grey primer. I decided to use black gloss paint rather than my usual satin finish, so that the transfers and lining would sit more easily. I should mention that the locomotive was to be finished in early

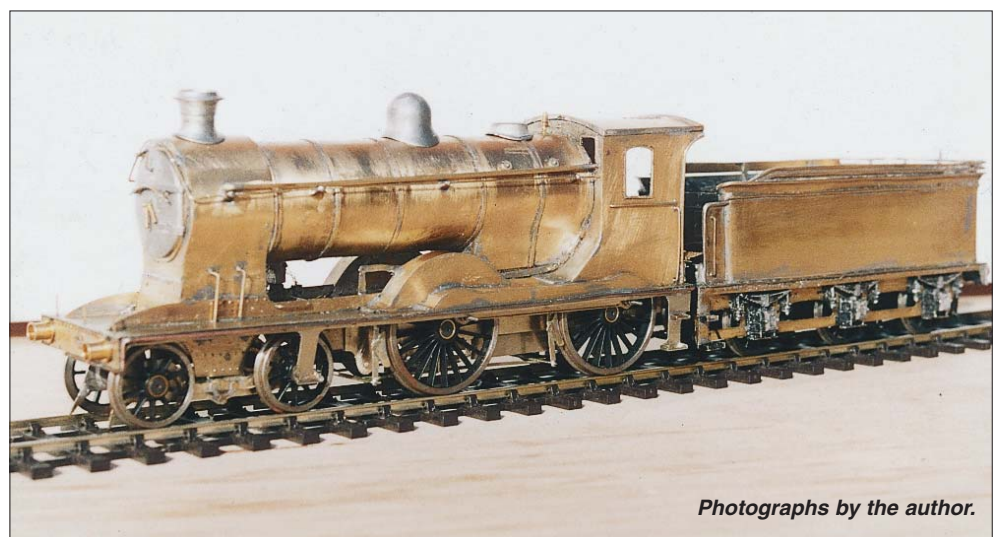
Above: NBR No.307 Glen Nevis, location and date unspecified.

Photograph: author's collection.

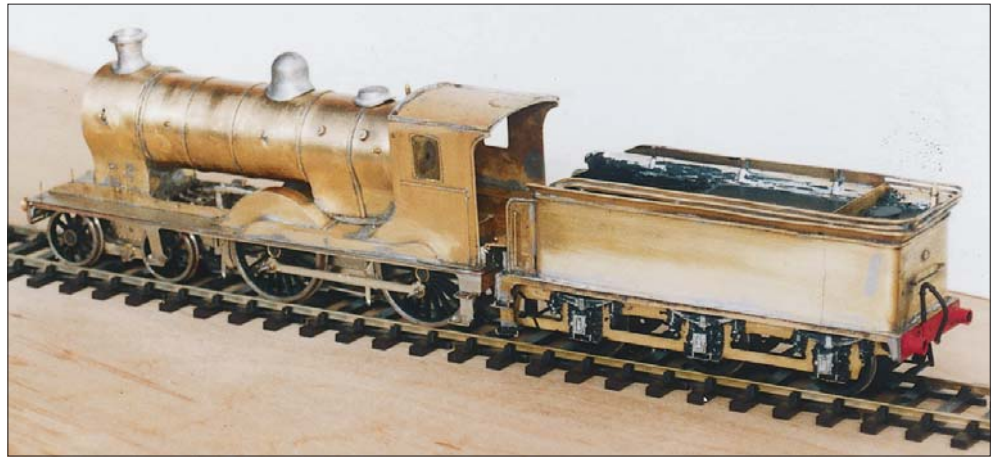
British Railways lined black livery with the smaller earlier BR emblem. At this stage I was quite undecided as to its name although I was sure it would represent an Eastfield locomotive. In fact, through a fair amount of research, I managed to find that *Glen Fruin* had operated along the West Highland line during my chosen period, 1953 – Coronation Year, and the year my dear sister was born! So that might be the chosen name although things could change in that department.

It took three attempts to finish the paintwork. After each attempt, I was never quite satisfied so stripped it all off, twice! Once I did get the finish I wanted, I started the lining. A telephone call to my good friend Stephen Barnfield sorted out the boiler band lining, and he kindly posted me some suitable transfer paper. I used a very old lining pen, which belonged to my father, so it could well be over 50 years old I should imagine. The boiler band lining was 'floated' into position with some matt varnish. I then lined the tender sides and then along the edge of the footplate using the bow-pen. The cab sides were also treated and the buffer beams painted red. I have to say, it looked very garish, so I used my old airbrush and a home-grown 'weathered' mix to tone everything down.

The final touch was to apply the crests and



Photographs by the author.



then weather the whole lot again including the wheels. A certain amount of 'rusty' dry brushing took place around the smokebox door as well as the brake blocks and underframe. I have a colour photograph of a 'Glen' at St. Boswells, and it is in quite a disgusting state. I used this photograph as an aid when weathering the locomotive. A smokebox numberplate needs to be ordered along with an Eastfield shed-plate, once I finally decide upon its name and number. As usual with my locomotives, a crew is required, so I will modify some ancient cast figures I have in the spares box.

The whole operation to carry out this conversion took well over three years. Other projects kept getting in the way naturally, but with an impending book about modelling Scotland's railways on the way and a new 7mm layout based upon West Highland practice, it was essential that a 'Glen' was constructed. They had been designed by W.P. Reid, for use on the West Highland line, and elsewhere too. So at last I had my 'Glen' but, as usual in such matters, there is a postscript.

Postscript

During 2005 news filtered through that shortly there would indeed be a 'Glen' kit made available, but in fact a 'Scott' class would be the first to fall onto the workbench. We NBR modellers have been disappointed about such reports and rumours before, so we did not hold out too much hope. However, I started to receive

photographs and progress reports, and it did seem as though these kits would become a reality. Sure enough, Norman Blackburn on Tyneside (trading as NB Models) has produced an absolutely stunning 7mm 'Scott' Class complete with NBR number-plates and BR smokebox numberplates to suit an assortment of locomotives, some of which operated along my favourite Border Counties line. He is to follow this up in 2006 with the 'Glen' kit and of course there will be no need to carry out drastic work raising the height of the boiler, and the 4,235 gallon tender will be standard. You might think I would be slightly miffed at this news. After all, I am not the first modeller either to scratchbuild a model or modify a kit, only to find after completing it, that the actual model is released by the trade. Not a bit, I think it is absolutely brilliant news.

By 2006, NBR modellers will have practically all the classes of locomotives they need to operate a layout based upon North British practice, covering all the periods required. The whole family of Reid 4-4-0s should be possible by simply mixing and matching some of the parts, the tenders in particular. Care will need to be taken so as to fit the correct spectacle plate, as well as the chimneys and domes. The 'Scotts' and 'Glens' have the added attraction of carrying names too. The 'Glens' were named after some of the glens in the area served by the NBR, whilst the 'Scotts' (both D29 and D30), were named after characters in Sir Walter Scott's novels. After all, who could resist

naming a D30 *Wandering Willie*? And of course, Jim's D32 kit is still available although very few examples of this elegant class lasted into BR days.

Making things even better, Norman has brought out some name transfers to fit on the leading splashes. These were used during the BR period for the 'Scotts' and 'Glens'. They are in cream and look excellent. In a similar fashion, he has also produced some BR cream names for the J36s, especially the locomotives that had worked overseas during World War One. Also to be produced are some transfers for the Scottish D11 'Director' Class names. I hope *Laird of Balmawhapple* is amongst them! In fact there are some delightful names to be found when looking at the Scottish locomotives, and not just the North British types. I do however, believe in running locomotives which are known to have worked in the areas you model.

Remember, the 'Glens' in particular, ended up operating some of the branches in and around the Great North of Scotland fishing ports, such as Macduff and the like. They were to be seen in Carlisle and the Border country, after traversing the Waverley Route and its branches with local stopping services. They even reached Newcastle, again via Carlisle or the Border Counties route. Of course, many of the Reid 4-4-0s could be seen in the far west, at Mallaig and in the east along the Fife coast. Even the Intermediate classes of D32 and D33, which were primarily introduced as freight locomotives, were found to be just as useful on passenger work.

I started this article stating that NB modellers were extremely lucky, especially in 7mm scale, and it would seem that our luck continues. The next question is, what other new NBR locomotives might come our way in the not too distant future? Possibly some of the earlier designs, although it has to be recognised that any models which can feature in the NBR, LNER and BR periods, would make more commercial sense. A Reid C16 4-4-2T would be an interesting proposition, or a Holmes D31 4-4-0. Taking it one stage further, we really could do with a selection of NBR coaches, some of which lasted well into British Railways days and a Reid 10ton goods wagon would be extremely useful. I already have some of these under construction in plasticard, so if the omens are right, it could well appear!



BR Bogie Steel Wagons

BAA vehicles and BZA/BCA variants drawn and described

COLIN CRAIG examines these steel carriers used widely on Britain's railways.



Bogie wagons for carrying steel had been around for decades but the BAA was a totally new design that appeared in 1972 to provide air-braked capacity during a boom period in steel manufacturing. Over 300 were eventually built and they were a forerunner to the longer and more numerous BBA.

The first build at Ashford in 1972 (Lot No.3792) was to design code BA001A, and because they were fitted with a through vacuum pipe, were coded BAB. The through vacuum pipes were removed in the 1980s and the wagons re-coded as BAA.

All subsequent builds were as BAA; Lot No.3805 (Ashford 1972/3) and Lot No.3805 (Shildon 1973) under Design Code BA001B, Lot No.3858 (Ashford 1975) under design code BA001C, and finally Lot No.3890 (Ashford 1976) under design code BA002A. This final Lot No. is not covered by these drawings as there were many differences, the most significant being the depth of the solebars, the width of the wagon and the bogie centres.

The distinguishing features of the different Lot numbers were changes to the raised ends,

Above: BAA No.900102 (ex-Lot No.3803) with steel billet load seen in Hereford Yard in 1990. The livery of black with Railfreight flame red ends appeared in the mid to late 1980s.

Right: BAA No.900028 (ex-Lot No.3792) with 'eye to the sky' coils. Hereford up relief 1990.

and, in the case of design code BA001C, the overall length was also increased by the use of 24 $\frac{1}{2}$ " buffers with elliptical heads. These variations and the running numbers are all shown on the drawing.

The deck of the wagons is made up of a series of transverse inverted channel sections, with a mesh on the underside. The channel sections have a row of holes to ensure free air movement, and assist with cooling when loaded with hot steel billets or coil. There are

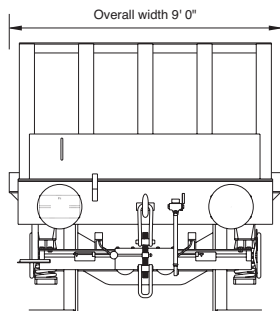
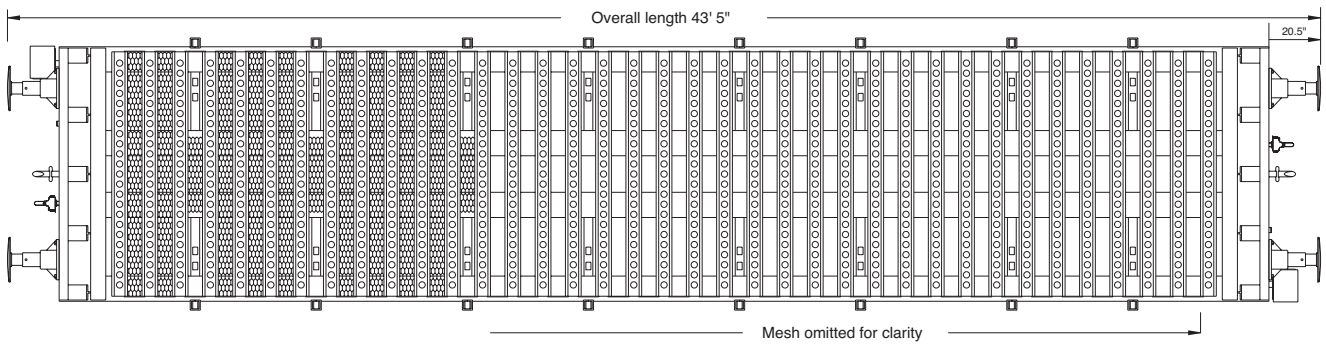
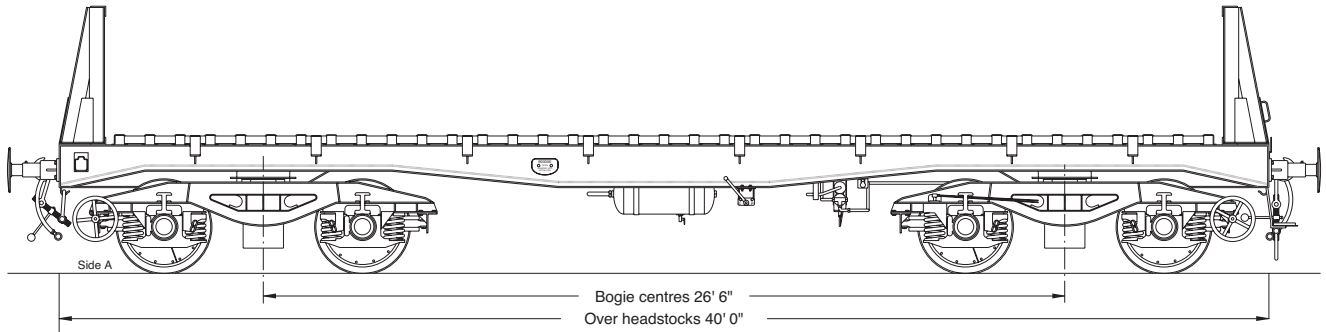
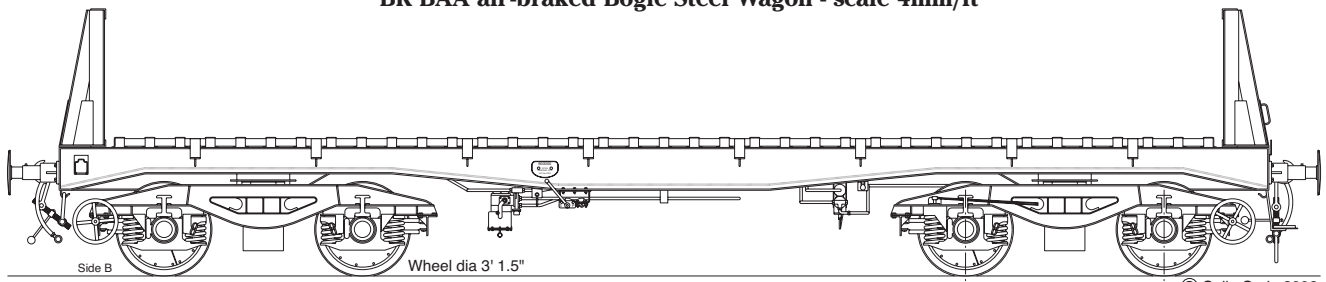
eight external stanchion sockets on each side and a further two inboard from each of these.

The bogies are 2-metre wheelbase FBT6, equipped with disc brakes on all wheels. Handbrakes are also provided and operated by a hand wheel on the outer end of each bogie. It can be observed on the drawing that the two sides of the bogie are not identical. The outer spring on the left hand side only has a sensor fitted for the SAB variable load braking control. The same differences can also be

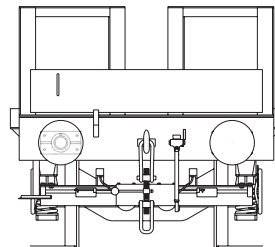
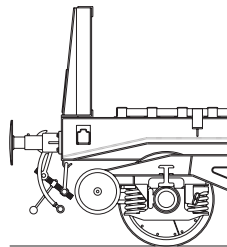


Photographs by the author.

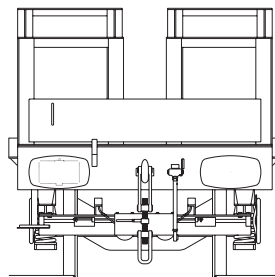
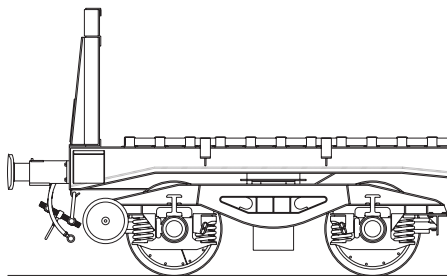
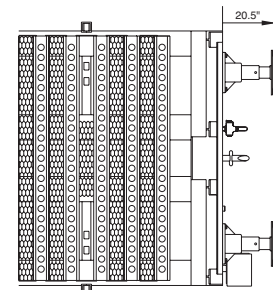
BR BAA air-braked Bogie Steel Wagon - scale 4mm/ft



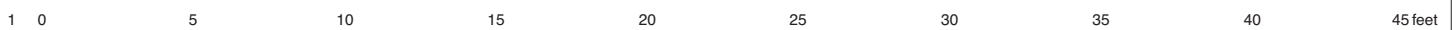
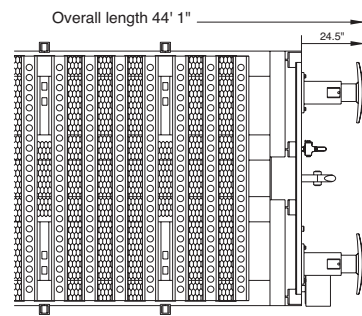
BA001A
900000-900048
(Lot 3792)
BA001B
900049-900124
(Lot 3803)



BA001B
900125-900198
(Lot 3805)

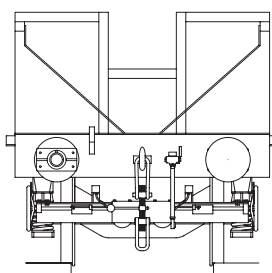
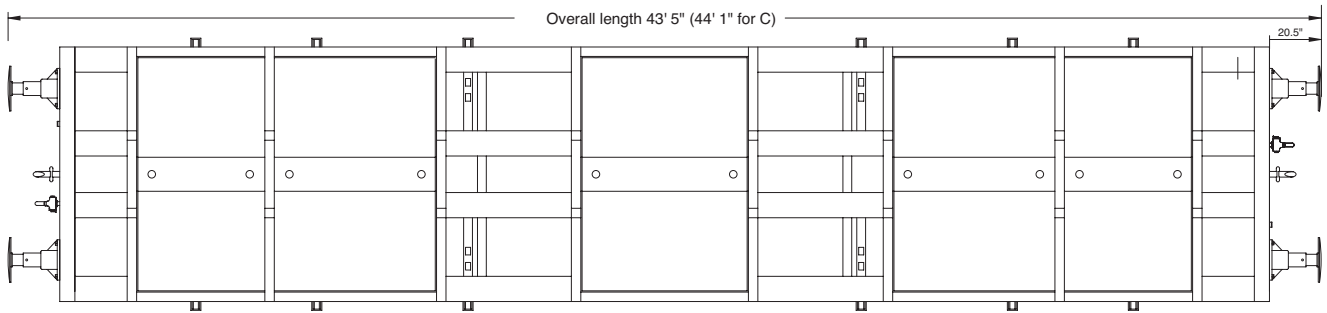
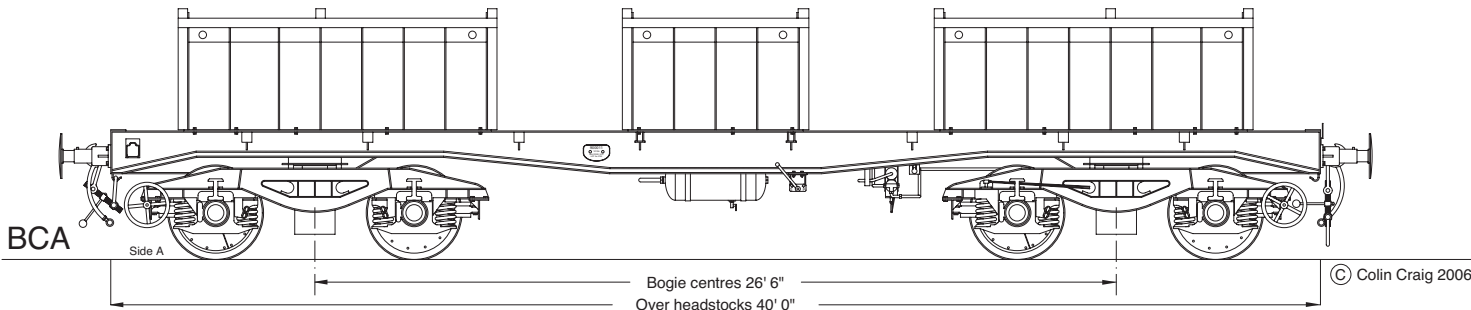
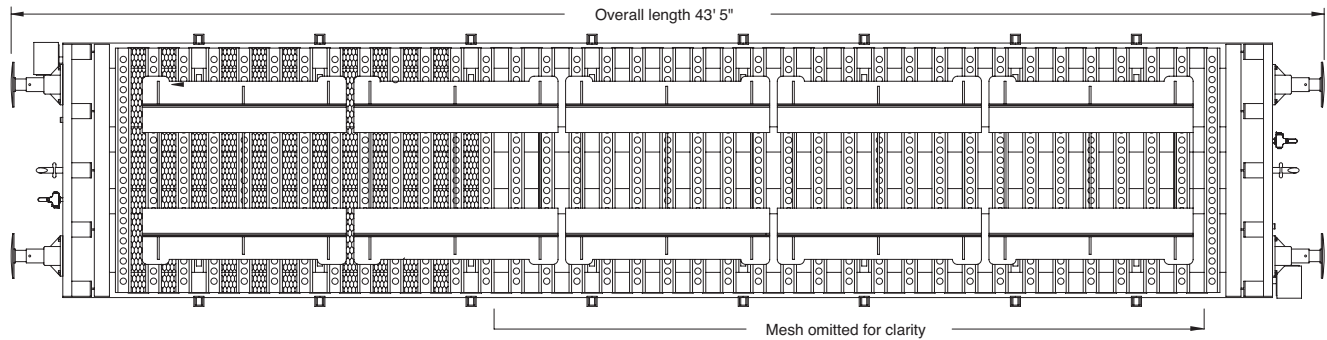
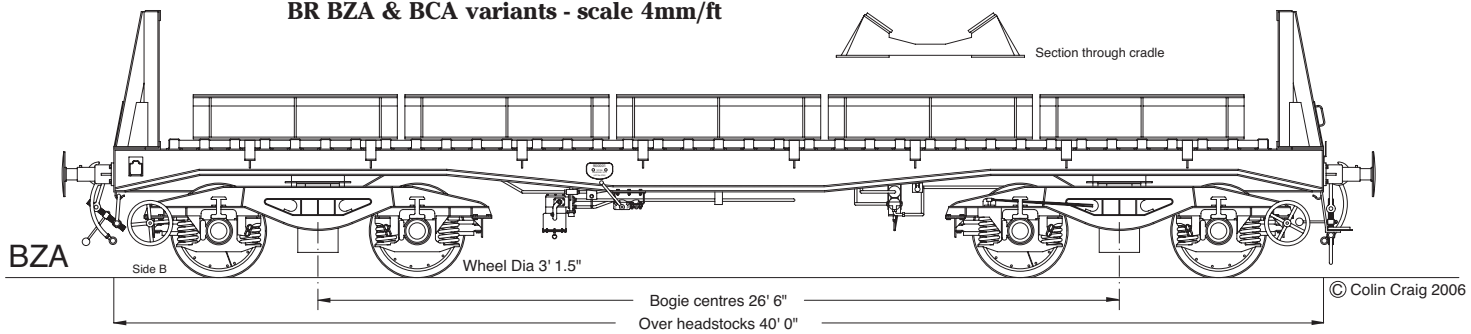


BA001C
900200-900273
(Lot 3858)

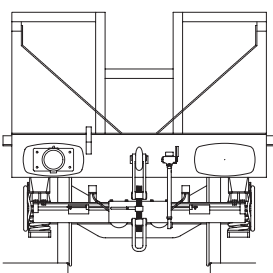
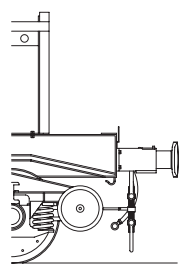


Scale 4mm to 1 foot

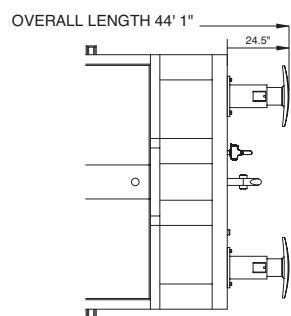
BR BZA & BCA variants - scale 4mm/ft



BCA (ex BAA BA001A/B)
 90000-900048
 (Lot 3792)
 900049-900124
 (Lot 3803)
 900125-900198
 (Lot 3858)



BCA Ex BAA BA001C
 900200-900273
 (Lot 3858)



observed on many of the French Sambre et Meuse bogies.

The underframe is relatively uncluttered as much of the braking equipment is bogie-fitted. There are, however, two SAB brake valves located just inside, and to the left of, the bogies, a Westinghouse brake distributor and an air reservoir tank (on opposite sides of the wagon). There is also a Goods/Passenger changeover lever on each side. Originally all the wagons were built with a two-pipe braking system, but the reservoir hoses and associated pipework were removed in the 1980s.

The original livery when built was 'Bauxite' freight brown and black bogies. In the mid- to late 1980s most wagons were repainted overall black with Railfreight flame red end stanchions. Under EWS ownership many have been repainted in EWS maroon.

Significant modifications

For the transportation of finished coil, special cradles could be bolted to the main deck, either in-line, or across the wagon. Originally many of those fitted with in-line cradles were reclassified BKA to reflect the new tare weight, but this was not universal. The fact that these cradles could be easily moved between wagons only served to confuse the situation. In the late 1980s, many wagons observed with cradles appeared to be coded BAA. More recently the code BZA has been applied to these wagons, but the problem of cradle addition or removal still persists. Latterly these cradles had wooden cheeks fitted to minimise damage to the coils, and are therefore only suitable for cold product.

The movement of hot coils in the 'eye to the sky' arrangement can cause damage to the edges over the whole length of the rolled steel, whereas coils in cradles tend to have any damage limited to the outer layer only. As a consequence, in the mid-1990s many wagons were modified with special box cradles suitable for the movement of hot steel coils. This required the complete removal of the deck and the bolting of the box cradles directly to the main frame. The outer stanchion sockets were also cut off, particularly where they obstructed the securing bolts. This is a major modification, as it is not easily reversible. These wagons were all re-coded BCA. Examples on the 2003 TOPS register were: 900011, 33, 38, 41, 44, 46, 50, 85, 92, 94, 96, 98, 900100, 102, 103, 139, 143, 144, 145, 147, 149, 155, 159, 163, 179, 183, 187, 191, 192, 200, 204, 211, 212, 221, 224, 232, 234, 236, 243, 246, 252, 260, 263, 266, 269 and 273.

Areas of operation

These wagons are to be seen fairly widely over the network, to and from docks and the major steel centres in the Midlands, North East, North and South Wales, and Scotland.

They generally run in block trains, often intermixed with other types of steel wagons. Over the lifetime of these vehicles there has been a significant decline in the number of manufacturing sites which, in turn, has reduced many of the movements with which they were originally associated.



Reference sources

An Illustrated History of BR Wagons, Vol. 1 by P. Bartlett, D. Larkin, T. Mann, R. Silsbury, and A. Ward. OPC, ISBN 0860932036.

British Railway Wagons by Don Rowland. David and Charles, ISBN 0715381830.

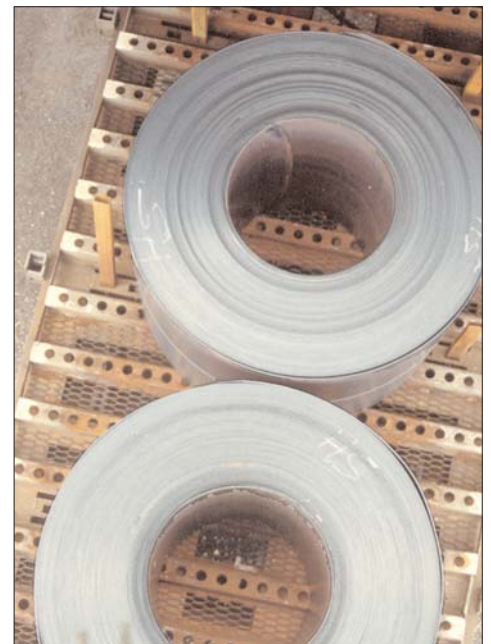
Working Wagons, Vol. 3 1980-84 by David Larkin. Santona Publications, ISBN 095384482X.

British Railway Air Braked Stock, Vol. 2 by Tom Smith. Cheona Publications, ISBN 1900298228. Paul Bartlett British Railway Wagons website: <http://gallery6801.fotopic.net/>

Top: BAA No.900234 (ex-Lot No.3858) seen with in-line cradles and load of finished coil at Hereford down relief in 1990.

Centre: the BCA variant, No.900263 (ex-Lot No.3858) seen with empty coil box cradles at Hereford down relief in 1998.

Right: a detail view of loaded 'eye to the sky' coil and showing inverted channel, mesh deck, and locations for stanchions.



Stock for Abergwynant

Locomotive and rolling stock roster for this Cambrian Coast survivor

NEIL RUSHBY concludes his description of his latest small space project (part one last month).



At the time of writing the process of detailing had only just started. I tend to add bits and pieces as impulse dictates; the guiding philosophy being less is more. I believe that the illusion of reality is fragile and can so easily be destroyed by twee cameos, overcrowding, and as with structures, too many recognisable commercial offerings. I either scratchbuild detailing items or modify ready-made products. The ex-Airfix range of figures, now produced by Dapol, is particularly amenable to plastic surgery; all manner of transplants and cosmetic enhancements are possible. Road vehicles are modified and repainted to lend individuality or to produce variants more suited to the era modelled. I'm also a big fan of the Langley Miniature Models trade stand at exhibitions, in particular its pick-and-mix components. As bits of a kit they are virtually untraceable to the unknowing observer. I have a stash of the firm's farming items to spray around the agricultural engineers.

Also yet to do is to provide some form of display lighting. I wouldn't dream of attending an exhibition without a suitable lighting rig so one will happen soon, but as they are not terribly interesting things to read about, I'll leave that out.

The service card

The location of *Abergwynant* both in space and time has dictated the stock required to run a typical day's service. I say a typical day's service but I have to admit that my previous monkeying around with geography and history has had repercussions for those trains that can be seen. There are the genuine Cambrian Coast staples; the daily pick up and the DMU local passenger service.

Then there are those trains 'imagineered' to suit the fiction that is *Abergwynant* and my personal whim. These are the ballast and roadstone trains from the quarry, and the Pwllheli portion of the York-Aberystwyth mails. To run all these services I can call on the following stock roster:

Diesel Multiple Units;

Cl. 103: Park Royal DMU; DMBS M50402 and DTCL M56157, converted from a Hornby Class 110.

Derby Sulzer Type 2s;

5091: Rail Blue, converted Hornby body on a Bachmann mechanism.

5092: weathered green, converted Hornby body on a Bachmann mechanism.

Above: looking across from the platform we can see the extent of Abergwynant's general freight handling facilities; one siding, in itself insufficient to justify retaining this section of line; stone traffic from the nearby quarry has proved to be the saviour of this stretch.

Photographs by Steve Flint, Peco Studio.

5143: Rail Blue, again a converted Hornby body on a Bachmann mechanism.

To say that the DMU is a conversion of the Hornby Class 110 Calder Valley unit is a bit of an understatement. To give some idea: the roof-mounted indicator boxes were removed, the holes filled in and converted to domes, the cab front windows were altered and flush-glazed, the underframe from the centre car was altered to fit the DTCL, all bodyside windows filled in and sanded flush, new window apertures were marked out and flush glazing cut to fit, etc., etc. I think you probably get the picture! Quite a mammoth undertaking really.

Gunpowder vans and the ubiquitous 16T mineral 'rot-boxes' predominate in the pick-up goods, just like its real life counterpart. Shortened Dapol bodies provide the basis of the GPVs with Parkside or Red Panda running

Right: an overbridge leading to the quarry complex bisects Abergwynnant platform. One of the quarry buildings can be seen on the backscene. The Class 103 DMU operates the daily Cambrian Coast passenger services.

gear. The 16-tonners are a mix of Airfix and Parkside, sometimes in the same wagon. The pick-up also has a few wild cards to draw on, representing the more occasional wagon types seen in its consist. Amongst these is a pair of Parkside ply-sided vans built by my children, Anna and Matt, while they were both still at primary school.

The Pwllheli-York mail is based around a Mk.I BSK (Bachmann) onto which a variety of non-passenger coaching stock can be hung as takes my fancy; vans from Lima, Hornby-Dublo and Parkside, with varying degrees of added detail are available.

Quarry traffic is, or rather will be (you've probably noticed the lack of photographs here!), handled by Catfish and Dogfish ballast hoppers or tippers, when I complete the kits I have in stock. These are rather reminiscent of childhood holidays spent watching the sidings at Penmaenmawr being shunted.

For the future a couple more brake vans are a must. Also, having seen Ken Gibbons' article on modifying the Bachmann 40, I could be tempted as they worked down the coast on rare occasions, at least as far as Towyn in the period modelled and further, later on. As DMUs were the most frequently seen train on the coast I could do with another one or two: The promised Bachmann Class 108 should fit the bill, as would a Hornby re-release of the Lima 101.

Question time

The use of recycled materials has kept costs down and my eco-hippy rating up. The obvious reclaimed stuff has been the timber, only a small proportion having been bought new. Some of the electrical fixtures and fittings have been salvaged from previous projects. Maybe then, it is more of a Scrapheap Challenge than a Grand Design?

The Gaugemaster handheld controller is shared with other layouts, as is the transformer pack. Stock built for *Shell Island* forms the core of what is available and new additions will likewise have a place in future plans. The structures are new-build, though this perhaps gives the wrong impression as some, such as the signal cabin, were started when *Abergwynnant* was just a gleam in my eye. No new paint or scenic materials were bought, the layout being finished with leftovers. I still have some leftovers left over!

Despite my intention to take an artistic rather than an engineering approach to the development of *Abergwynnant*, it works, and works well. Letting a layout evolve does not

Right: it must be a summer's evening as the Pwllheli section of the York mail has arrived. To judge by the headcode 5143 will have been at the head of the pick-up goods earlier in the day and the crew forgot to change it over. The mail meets Post Office vans from Dolgellau and Bala at Abergwynnant, the only reason for the train to visit here.



imply a tolerance of sloppy workmanship or exclude the use of tried and trusted techniques. Bought-in components such as the Gaugemaster controller and Bachmann mechanisms contribute to reliability and pleasure of operation. It is in the look of the layout that the evolutionary approach pays dividends; having a detailed plan to follow can blinker one to changes that would have a beneficial effect. Several features of *Abergwynnant* have altered during construction and have resulted in a much more pleasing composition.

I have tried to future-proof *Abergwynnant*. You may have noticed that the tracks extend to the board edge at the Dolgellau end. The potential scenario that the whole line to Llangollen and beyond was retained becomes a possibility. With scenic extension it would be possible to show a stretch of railway and for trains to take a journey through a landscape. Larger fiddle-yards would be a boon as the current item is only just big enough for the very short trains

run. This focussing on short trains in a constrained environment is the downside of very small layouts, but better than no layout at all.

Songs of praise

Any layout however modest in size has an impact on the home. When set up *Abergwynnant* clutters one of the bedrooms; when worked on it takes over the front room. I vacuum up loose scenic materials from the layout far more frequently than I do the floor, reference books teeter on chairs and I become a monosyllabic hermit when engrossed in a fiendishly complex piece of construction. Heartfelt thanks go to my wife Jan for not only putting up with all this, but for applying soothing words when expletives indicate that all has gone wrong.

Thanks must go to Steve Flint for his professional photographic record of *Abergwynnant*. It is a constant source of encouragement to see my work so well presented; the camera perhaps doesn't lie, but it certainly flatters.



DCC for GF 'Hall'

Another conversion project for an N gauge locomotive

ROGER MILLER shows you how you can fit a decoder into a Graham Farish 4-6-0.

The guiding principle of all DCC conversions comes from the fact that the chip has four connections for motor control. In its simplest form you would break both connections from the track to the motor, substitute the red and black wires from the chip to the chassis' track connection and connect the orange and grey wires to the motor. The Graham Farish steam loco chassis does not allow such simplicity because the motor brush on the underside of the loco is electrically part of the chassis and therefore cannot be isolated easily.



The Gerry Spencer Farish fitting kit has been designed to overcome this problem. It comprises three components:

- a) insulated brush retaining clip
- b) insulated brush holder bush
- c) heat-shrink sleeve.



1. Disassemble the chassis

The first job is to strip the loco down to the bare chassis. Undo the drawbar screw to separate the tender. Remove the loco body by undoing the front screw – this also holds the leading bogie in place.

Remove the silver coloured screw to remove the bottom plate. This reveals the wheel pickups.

Remove the black screw that goes through the chassis to a nut on the top side of the motor frame.



Remove and place the pickup set carefully aside as a complete subassembly, if possible. Remove the wheels leaving the con-rods

attached to the centre driving wheels. Un-clip the bottom brush holder clip and remove the brush and spring to a safe place.



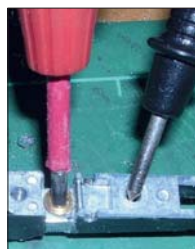
The suppression capacitor can be removed at this stage. Snip its wires leaving about 5mm of wire attached to the chassis and 5mm of wire showing from the top brush holder. These will make good soldering terminals for later in the process.



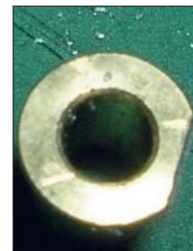
Removal of this capacitor will also remove the only tether between chassis and the motor itself. If the chip being used does not require the removal of the suppression components, and you can work the rest of the process with motor and chassis still connected it will make re-assembly easier later on. The process described here is where the two parts have been separated.

2. Fitting the replacement parts

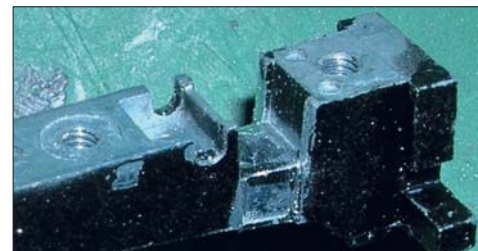
The replacement brush holder bush has been plated with an insulating material. This has increased its diameter and requires that the hole in the chassis be drilled out to 2.9mm diameter. Whilst drilling is the best way, very careful use of a round Swiss file or a 3mm broach would probably work as well.



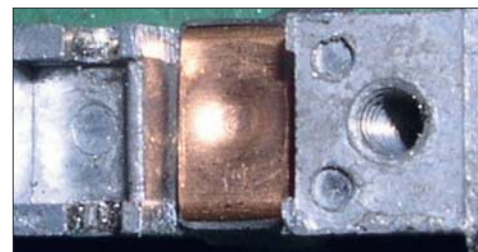
Fit the bush and check for continuity between the chassis and the bush. *There should be no continuity.* If there is, the most likely cause is the bush flange touching the chassis at the front part of the recess in the



chassis casting. File a flat on the flange of the bush and refit it with the flat forward then retest. Repeat this process little by little until there is zero continuity between brush holder bush and chassis.



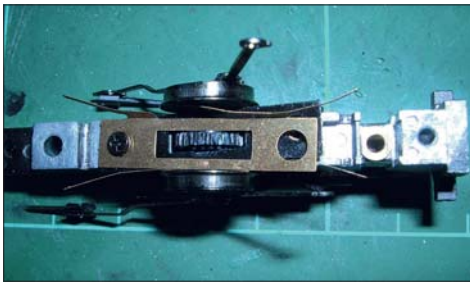
The next stage is to fit the insulated brush retaining clip. Test for zero continuity between chassis and the short wire attached to it. In my experience, the continuity is never zero on first fitting. The clip tends to touch in one (or more) of three places on the brush holder recess: a) the front b) the back and c) the shoulders either side of the brush holder hole.



The only recourse is to round off the shoulders gently and file the front and/or back of the recess a little at a time, retesting for continuity frequently until the clip is giving zero continuity with the chassis. Patience and care will be rewarded...eventually!

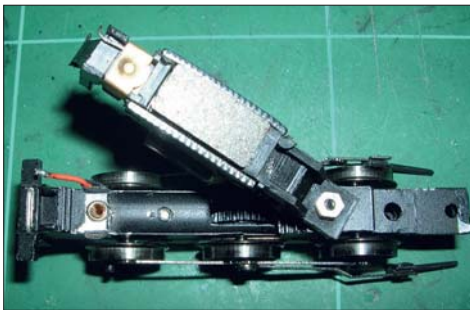
The process of isolating the bottom brush holder is applicable to most Farish steam chassis. On the 'Hall' it is possible to remove all the motion from the chassis because there is no Walschaerts gear. On chassis with complicated valve gear (e.g. rebuilt 'Merchant Navy') it is preferable to work on this process with the valve gear still attached to the chassis. However, extra care is then required not to damage or misalign these delicate parts.





3. Re-assemble the chassis

Remove the new brush retaining clip and re-assemble the wheels, pickups and motor. Replace the bottom brush, spring and new brush retaining clip. Finally, replace the bottom plate to hold everything in place. The super-cautious may check for zero continuity again.



If the suppression capacitor has been removed, during re-assembly there is the possibility that the back end of the motor comes out of its retaining niche, resulting in the bottom brush popping out of its holder. A way around this problem is to put the front motor retaining screw and nut in place, but not fully tightened, and pivot the motor whilst re-fitting the brush from the top.

4. Preparing the decoder

Now that the chassis is prepared there is a choice of methods for fitting the decoder. You can install it in the tender or in the cab roof.



Fitting the decoder in the tender

This method allows plenty of space for the decoder but makes it more difficult to remove the tender body and loco body for servicing. However, it is probably the easiest method from the installation point of view. Also, there is room for slightly larger decoders or those that come with a plastic insulating cover such as the ZTC217 or Digitrax DZ123 (the latter is illustrated here).

Bachmann has conveniently left a hole in the front of the tender, probably with DCC conversion in mind. If

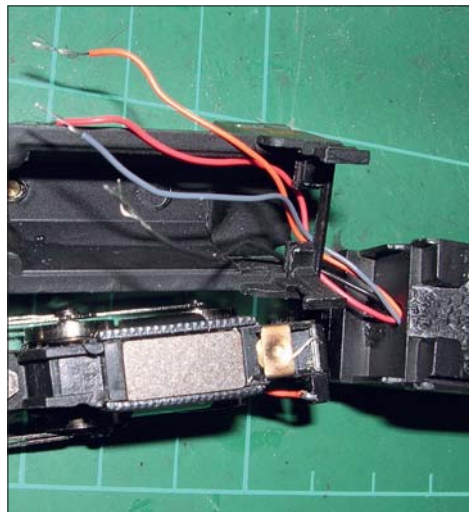


this is missing from your loco it will be necessary to drill such a hole for the wires to come through.

The yellow and white (and blue if it is there) wires are unused and any bared wire ends should be snipped off.

Push the red, black, grey and orange wires through the hole with approximately 5cm to 6cm protruding – final adjustment can be done later.

There is plenty of space to wrap the excess wire lengths inside the tender body. The chip can be affixed to the top of the tender with a double-sided sticky pad if necessary.



Thread the wires through the loco cab in preparation for soldering.

- a) If necessary, bare 1mm of wire at the ends of the orange, grey and red wires and then tin with solder.



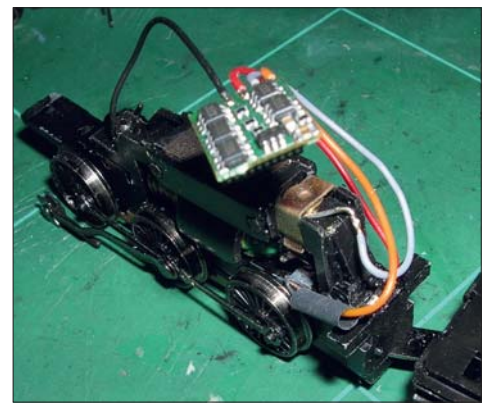
- b) Take the heat-shrink sleeve and slide it over to the orange wire from the decoder. Solder the orange wires together and slide the sleeving over the join. This can be heatshrunk in place but I did not find this an essential requirement.
- c) Solder the grey wire to the wire connecting to the motor's top brush.
- d) The red wire is soldered to the (remnant) wire from the suppression capacitor at the rear-most chassis point.



- e) The black wire is bared 10mm and tinned. It is connected to the front motor terminal by unscrewing the nut a little way, curling the bared wire clockwise around the screw and re-tightening the nut.
- f) At this point you can place the chassis on the programming track to read CV1 and test the chip installation. The default address shown is normally 3.



- g) Refit the loco body, cylinders and crossheads. Adjust the cable lengths by pulling them back into the tender bodyshell achieving a compromise between visibility and enough slack to run properly.



Fitting the decoder in the cab

This requires a decoder of the right size. The Kühn N025 was used here (above). Its dimensions are 11.4mm x 8.8mm x 3.3mm, which allow the decoder to be placed in the cab roof with the wires running into the firebox area of the loco body.

Remove the yellow and white (and blue if applicable) wires from the chip. This saves on wire-bulk in the firebox and cab.

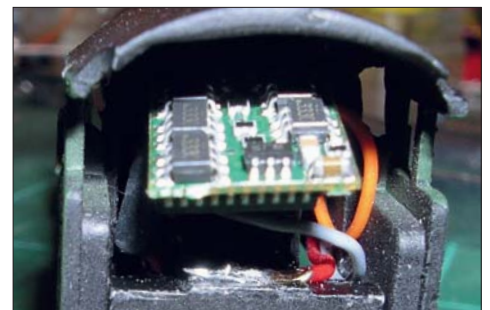
Cut the orange, grey and red wires to approximately 4cm. Cut the black wire to approximately 5cm.

Bare 1mm of wire at the ends of the orange, grey and red wires and then tin with solder.

From this point follow steps b) through to f) above as the wiring-up procedure is the same as for the tender-mounted chip.

Refit the loco body, cylinders and crossheads, allowing the chip to protrude through the cab.

Continued at foot of following page.



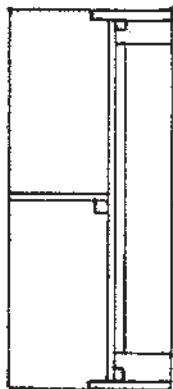
A baseboard variation

A design for a portable layout

ROBIN BAKER was tasked with the construction of a manageable single-unit layout foundation.

It all started when a younger member of the Farnham Club (most of them are younger than me) asked if I would help to build a baseboard for his new N gauge layout, for a price. The price was agreed (cost of materials plus a couple of pints), so in short time he sent me the track plan, together with the overall dimensions and a hint of the scenic design. The maximum size of the layout was to be 5' x 2', with legs attached to fold up underneath.

A few weeks before I had been involved in construction of the new 0 gauge layout's baseboards (RM January 2004), so I had in mind a similar design until I sketched out the board to get a cutting list. The intention was to use $\frac{3}{8}$ " (9 mm) plywood as the build material. Part of the design specification was that the new owner must be able to move the board on his own, from his house room to the car, without causing hernia problems. Looking at my sketch of the proposed baseboard I thought it may be possible to eliminate the internal cross-members.

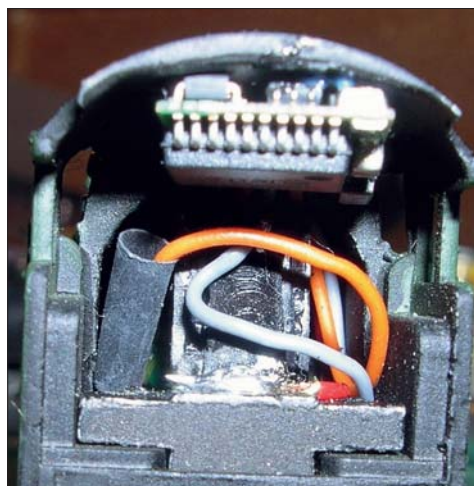
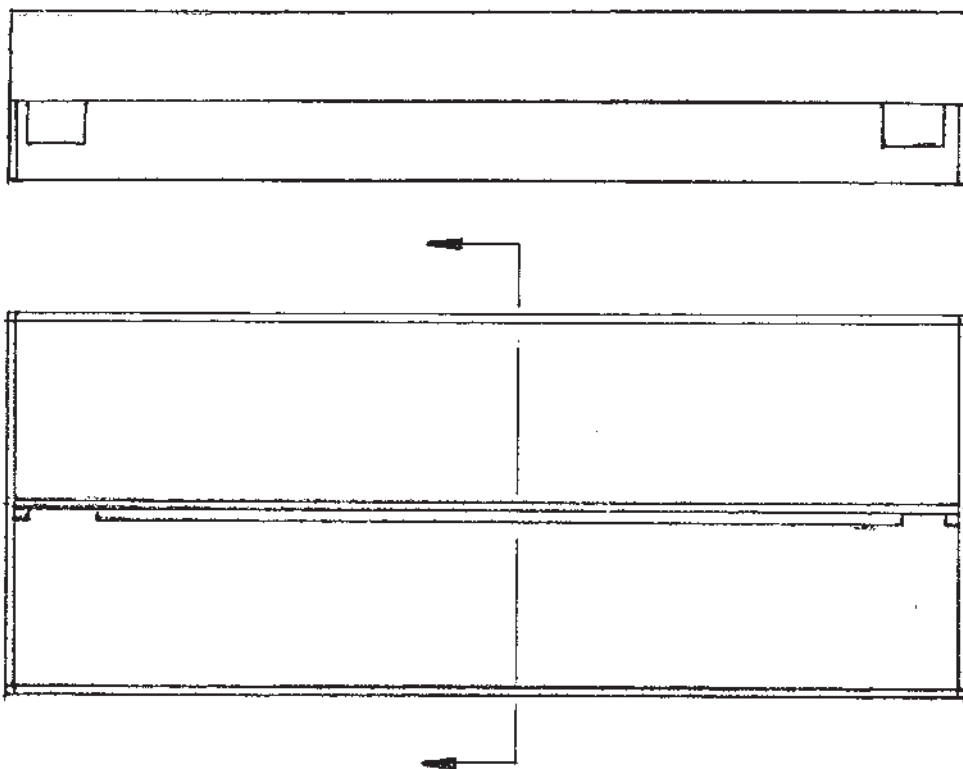


With front and back edge verticals of plywood 5" deep and a 6" deep scenic divider running the 5' length of the board, the chances of the trackbed bowing seemed remote. If I was wrong, cross-members could be retro-fitted fairly easily. So, a sketch for the new design and a sketch of an 8' x 4' panel to show the cutting lines was produced. To keep the weight down I proposed $1\frac{1}{2}$ " square material for the legs as against 2". The customer agreed the design so material was procured, plywood sheet cut to size by the timber merchant, $\frac{3}{4}$ " timber to reinforce the plywood

joints, $1\frac{1}{2}$ " sq. timber for the legs, screws, hinges, glue, plus adjustable-height feet from Red Dog.

The total assembly took about four hours, and was taken home with great glee. A few weeks later mutterings were heard that he was thinking of extending the layout! Unfortunately his work has got in the way so the project has become dormant.

With hindsight – which always gives 20/20 vision – I believe an even lighter structure is feasible using $\frac{1}{4}$ " (6mm) plywood; but that is another story...



DCC for GF 'Hall'

Continued from previous page.



The chip needs to be stuck to the cab roof to complete the conversion. If you can use a thin double-sided sticky pad this would do the job. I used double-sided sticky tape, which was thinner and made the chip less obtrusive.

A final touch of matt black paint on the visible trailing edge of the chip would help it 'disappear'. Re-couple the tender and the conversion is complete.

The Gerry Spencer Farish Fitting Kit is available from Digitrains Ltd, The Stables, Digby Manor, North Street, Digby, Lincoln LN4 3LY. Tel: 01526 328633, fax: 01526 323008.

Email: enquiries@digitrains.co.uk

Website: www.digitrains.co.uk

Product page: http://www.digitrains.co.uk/product_6.html

PPM50 update

Further views of our modelling competition subject

CASPAR LUCAS presents some additional photographs of the interior of this light railcar.



We present a further selection of photographs to aid those modelling a PPM50 Light Railcar for our competition, full details of which were given in the June issue.

Above left is the No.1 End of the vehicle, as seen from the No.2 End. Note the 'clerestory-type' roof profile with raised centre section, bus-style ticket machine (not actually used in current service) opposite door at No.1 End only, right-hand driver's position and absence of doors to cab area.

Above right is the No.2 End, as seen from the No.1 End. On the right side as seen (Side B) there are four seats in facing arrangement and six in longitudinal arrangement. On the left side (Side A) are six longitudinal seats, with a wheelchair space immediately to the photographer's left.

Two folding seats are placed longitudinally on Side A against the No.1 End cab bulkhead, with one folding seat opposite the driver's position facing inward (obscured by the door

bulkhead on left in this view). Total seating capacity: 20.

Below left is an interior shot taken from the No.2 End towards the No.1 End. From this angle, the folding seats opposite the driver (far left) and in the wheelchair area (right) are just about visible in the stowed position.

The final view shows the positioning and typeface of the running number. The photograph was taken at Leeming Bar, on the Wensleydale Railway, on 12 September 2005.



Pecorama SM-32 layout revival

14 years of sun, sea and spectators means it's makeover time

*The original's flavour remains, but refurbishment brings a new lease of life, reports **ROBERT ILES.***

Nothing lasts for ever! The SM32 outdoor display layout at Pecorama was last refurbished in 1992, but after 14 years it was time for a full overhaul from the baseboard up.

The grounds of Pecorama at Beer on the Devon coast enjoy glorious summer sunshine, but are also exposed to salty air, winter rain, occasional strong winds and considerable temperature variations during the year. The combination of all of these is more than enough for any outdoor exhibit to endure.

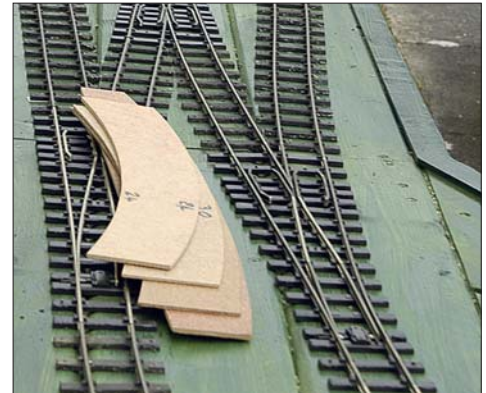
After a thorough inspection, the original block support wall was found to be fine and would still provide a solid base for layout reconstruction. The old marine ply surface that supported the track was a different story. Over the years this had delaminated, rotted in parts and no longer fully supported the track. The original Peco SM32 track was lifted carefully and stored to be used again for the rebuild. It had survived very well; the plastic sleepers had withstood the ravages of sunlight and frost perfectly. To replace the track would be an unnecessary expense, the exceptions being the turnouts which had been superseded by revised designs. The scenic items and other trackside articles were also removed for storage. The station building was in poor condition and would be replaced. Other buildings of plaster, resin or fibreglass were in good enough condition to be re-used.



To avoid similar baseboard problems eventually recurring with another marine ply base, a new approach was needed to make a weather-resistant and stable trackbed, so it was decided to use garden decking planks, smooth side up. During manufacture these are tanalised, which means that they are pressure-treated with an all-weather preserver, so they should last 15 to 20 years without too much attention. The decking planks are also much thicker than the original marine ply; nominally they are 32mm thick by 140mm wide.



Transverse battens are secured to the top of the block wall with weatherproof screws and masonry plugs. The battens are spaced at approximately 30cm intervals. Upon these are mounted the longitudinal decking planks, again using outdoor-quality plated screws. A finishing board is mounted along the outside edges of the decking to conceal and protect the ends of the battens and make a neat appearance. Approximately 160metres of decking, 45metres of 2" x 1" wood, 1800 'zinc and yellow passivated' weatherproof screws would be needed. The completed baseboard structure is then painted green to blend in with the hedge that is adjacent to much of the support wall.



The original track plan of two circuits is retained, but some more buildings would be added including a replacement station.

The track was reinstalled in much the same formation as before. The straight sections were checked for alignment against a known straight edge and the curved sections matched to hardboard templates of known radius. This procedure ensures that there is no unwanted unevenness in the curves and that they follow a smooth line. The track was cut with a small hacksaw.

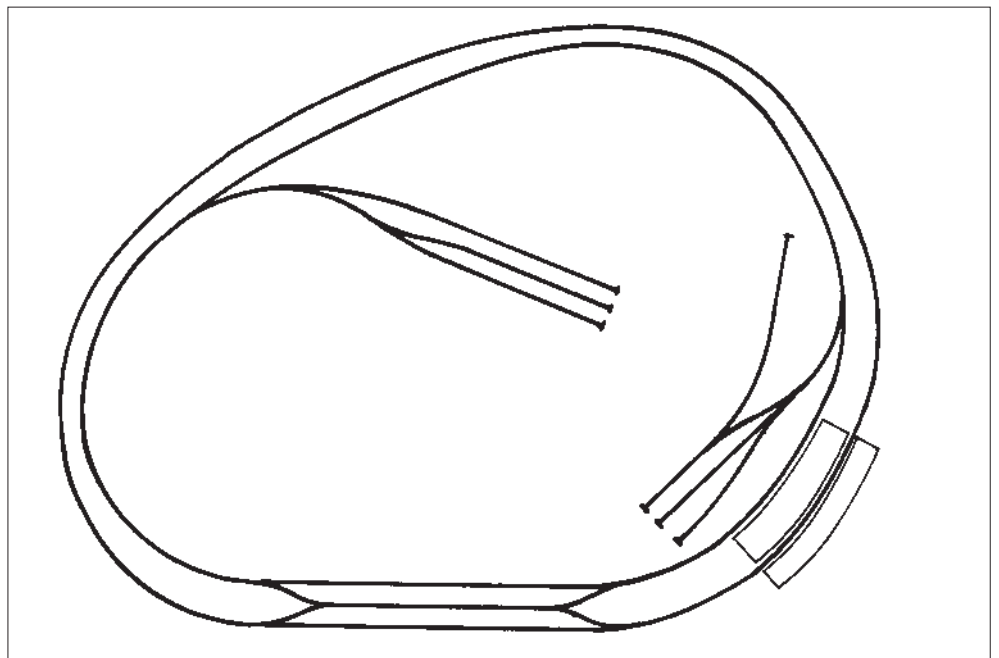
At short intervals along the underside of the track are blind holes at the ends of sleepers. These were drilled out to accept the nails that secure the track to the baseboard.



1" brass nails were used to resist the punishment of the varied weather conditions. The track was laid directly onto the baseboard with no underlay. Where necessary, small plastic shims were inserted under the track to make it perfectly level. The level was continually checked with a small spirit level laid across the track as it was installed. On the outside of the bends, extra shims were inserted to raise the outside of the track a little. This is known as super-elevation and helps the train to remain stable when travelling at speed around a curve; this practice is adopted on prototype railways. These shims would eventually be buried under the track ballast and would not be seen.



The ballast is coarse, horticultural grade, washed garden grit which is available from garden centres. The application method is slightly different from that used in smaller scale layouts. This time, undiluted PVA glue is applied directly to the decking.



The thick glue does not slip as easily through the joints between the decking planks and secures the ballast in readiness for all likely weather conditions. It is a wise idea to use disposable protective gloves when working with glue, it can cause irritation to the skin. The ballast is then sprinkled on by hand and tamped down using a block of wood. When the glue is dry, the excess grit is brushed off and saved for further use. Glue and grit are kept away from the moving parts of the turnouts to allow them to function properly. The final ballasted track looks effective and will be very durable.

This is a sizeable layout to ballast, and it took 30 litres of glue and 100kgs of grit; an expensive and time-consuming project, but one that should last well for many years to come.

It is impossible to take too much care at this stage. Good track, well laid will guarantee smooth, reliable running for many years.

The buildings were cast in sections from plaster using rubber moulds, but where did the rubber moulds come from? For each size of wall a rectangular tray was constructed, a little larger than the required wall and a little thicker. A rectangular plaster block was then cast in this mould. Once set and removed from the tray, the wall outline was carefully marked and cut out with a small electric rotary tool. Interlocking corners were created to add strength and rigidity.

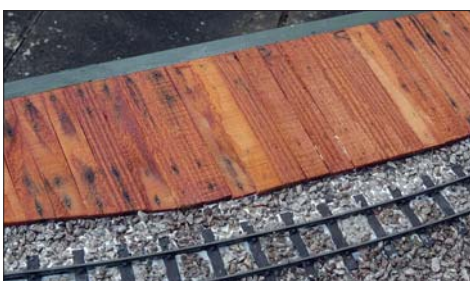
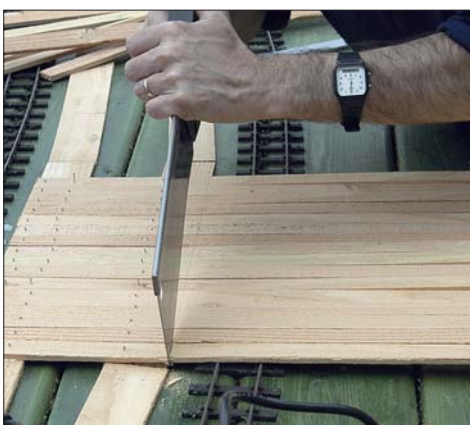
The brick pattern was marked on the surface, then using the rotary tool and an old screwdriver, the pattern was carved into the surface. From this master, a rubber mould was made. This was done by again using a rectangular tray into which the master was placed. Cold-set rubber, which is a two-part compound, was then poured in and left to set overnight. The rubber mould production technique enables as many castings as required to be made, knowing they will all be identical.





Moulds were made for both side and end walls. The walls were cast in plaster and cemented together.

The new station building is constructed in the same way and the platforms are made from rough-sawn timber finished with a stained woodseal paint. The finished buildings are glued to the baseboard with PVA.



The final effect, as seen above, proves that all the work was worth it!

Finishing touches included buffer stops made from blocks of wood covered in vertical wood strips to give a planking effect. This is all topped with ballast material glued on and painted.

Photographs by Jolyon Sargent.

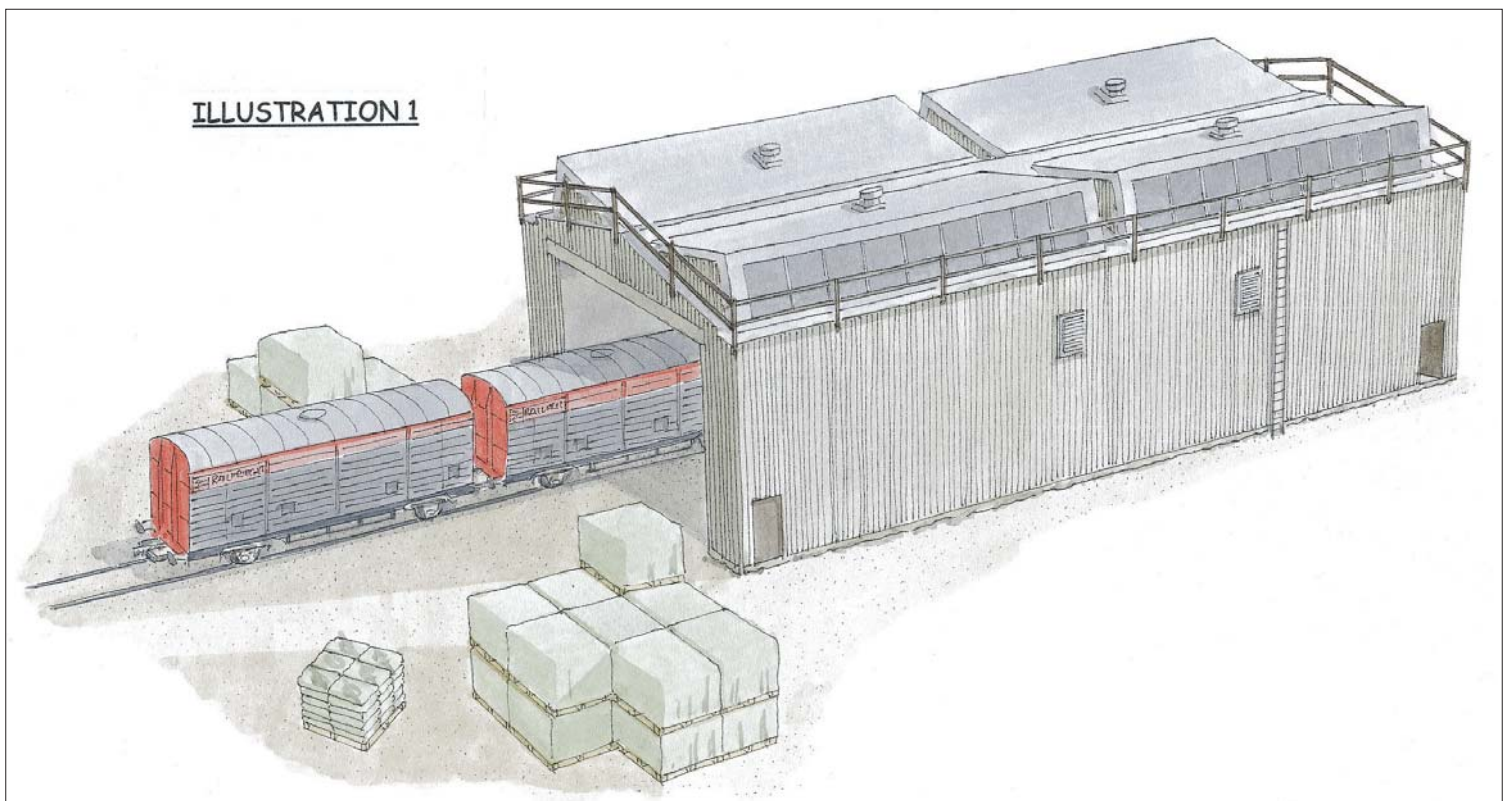


...an exchange of railway modelling ideas for beginners of all ages

Structure modelling – 9

A conversion for the Peco train shed kit

PAUL A. LUNN presents another in his occasional series of building makeovers.



Some kits, on the face of it have endless possibilities when it comes to adaptations. At first glance, this did not. I remember looking at it thinking 'I know – I'll leave it until late in the current series and maybe inspiration will find its way'. Well, some things are best left because sure enough three ideas surfaced; two are incredibly simple and one, although complicated, is quite rarely modelled.

Freight handling depot

Prototype examples at Akeman Street UKF Fertilizer Depot and at Arpley Sidings (illustrated in Richard Bardsley's excellent *Sluchers Lane* article, in *RAILWAY MODELLER* June 2005 pages 344 and 348) have straight-through sheds with no doors at either end. They are easy structures to replicate: just omit the doors, whilst removing the centre stanchion is

optional; build the rest as per the instructions. The effectiveness of the model will depend on how you stage it.

In Illustration 1 the Freight Depot is shown for handling grain in the Speedlink period of the late 1980s. Lots of pallets give it that 'modern' feel. A forklift truck and a couple of lorries appropriate for the time would complete the scene.

Under construction

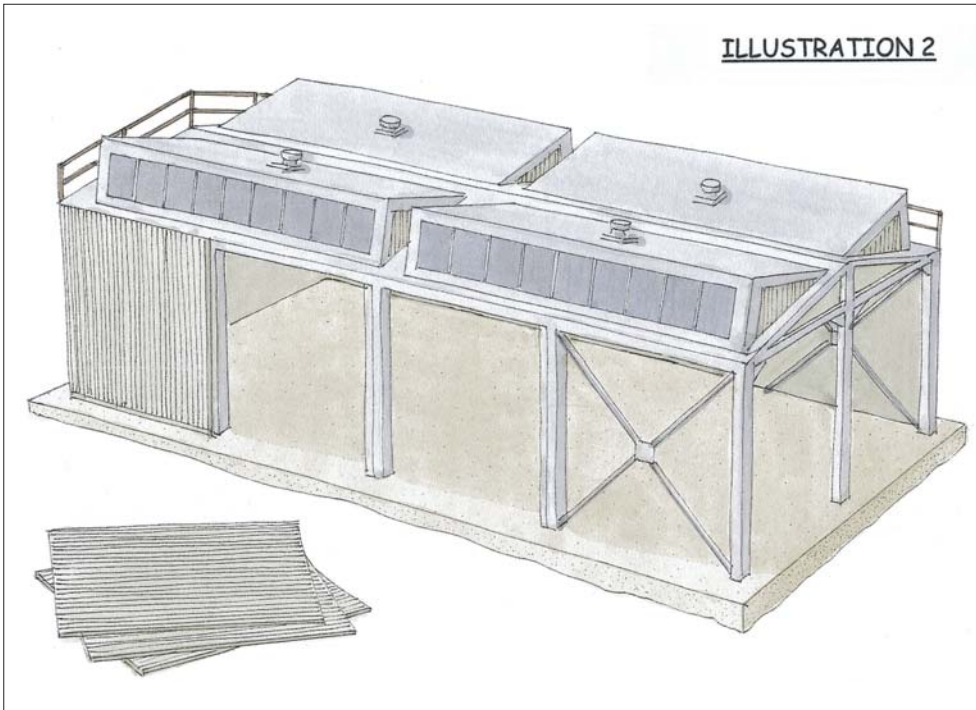
The train shed kit comes with open-frame spare side and end wall supports (part numbers 20 and 25) for those modellers wanting to add other kits to increase the overall width and length. Indeed this is one of the excellent aspects of the kit, and the instructions give several options for a variety of developments.

The supports, however, resemble the girder

skeleton that lurks inside most modern buildings of this type, although you don't get to see them from the outside because some form of cladding has been attached. Build as per Illustration 2; expose one long side and one end showing the girders with additional diagonal bracing. The framework on the long side will need to be positioned further in under the roof edge to allow one corrugated panel to be placed correctly. As a result some adjustments to the end frame are required, as is packing on the top edge of part 25 to enable it to be glued to the underside of the roof. It's a case of trial and error I'm afraid!

The remaining corrugated sheets can be stacked on the floor ready for craning into position. To be convincing you will need to create a modern building site with exposed concrete slab foundation, site buildings (the

ILLUSTRATION 2

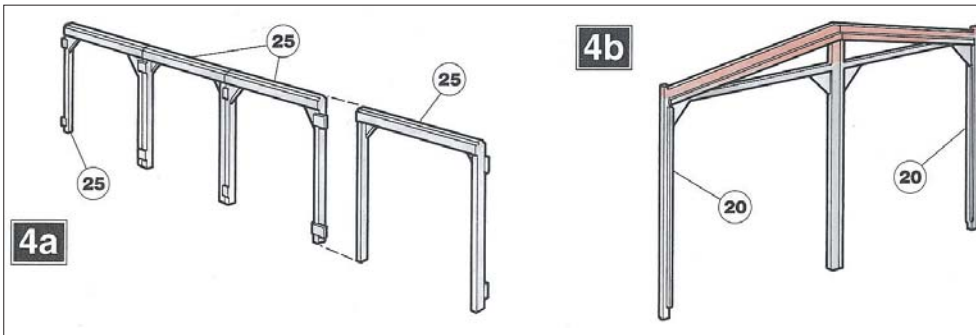


Steel depot

Although somewhat complicated, my favourite design is that shown in Illustration 3. It is inspired by the inaccessible, modern prototype at Outo Kumpu, adjacent to the M1 at Tinsley, Sheffield and by a much older version at the now defunct Chesterfield Cylinders in Derbyshire (see photographs). It makes use of parts 20 and 25 for the supporting framework: additionally some sections will need removing, which are shown shaded red on illustration 4b (so numbered to correlate to the instruction sheet provided with the kit).

The long sideframe, constructed from 4 x part 25, is quite sturdy and certainly looks the part when glued together. You may however wish to add diagonal bracing, top left to bottom right and bottom left to top right of each part 25. There is plenty of spare matching grey sprue from which to make the bracing. On the shed side a new running rail for the crane will need to be made from Plastruct Finesline H-section measuring 4.8mm x 4.8mm, and mounted on five equally spaced stubs of Plastruct Finesline I-section 9.5mm x 4.8mm that appear to pass through the shed wall. In reality these go on to girder supports on the inside, which are obviously unseen (see Illustration 3). The modified end frames, from parts 20, on the prototype carry no weight from the crane and serve only to hold the structure square. That said, on the model some strengthening of the top rail and uprights may be required and this can be achieved by laminating further pieces of grey sprue cut to the correct length.

Travelling cranes seem to come in many different styles. Older ones appear to be quite ornate with viewing consoles allowing the operator to have good sighting from above. Modern ones are simpler box-girder affairs that can be remotely controlled from the ground. It's this latter type that I have chosen



Knightwing Portakabins are ideal) and building materials for internal walls etc. – usually blocks and cement – and of course scaffolding. A workforce and a number of modern

vehicles appropriate for the period are essential. The structure although under construction can be railway-related or an industrial unit, the choice is yours.

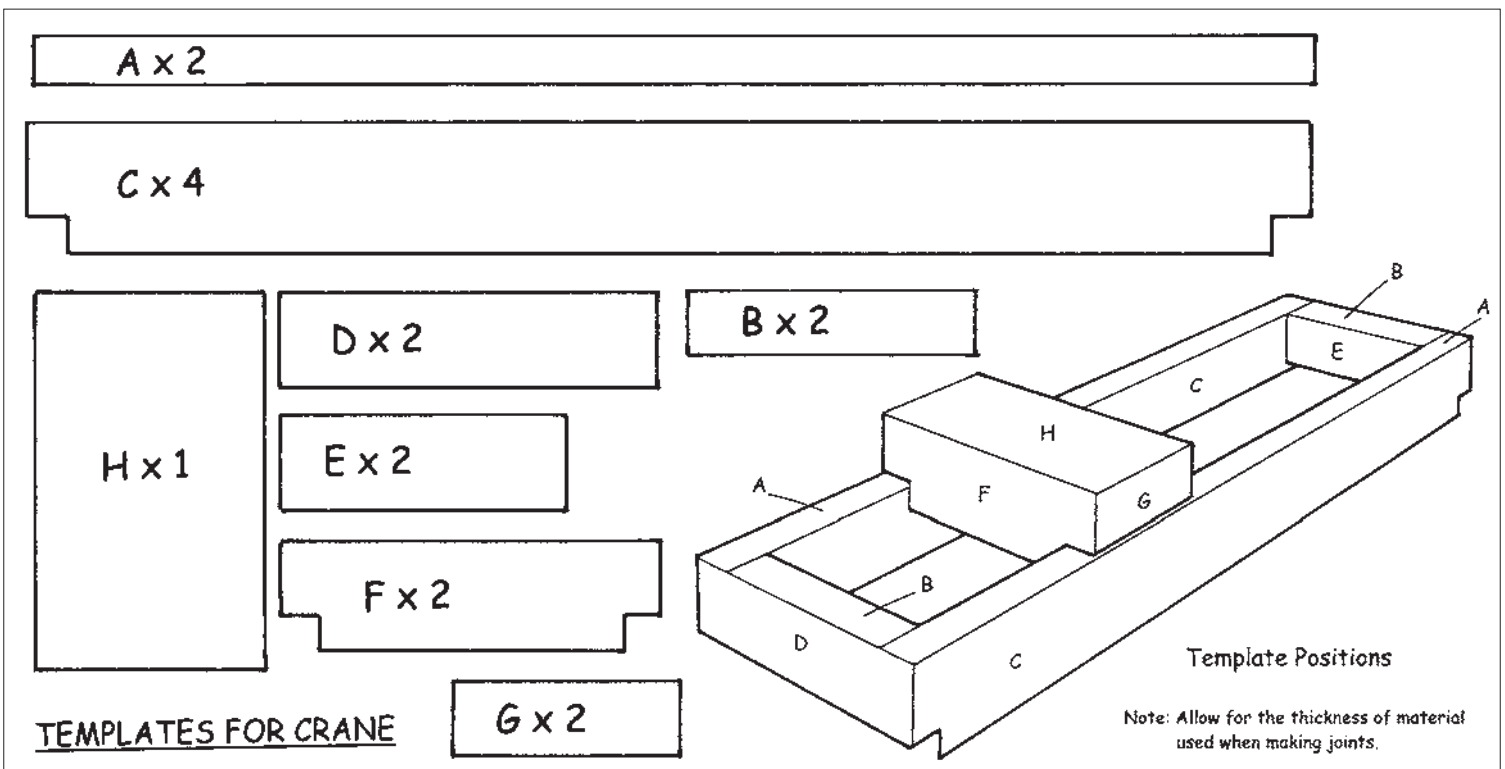
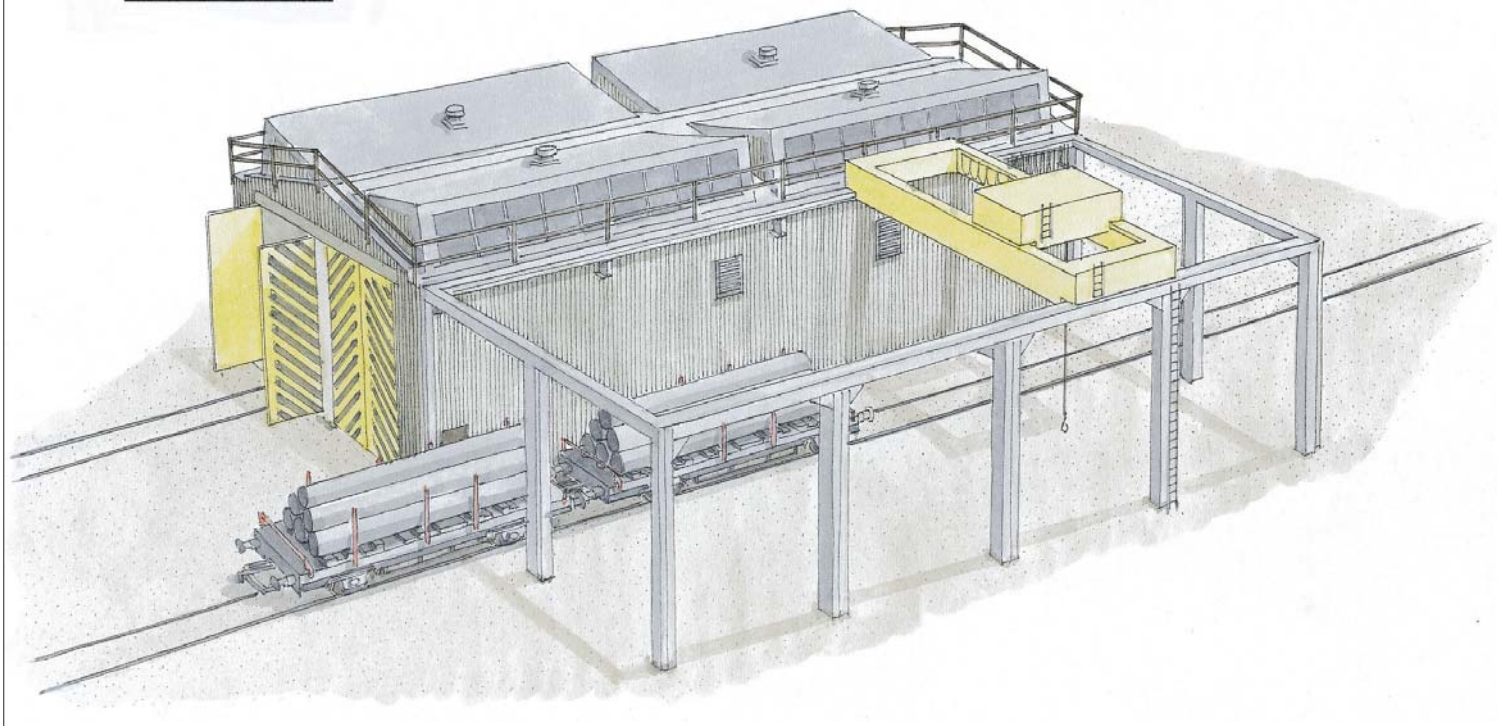


ILLUSTRATION 3



Right: a diverse selection of pipes and rods together with scrap in tubs and skips gives a deal of atmosphere to the Chesterfield Cylinders site. Note the modern corrugated buildings to the rear of the view, similar to the Peco kit save for the larger roof vents.

Below right: lots more yard detail here. A clear example of diagonal bracing extreme left and most important, underside detail of a crane showing looped power cables.

Photographs and illustrations by the author.

for the model largely because it's easier to construct for entry-level modellers. As always to aid construction I have included templates and a 3D illustration of the crane structure. Keeping it simple, I've only added ladders (cut from those supplied with the kit) and looped power cables from wire. It would be possible to add more detail by referring to prototype examples. The design suggests that the running gear (wheels) for both boxes are encased in the box girder sections, having access panels for servicing etc. It saves having to undertake intricate modelling, although a little fine packing between the mainframe and running rails, and between crane and mainframe, will suggest that the wheels are there even though they are not seen!

One minor adjustment is required to the shed itself: the brown-coloured safety handrail, on what is now the crane side, must be fixed to the roof and not the side wall where it would foul the crane.

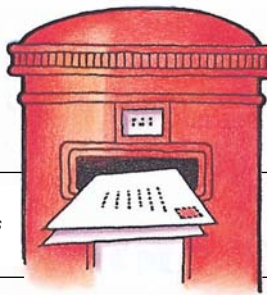
Besides the usual workforce and vehicles this particular example cries out for having its own shunter and internal-user wagons.

There you have it; three quite different interpretations of the Train Shed Unit. It's a fab kit...if only I had more time for a model railway of my own!

Previous articles: Oct 04, Jan/May/Aug/Oct/Dec 05, and Feb/Apr 06.



READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

CAN YOU HELP?

As part of the 50th Anniversary celebrations of the Gauge 0 Guild, on Thursday 24 and Friday 25 August an attempt will be made to break the world record for the longest model train pull.

At the time we planned this event the record was held by the Australians, at 321'2 1/2" in H0 scale. This has since been broken by a German group and currently stands at 361'10", again in H0. In order to break this record we will need to pull a train of at least 724' in 7mm scale.

The attempt will be made at the Telford Exhibition Centre – the venue for Guildex – where we have space to erect an oval of track approximately 911' long, with 25m radius curves.

Are you interested in helping out at this event? We require stock (at least 1500 wagons) and suitable motive power, preferably locomotives fitted with DCC decoders. All wagons and coaches must be free-running and representative of the prototype (i.e. no freelance designs).

We also need help setting up the track, which has been provided by Peco.

If you can help, please send details of stock and availability.

MIKE WILLIAMS,
2 College Road, Sutton Coldfield,
West Midlands B73 5DJ.
sarah.l.williams@blueyonder.co.uk

700 CLASS 'BLACK MOTORS'

The drawings of the 700 Class 'Black Motor' in the July RM brought back a number of memories – including a rather unusual one.

In the late 1960s there were a number of articles, letters etc. in the model railway press about the assembly of whitemetal kits and the different methods of eliminating the join along the top of the two boiler halves.

Various methods were discussed, but the common theme was the elimination of the join/seam.

On page 96 of the March 1969

Model Railway Constructor, however, there was a photograph of a 700 Class 'Black Motor' in the goods yard at Barnes Station which clearly shows a seam along the top of the boiler – thus shooting down (in the nicest possible way) those modellers who insisted that the boiler top join/seam should be eliminated at all cost.

The photograph was credited to Frank Vascoe of BEC Models who made a whitemetal kit of a Class 700 loco body and complete tender – the loco body fitting the standard Tri-ang 0-6-0 chassis. I have one of these locos still in service, the only modifications being to the chassis with the X04 motor now having a 5-pole armature and the wheels now being Romford (all flanged).

MARTIN JAMES

STEPHENSON-GEAR BLACK FIVE

I am wanting to build a model of the ex-LMS Class 5 No.4767, with Stephenson valve gear. The only drawing I have found so far is the one published in RM March 1999 along with two photographs, plus two photographs which appear in LMS Journal No.1.

What I would really like to know is does anybody produce an etch for this valve gear in 4mm scale, or are there any other drawings/photographs available so that I could determine more clearly how the valve gear operates with wheel rotation.

I understand that the prototype has been preserved and belongs to the National Collection. Does anybody know of its current whereabouts?

If anybody can assist with drawings, photographs or information I will of course cover any reasonable costs.

IAN PILKINGTON,
1 Maes Celyn, Coed-y-Glyn,
Wrexham, North Wales LL13 7QG.

(4)4767 is privately owned, and at the time of writing is based on the North Yorkshire Moors Railway, but is undergoing restoration off-site – Ed.

W. KEITH NEAL, AND TELEGRAPH POLES

No doubt like many of your readers I was very intrigued by Jamie Guest's article *Telegraph Poles* (RM July, 2006), not only for the realism of his poles and wires as shown in his various illustrations, but also for his research, inspiration and practical application which brought him to such a worthwhile and enviable result.

Quite possibly Jamie is not aware of a small book which could have been a great help in his research, indeed I have little doubt he would have thoroughly enjoyed meeting its author, W. Keith Neal and learning from his *Searching for Railway Telegraph Insulators* (The Signal Box Press, La Terre Norgiot, St. Saviours, Guernsey, 1982, ISBN 0950795909). Keith can be said to have devoted much of his life (1905-1990) to the collection and research of two widely divergent subjects, for each of which he retained an absorbing passion.

On the one hand, from the age of three he demonstrated an interest in antique firearms which endured throughout his life, leading to him becoming the world accepted authority on the subject. His collection of around two thousand individual pieces, each in wonderful condition, was without question the largest in the world, and he was the joint author of nine of the most respected, authoritative books on antique firearms.

The source of the second interest arose from the fact that during his earliest years he lived within sight, sound and smell of the London & North Western Railway at Boxmoor, Hertfordshire and, by the age of five, had also become an enthusiastic train spotter. By the age of eight his interest had developed beyond trains to the telegraph and its 'singing wires'. He was intrigued very early by the discovery of a broken white insulator found at the foot of a pole, following which he sought and found the remaining parts which were carried home to be glued together.

The discovery gave birth to his second lifetime interest, brought a close acquaintance with innumerable railway company Signal Engineers across the country and led to a unique and enduring research, not only into the insulators but also the necessary telegraph poles. His book, containing 135 illustrations and detailing and identifying virtually all known insulators and their telegraph poles across the now non-

Left: No.4767 George Stephenson runs light away from the camera at Long Preston on 21 February 1981. By sheer co-incidence, this is the location for Jamie Guest's 7mm model, referred to above.

Photograph: Frank Hornby.

existent individual railway companies, was published partially to draw out other collectors, disappointingly with little result. The reader nevertheless feels Keith's excitement as new discoveries were made and his collection and knowledge grew, an excitement and enthusiasm which extended, unbroken, from about 1910 to his death in 1990.

He published the book from his ultimate home in Guernsey, a home since sold along with almost all his huge collection of firearms, dispersed in a series of auctions at Christie's and Bonham's, London, where they raised several million pounds. Presumably the collection of insulators, cross-arms and the odd full pole, which he purchased complete and had transported to his earlier home in Wiltshire, have also been disposed of and, just as with the firearms, the world will never ever again see such an important, historic collection in one place. Keith is survived by a daughter, Diana.

L. PATRICK UNSWORTH

SOUTHERN ROLLING STOCK

With regard to the letter from Gerald Funnell in the July 2006 issue, I wish to say in reply that I haven't really missed the point as originally raised by Dr. James A. Ford. I quite agree that it would be nice to have more ready-to-run Southern Railway rolling stock available (although we have done well with vans in recent months) but pending this happening I simply wish to point out some possible alternatives.

I do of course accept that it is up to individual modellers to decide whether or not they wish to make use of these alternatives, depending upon the format in which they are offered.

My own collection of rolling stock includes ready-to-run Southern Railway pure and simple, and Southern Railway, ex-constituent companies (as against British Railways, Southern Region), which has been built up over the course of time, and is by various manufacturers, some of which are no longer with us.

For example I have some Southern Railway ready-to-run coaches, of several prototypes, manufactured in 00 by the original Graham Farish company, as against the present Graham Farish division of Bachmann, which manufactures in N gauge only.

The oldest wagons on my layout are 57 years old and are still running, being built by my late father, Edgar, in 1949. They are made from Merco lithograph sides and ends, mounted onto thin plywood, with Leeds Model Co. cast metal underframes, Hamblings brass buffers and Hornby Dublo couplings. The wheels were originally Hornby Dublo metal ones, later changed to Peco plastic when the first model railway was converted from 3-rail to 2-rail. The coal loads are the real thing, finely crushed. Everything was stuck together with boiled-up fish glue, an evil smelling concoction which got my father into big trouble with my mother, for 'borrowing' her best saucepan to do the job!

My father pointed out to me, when I was old enough to understand, that at the time supplies of model railway items were quite scarce, and there wasn't much available in ready-to-run anyway. Like your recent contributors, he too was inspired by Edward Beal. I



still have his copy of *Railway Modelling in Miniature*. Our first ready-to-run train set, by Hornby Dublo, came for my Christmas present in 1954. The controller and transformer lasted for 40 years before finally disintegrating; good value for money!

The rolling stock is mostly still running, although some items died of metal fatigue eventually. Despite being dropped onto a concrete floor by me as a child, the original tank engine is still running too. Following servicing by my local model shop this is one of the locomotives which I had restored by Simon Greenwood. It still has its original wheels, and incidentally runs perfectly well on the Peco Streamline and Setrack as used on my layout. This includes Setrack points.

In conclusion I can only repeat what my father once said: materials and other things on offer may change, but our hobby remains as a wonderful interest for us all.

D.K. SZTENCEL

FROM EXE MRS

Could you on behalf of the Exe Model Railway Society pass on our apologies to your readers who may have had difficulty finding our exhibition, held over the weekend of 3 and 4 June due to the absence of direction signs. This is because the Highways Authority informed our club secretary that we would be fined for every sign we erected, and despite his best efforts to try and reach a compromise with them, all we got in reply was 'New Government Legislation'.

With less than two weeks left before the exhibition to try and get through the red tape and the threat of prosecution, it was reluctantly decided not to risk putting up any signs. As you know publicity ie: magazines, press releases, posters and fliers are prepared and sent out many months in advance, so the only option left to us was putting a notice and map on our website. We hope to resolve this for next year's show but I would advise all Exhibition Managers – beware!

PAUL DORAN,
Chairman, Exe MRS

ABOUT MAIL ORDER

With reference to James Newby's letter (March 06). Perhaps the following information might help people like him.

I own and run a small retail electronics business, which is aimed at the railway modeller (although I do get the occasional model boat builder as well).

If the item is not in stock I do not ask for cash up front. I advise the customer as to when it will be in and then I contact the customer, then and only then I arrange payment and delivery.

I carry ample stocks of most items – I have about 94 different items in stock and I usually despatch the customer's order within 24 to 48 hours; if there is a delay, I will inform the customer.

MIKE SYMONDS,
Electronix Connections, 33 St.
Leonard's Road, Lowestoft NR33 0EL.

CASTLE ROCK MOTOR TORPEDO BOAT

As somebody with an interest in both model railways and WW2 modelling, I was both interested and impressed with the *Castle Rock* feature in the June issue.

However, I could not help but notice one understandable error, common to other layouts I have seen including the also excellent *Overlord* layout – that being the use of the early Airfix 'Royal Navy MTB' kit. Unfortunately, while it was marketed as a British MTB, this model is of no such thing! It is an accurate model, but of an American-built MTB, built to Vosper plans. Even worse, this version never saw action with US forces either, but was supplied under lend-lease solely to the Russian Navy. British MTBs were very different, particularly in not having the dual gun positions either side of the cockpit.

This model can, with a fair bit of work, be adapted to a British boat; but far easier would be to use the Airfix kit of a later MTB which is correct for an RN boat, or if modelling prior to 1944 the Airfix RAF rescue launch, or even a kit of an American PT boat – with some minor alterations – as two squadrons of these boats were on active service in the Channel and performed joint missions with RN MTBs.

TREVOR PHILLIPS

RENUMBERING WEATHERED LOCOS

Your reviewer of the weathered Bachmann V3 2-6-2T (May issue) comments on the difficulty of changing the number then trying to match the weathering.

One possible way round this would be to represent the locomotive in the condition seen on many locomotives, particularly secondary ones, in the London area in the 1960s. This was where an area, usually a rectangle, had been wiped clean(ish!) round the number, presumably to enable locomotive crews and shed staff to identify which loco was which. The problem of matching weathering after changing the number would not then arise.

BRUCE B. PERCIVAL

SEALANE – MEMORIES STIRRED

The Sunderland tram article *Sealane* (July issue) brought back a lot of memories. We never called the area 'Sealane', it was always just Roker.

A blue bus (SDO) to Sunderland, upstairs at the front on a tram, off at Roker and a walk along the promenade to Seaburn was the order of the day. All I remember of Seaburn was the tram circle, the very sandy beach, Alec Hastings (ex-footballer) had the post office, and of course Nottariani's ice cream shop. There was not a lot of development pre-WWII.

The most vivid memory however is of the trams as people-movers. After



Above: the cleaned number on the otherwise filthy Thompson O1 No.63752 illustrates the point made in Mr Percival's letter on this page. Rugby MPD, date unknown.

Photograph: the late Les Pickering, courtesy Bob Brown.

the football match at the other Roker Park (Sunderland AFC) the trams would all be lined both ways along Roker Avenue. As soon as the first one was full (overloaded) it was away. It is doubtful if the conductor could move to collect all the fares. The football crowd was gone in a few minutes; so now have the trams and the football ground.

The other memory is the trip or two to Roker at night to see the illuminations in the real Roker Park. Mantovani, before he was famous, was a regular visitor with his Tipica orchestra playing in the bandstand.

Great memories!

D.A. PETRIE

DCC PROVISION

I have no desire to start a debate about the merits of DC versus DCC. However Mr Nelson's letter again raises the suggestion that modellers are somehow to be 'forced down the DCC path', and links this with opposition to the sale of locomotives ready-fitted with DCC decoders.

I am baffled as to why so many modellers committed to DC operation think they are going to be 'forced' to buy locos with built in DCC decoders. It has always seemed quite obvious to me that the only people who are going to buy DCC-fitted models are users of DCC. If there are sufficient British DCC users to buy such models, then they will sell, and if there aren't, they won't, and that will be the last we hear of them in Britain. Presumably Bachmann and Hornby believe there are now enough British DCC users to make a few such DCC-fitted models commercially viable.

In America and on the Continent, manufacturers have offered a selection of DCC fitted locos for years. But almost without exception, a DC version of the same loco is also offered, albeit

often in a different livery. Locos without decoders are still the norm, and there is absolutely no sign of any trend to withdraw them and leave the modeller with just a DCC option. I cannot understand why it should be any different here.

There is no reason for modellers using analogue DC control to campaign against the trade offering commercial support for DCC. Dark threats of a boycott are irrelevant, since no sensible sales manager would expect DCC equipment to be bought by DC users.

STEPHEN SIDDLER

WINTRINGHAM HAVEN

Congratulations on an excellent magazine. I found the piece on *Wintringham Haven* (RM June issue) particularly interesting, living as I do not many miles away. As an aside, the Great Central Railway had plans to drive a tunnel under the Humber between South and North Ferriby, but decided to spend their money elsewhere. If it had come to fruition there would have been some interesting traffic flows between the north and south banks!

Now to, I hope, a couple of constructive comments on layouts featured in the model press. Firstly, pointwork. The hours spent laying it, ballasting it, painting it and forgetting a vital point (no pun intended). How many times do you see shiny tops to the ends of wing rails and check rails? Am I missing something, but I thought that wheels didn't actually run on these surfaces so varying degrees of rust formed. If you look at the real thing, or photographs, you'll see what I mean.

And this brings up my second point. Too-clean layouts. Where is the litter? Fag packets, chip papers, empty bottles and drink cans, often between platforms and rails. They're always there yet I've never seen them modelled.

That's it, gripes over!

R. JACKSON

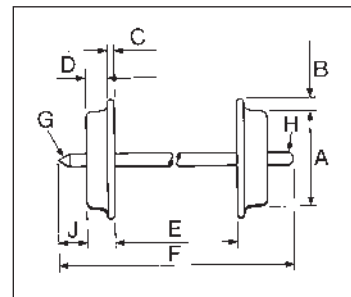


Left: BRCW Class 110 'power twin' DMU provides the passenger service for Wintringham Haven. If the GC's plans had come to fruition, this scene could have been a real one...

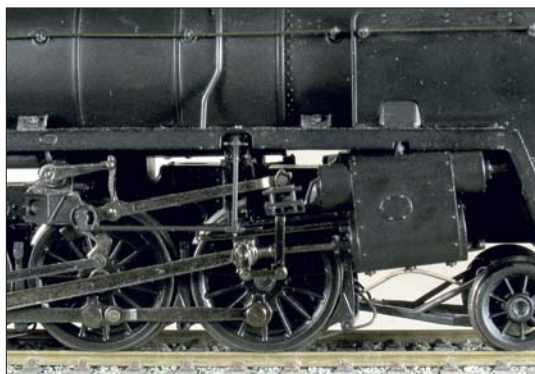
Photograph: Steve Flint, Peco Studio.

LATEST REVIEWS

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BR Standard 9F 2-10-0 new in 4mm scale from Bachmann



Your editor's schooldays were over before he saw a Spaceship, and it is possible that one of Dan Dare's craft would have been a less surprising sighting at New Cross Gate than a ninety-two'er like this.

There was little doubt that the eagerly anticipated Bachmann Nine Freight would be a cleverly designed model. The motor, horizontally disposed inside the largely metal-filled boiler, does not intrude into the detailed cab, nor is it visible in that characteristic void between the completely modelled boiler

underside and the top of the frames. A gracefully curved chain of six gears drives the second and third axles, and the gearbox hides discreetly behind the motion bracket. In short, there's clever and there's *fiendishly* clever.

No.92192 was built at Swindon with a 1F tender and allocated to Eastern Region. The model carries a 36A shed-plate, Doncaster.

The flangeless driving wheels on the third coupled axle are inconspicuous both in reality and in photographs, but they are most noticeable in model form. One of the best close-up prototype photographs we have seen taken of this feature was that by G.H. Heiron

which appeared on the cover of *Model Railway News* for January 1958. The model is not recommended for operation over curves tighter than 18"/second radius.

The motion of the Bachmann model consists of plain coupling rods and fluted connecting and other rods. The connecting rod big ends are made double thickness and look suitably massive. Brake blocks and dummy springs are fitted and the frames carry rivet detail and lightening holes. The cast metal frames, firebox/ashpan, boiler underside, footplate and motor mount contribute much to the 482g weight of the model.

The injector pipelines and other pipework forward of and beneath the cab, is moulded in soft plastic, but should still be treated carefully. This 'plumbing' is well modelled.

The cab has a well detailed back-head, and driver's position with brake-stand and reversing wheel. The cab windows are neatly glazed.

The model is fitted with a standard eight-pin dual inline NEM652 decoder socket for DCC.

The BR1F tender is a nice model in its own right, with ladder, stand-proud lamp brackets, handrails and lifting lugs. There is well modelled coal, piled up, and a detailed tender front with locker doors, etc and shovelling plate. The coal load 'clicks' out, revealing a well proportioned coal space with residual load and a properly hollow fire iron tunnel. The rivet patterns on body-sides and underframe are sharp and convincing.

Below the footplate the water scoop can be seen, the buffers are sprung in Blue Riband style, and the red/yellow axlebox covers are sharply printed with stripes in line.

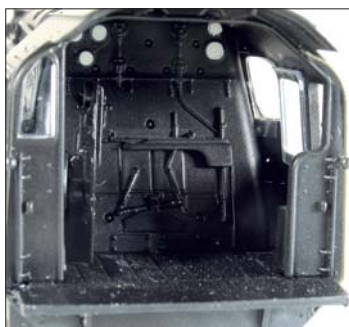
The locomotive handled six coaches with ease over the sharp curves and 1:36 grades of our Loft Layout.

For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
ref.32-851, £112.15

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Ready-to-run LNER J72 0-6-0 in 0 from DJH



This 0 gauge ex-NER 0-6-0 tank is the first steam-outline example we have seen of the factory-built ready-to-run models which DJH Engineering Ltd has been advertising recently.

These tiny tanks (4'11/2" wheels and 8' wide over footplate) were introduced by William Worsdell in 1898 and constructed to practically the same design at intervals until 1951, the final 28 being built by BR.

The model is assembled and finished to a very high standard. The Crailcrest CR109 motor is located in the firebox which enables a highly detailed cab interior. A hint of simplified inside motion (slide bars) is visible between the frames. The 'mixed technology' current collection (wiper pickups on the treads of centre and rear wheels, plungers on backs of front

wheels) is designed for stability and helps to keep such unprototypical items out of view. The wheels are by Slater's, coupled by rather nice one-piece rods. There is a very small amount of side play in the axles, and 48" minimum track radius is recommended by the makers.

The whitmetal and etched brass superstructure is mainly screwed together, and the 'inside' of the body is neat and well designed.

Buffers and three-link couplings are sprung, and brake and steam heat hoses are fitted and beautifully painted. Details such as lamp brackets, handrails and tank-top furniture leave virtually nothing to be desired. The bunker carries a coal load. The smokebox shows a 52A Gateshead shedplate. The cab windows are glazed,

those facing the bunker having fine coal protection bars.

As the photographs show, the BR lined black livery carried by this example is immaculate. Other schemes available are LNER unlined black (£525.00), LNER lined black (£599.00),

LNER lined green (£625.00), NER lined green (£625.00), BR unlined black (£525.00), and BR/LNER lined green (£625.00).

Performance is smooth straight from the box, with excellent slow running and a sensible top speed.

For 0

MANUFACTURED BY
DJH Engineering Ltd., Project House,
Villa Real, Consett, Co. Durham DH8
6BP

PRICE
£575.00. Other prices in text

WHEEL DATA
B. 1mm, C. 1mm, D. 2.5mm,
E. 29.9mm.



Two new train packs in 00 from Hornby

Hornby has expanded its selection of Great British Trains train packs with two certified limited edition runs of *The Devon Belle* and *The Talisman*, each of which number 2500 sets.

The former (ref.R2568, £150.00) commemorates the short-lived (1947-54) Pullman car service to Ilfracombe and Plymouth, and comprises 'West Country' No.34030 *Watersmeet* and

three matchboard-panelling Pullmans, parlour third No.36, kitchen third No.61, and kitchen first *Iolanthe*. Supplied with the packaging, to be fitted to the Light Bulleid are the celebrated wing-type nameboards for the smoke deflectors, and a *Devon Belle* headboard.

To extend the set, Hornby has a pack of three further Pullman cars



(ref.R4251, £79.99), consisting of parlour first *Minerva*, kitchen first *Fingall* and brake third No.65. The cars in the main pack have Plymouth destination boards, which date the set only to 1950; the add-ons carry Ilfracombe destination boards, so if you're running them together the seven-strong formation is in east of Exeter mode – but of course in model form they can be in anything mode!

The Talisman train pack (ref.R2569, £120.00) represents the light – eight-coach – high-speed Kings Cross-Edinburgh express introduced in autumn 1956. Stopping only at Newcastle each way, the train sets left each terminus at 1600 sharp. It was booked for A4s, which makes the presence of A3 No.60039 *Sandwich* in the Hornby set a bit of a surprise. Two Mk.I

composites and a brake third are supplied with the 'racehorse' – 1931 St. Leger, by the way – and there is another add-on pack (ref.R4252, £79.99) of three more, as above, available. Neatly-printed cantrail-mounted destination boards are fitted throughout on the individually-numbered coaches.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES
In text

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Ready-to-run BR Highfit and ready-to-paint skips in 0 from Skytrex



Skytrex has added to its rapidly-expanding range of ready-to-run 0 gauge freight vehicles with the BR 13-ton all-steel high open.

The wagons were built mostly by BR Shildon to an LNER design, which featured distinctive circular protrusions on sides and ends: these protrusions betrayed the presence of securing rings let into the inner sides and ends of the wagons. Nearly 6000 were built in all, fitted and unfitted, some later being provided with sheet rails.

The model features fine moulding and finishing, though the indentations

for the securing rings are not present on the inner faces of the body. Sprung buffers and three-link coupling shanks are fitted. The model represents B481688, which was turned out by Shildon in 1951 as part of a batch of 1500 wagons. Painting and lettering is good and crisp.

Also new to the Skytrex range is a couple of skips. One is offered empty, and is a clean, crisp one-piece resin casting measuring 82mm long and 31mm tall, and is 38mm wide. The other skip is a solid casting representing a loaded skip: its contents have

clearly been the subject of much research, as all the 'usual suspects' are present. There is a mattress; domestic doors and broken pallets act like coal rails on a tender, allowing more rubbish to be loaded; and amongst the general refuse is a bit of a downpipe. Clearly careful painting will be required to bring out the best in this characterful model of an everyday item of street furniture.

Each skip is provided with four whitmetal anchor points for the chains by which these items are loaded and unloaded from lorries.

For 7mm scale

SAMPLES SUPPLIED BY
Skytrex Ltd., Unit 1, Charnwood
Business Park, North Road,
Loughborough, Leics. LE11 1LE

PRICES

Highfit (ref.SMR35) – £42.50
skip, empty (ref.SMRA32) – £3.50
skip, loaded (ref.SMRA34) – £3.50

WHEEL DATA

B. 1mm, C. 1mm, D. 2.4mm,
E. 29mm.

White Rose display cabinet

Illustrated is a new dustproof display cabinet which is available from White Rose Modelworks. It measures 960mm wide, 540mm deep and 100mm thick and contains six slotted-in glass shelves (approx 75mm headroom) with a light oak background. To give an idea of the cabinet's size, a Hornby Stanier Pacific is pictured within.

The frame of the glass front is available finished in dark blue, green or red, and is easily removable to change the displayed contents. The top inner face of the front locates into securing

points at the top of the cabinet, and two clips hold the sides.

The cabinet is well and sturdily made, and weighs over 20 kg.

For all scales

MANUFACTURED BY
White Rose Modelworks, Unit 10,
Bedale Station, The Bridge, Bedale,
N. Yorks DL8 1BZ.

PRICE
£100 plus P&P.



Motor Art plant in 1:87 and Express Models lighting kits

Noted Swedish diecast importer Motor Art has been licenced by JCB to add two of its items of plant to the range, which comprises chiefly Volvos in 1:87 and 1:50 scales. The Motor Art range is distributed in the UK by John Ayrey Diecasts and stocked by Modern Structures in Miniature.

The Chinese-produced models exhibit very good detail. Our samples are of a JCB 3CX backhoe loader (left of main picture) and a JS220 tracked backhoe excavator. Neat painting and finishing are evident on both, and they both have full cab detail.

The models are poseable, and wheels/tracks can revolve. The backhoe on the 3CX can be swung about its pivot, and the body of the JS220 can be luffed.

Express Models has made for MSIM flashing amber light units for these models – near left, ref.EX/AF1(F), £6.00 – and also blue versions for Cararama 1:72 scale cars such as the police force Mini (ref.EX/BFMINI, £5.00).



For 1:87 scale

AVAILABLE FROM
Modern Structures in Miniature,
P.O. Box 3119, Ferndown, Dorset
BH22 8XY

PRICES

JCB 3CX – £18.99
JCB JS220 – £18.99
Express Models lighting kits: see text.

Latest Bachmann BR Mk.II coach in 00 – the FK

Bachmann has progressed its programme of modelling the BR Mk.II coach fleet in 00 with the corridor first (FK). The real things were amongst the earliest of the breed – indeed the actual Mk.II prototype was an FK, built at Swindon in 1963.

Our sample, E13373, is modelled on a coach built at Derby in 1964, thus it carries the lined maroon livery: given that we remember the coaches so well in blue & grey (and later) colours, this always prompts a double-take when accompanied by the rounded body of a Mk.II in comparison with a Mk.I.

Bachmann has changed its method of construction with this type of Mk.II: anyone trying to get to the interior armed with our instructions for so



doing (June issue) will have a fruitless struggle with an immovable corridor connection! The chassis here unclips, and out drops floor, interior and all.

The well-moulded B4 bogies carry the usual Blue Riband slimline tension lock couplers, mounted in NEM pockets on swivelling mounts. These are

sprung-centred, extending to take account of curvature to prevent buffers snagging. The semi-permanent alternative coupling is included in the packaging.

For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
ref.39-332, £22.45

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Latest Hornby Mk.IV stock in 00

East Coast Main Line operator GNER has been refurbishing its Mk.IV coach fleet, in a procedure codenamed 'Mallard'. Hornby has not ducked its responsibility to keep up to date in 00, and has duly released versions of the tourist open (right, ref.R4287), open first (below right, ref.R4286) and restaurant (below, ref.R4288), in the latest livery with red passenger doors.

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES
each version – £19.99

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



New from Precision Labels

Amongst a large batch of new additions to the Precision Labels range of waterslide and self-adhesive locomotive and coach accessories are the following. Pack L96 (£5.99) covers 4mm scale carriage and loco headboards for the *Pines Express*, with end gangway boards included. The pack covers all portions of this storied train.

Carriage window transfers, on 'carri- less' waterslide paper, are available

for 0 (£6.99) and 00 (£3.99), and comprise finely printed double-sided first class brandings etc.

Precision Labels' products are available by post from Frizinghall Model Railways of Bradford, and the Alton Model Centre, both of which are regular advertisers in the magazine.

AVAILABLE FROM/PRICES
In text.



Commemorative CDA from Peco



This being the 60th anniversary of the founding of our parent company Peco, a special issue of the new N gauge CDA china clay hopper has been produced to commemorate this milestone.

The model should be obtainable from your local Peco stockist, and it is also available from our Technical Advice Bureau at the usual address.

For N

MANUFACTURED BY
Pritchard Patent Product Co.,
Underleys, Beer, Seaton,
Devon EX12 3NA

PRICE
ref.NR-60, £12.50.

New selection of modern freight stock in N from Graham Farish



Modern freight operators will welcome the new MFA lowside in EWS finish to the Graham Farish N gauge range (ref.373-878, £6.95). It has rather large moulding marks on the interior, but these could be disguised easily with a trace of ballast, seeing as many of these often-overlooked vehicles can be seen trundling items like spent ballast around the network.

Other contemporary wagons for the N gauge operator are the weathered PCA-coded pressure discharge hoppers in Blue Circle (ref.373-003B, £6.95) and Castle Cement liveries (ref.373-007, £6.80). The weathering has been applied very subtly, not obscuring the markings, logos etc.



Other unweathered versions are a vee-body type in plain grey (ref.373-077A, £6.95) and a straight-body style PCA

with Rugby Cement branding (ref.373-002B, £6.95). Also new is the CEA-coded covered hopper (ref.373-476,

£7.25), with finely reproduced roof gear, which on the real thing is retractable. Our sample's was a little loose in its place, so could benefit ideally from a dab of glue.

For N

SAMPLES SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICES in text

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.

Malcolm Moore 2' gauge diesel kit in 7mm from The Model Company

This new kit from Paul Berntsen of the Model Company in New Zealand represents the small 2' gauge internal combustion locos developed in the 1930s by the Malcolm Moore company using a Ford V8 65hp petrol engine. The unit weighed just 3tons 2cwt and measured 9'6" long and 3'8" wide over the main frames. 92 were built for the Australian Army during the Second World War, and many subsequently had civilian careers with industrial users. Several are preserved.

The kit contains highly detailed pewter castings for the main components, including some complex one-piece parts, with finely cast brass accessories (bonnet catches, frame and body lifting lugs, clutch pedal, reverse selector, and handbrake assembly – a beautiful one-piece casting). All are very cleanly cast, with no visible part lines and hardly any flash, and most of the holes that have to be drilled have locations ready 'pipped'; all sizes are specified in the instructions.

Brass wire of various sizes is provided for handrails, pipework, wiring, etc., brass angle and strip for the roof supports, plus fine brass mesh for the radiator grille and brass sheet for the cab roof – both these components are pre-cut to the correct size. Self-tapping screws are supplied to secure body to chassis.

The model can be assembled either with glue or low-melt solder, and construction should not prove difficult. Instructions run to just over four sides of A4, with a further three-and-a-half sides of photocopied pictures of the parts to aid identification and of assembled models and prototype examples, plus a side of copies of the



manufacturer's drawings. These are helpfully reproduced to 7mm scale, which certainly simplifies shaping parts, though the reduction means that much of the interesting information on the originals is almost impossible to discern – not that it is strictly necessary.

The directions are clear and easy to follow, and incorporate helpful tips and comments.

Fixing some of the smaller components, and some of the fittings like plug leads and fanbelts, will require a degree of dexterity, care, and some patience.

In one or two places the sequence could be clearer. For example, it should be noted that the seat back fits behind the angle irons on the inside of the cab side – this is not actually stated but does become apparent from other references (e.g. to the seat top fitting) and the match with the reversing gearbox.

Likewise, the holes for the self-tap-

ping screws that hold the drive unit in place need to be counter-bored $\frac{3}{64}$ " diameter and deep enough not only so the screw heads are hidden but also so that enough thread protrudes to grip.

The only point not covered in the instructions is fitting the body lifting lugs, but these are clear in the prototype and model pictures. The bonnet side doors are also not mentioned: these seem to be optional.

How the roof pillars are fixed to the underside of the canopy is also vague – in the original!

As to the drive, Steam Era Models has produced a special 'Black Beetle' power bogie with 12mm diameter disc wheels of RP25/110 profile on a 24.5mm wheelbase; overall gear ratio is 27:1 due to the ingenious use of brass double reduction gears. Current is collected from all four wheels, and the unit runs very nicely – especially with the weight of the body on top! Slight modifications are required (fully

explained in the kit instructions) to make the unit fit the body.

While this fine kit depicts a specific prototype, we have no doubt it will be welcomed by all those modelling industrial narrow gauge who are looking for variety in their motive power.

A body kit is also being produced in 1:32 scale.

For 0-16.5

PRODUCED BY
The Model Company, 608 Tomoana
Road, Hastings, New Zealand.

AVAILABLE FROM
Branchlines, P.O.Box 31, Exeter,
Devon, EX4 6NY.

PRICE
7mm scale complete kit – £93.50.
1:32 scale body kit – £59.50.
UK Postage & Packing – £4.00,
export at cost (minimum £3.00).
Export sales less VAT.

NER footbridge in 00 from Hornby



The final major item in the Hornby Skaledale suite of North Eastern Railway-inspired structures (see RM May) has been released: the footbridge (ref.R8641, £20.75).

Although tracking down the exact origins of the prototype has proved tricky, it is clear that the curvaceous prototype cannot have been built much before the formation of the NER from its constituent parts in 1854 if at all. They were built from cast iron, with distinctive cross-bracing to the railings. Countless were produced over the years, and many are still around.

The Hornby model is sufficiently wide (at 223mm) to span two tracks and the leading edges of their attendant platforms. The railings are metal on the otherwise cast resin superstructure. The decorative features along the

bridge's centre sections are from transfers: it might be advantageous to give the model a coat of matt varnish before installation to allow these details to blend in with the rest of the structure. The underside of the centre section, and the steps either side, are smooth, and do not display the underside of the risers that we suspect the real things do.

For such an unassuming yet elegant prototype, the Hornby model fits the bill very well indeed.

For 00

*SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX*

PRICE in text.

Harburn petrol pumps in 4mm

New to the range of Harburn Hamlet scenic accessories is the trio of old-type petrol pumps seen here (ref.SS385, £9.95). These little details, allied to a garage, will help set a layout's period admirably.

The three pump castings, displaying the Regent branding common in the 1960s, measure 35mm tall x 7mm deep. A nozzle and loop of pipe is cast into one side.

The pumps sit in an island paved site 85mm long overall x 16mm wide. Flagstones and kerbs are presented neatly.

Harburn Hobbies products are distributed to the model trade by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.



For 4mm scale

*AVAILABLE FROM
Harburn Hobbies, 67 Elm Row, Leith
Walk, Edinburgh EH7 4AQ*

PRICE in text.

Bespoke numberplates in 4mm

Ian Pattinson of Small Scale Customs offers a print-on-demand service of numberplates, both pre-1963 and 1963-72. The customer can specify the area required, two two-letter codes (e.g. RM and AO, both Carlisle), two one-letter prefixes (e.g. G and L) and year suffix if appropriate.

Each A6 sheet of waterslide transfers comprises 162 sets of two rectangular and one square plates. They can be ordered by post (cheques payable to Ian Pattinson) or via: www.spinneyhead.co.uk/ssc



*AVAILABLE FROM
Small Scale Customs, Flat 7,
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Book Reviews

Southern electric slam-door stock

The final years

Roger Palmer
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics
LE10 3EY.

190mm x 245mm 80pp
Hardback £14.99
ISBN 0711031088

This new addition to the publisher's landscape format colour albums celebrates the life and times of the Mk.I-derived units that were such a feature of the south-eastern corner of England for decades.

The photographs date in general from the last 15 years or so, so the range of liveries runs from Network SouthEast to the newest privatised liveries. A couple of views shows stock in BR blue & grey, including the sole non-gangwayed subject in the book (a 4-EPB), and there are shots of the 'heritage' all-over blue 4-VEP at Vauxhall and all-over green 3-CIG on the Lymington branch.

The captions are clear and to the point, but the typographic insistence on boldening the name of the location may not be to everyone's taste. The photographs are presented in a generally east-west sequence, which echoes the westward spread of Mk.I stock from 1959.

For those of us who grew up with these hard-working, unsung units it's still hard to believe that they've all gone. But this book is a good memory-jogging exercise.

Great Western Pictorial

No.3 – The Tony Sterndale Collection

Sue Sterndale
Wild Swan Publications Ltd,
1-3 Hagbourne Road, Didcot,
Oxon OX11 8DP.

275mm x 218mm 102pp
Hardback £22.95
ISBN 1905184115

Tony Sterndale worked in the Drawing Office at Swindon Works in the late 1940s. It was a period when a number

of older locomotives were finally being withdrawn after prolonged wartime service and he was in a good position to photograph them with his compact Leica IIIB, around the Works and on the adjoining main lines.

This collection of Tony Sterndale's photographs is not only a record of the last days of the GWR and the first months of the Western Region but also of locomotive classes which did not survive to wear BR liveries, such as 'Bulldogs', 'Dukes', 'Metros', 'Aberdares', '3571' Class, and a host of tank engine types from the pre-Group Welsh railways.

There are several interior views of the Works, including 'A' Shed Machine Shop, 'O' Shop and the Drawing Office itself.

Shots of the Test Plant in use are of great interest, as are those of locomotives freshly outshopped in the early (and experimental) BR liveries.

Other WR locations were also visited including in South Wales and at Old Oak Common, Kensal Green, Bristol TM and other places.

This is an absorbing and unusual collection for students of the GWR and for modellers who are seeking an unusual time slot, ie 1949-50.

The Greater Genius?

A Biography of Marc Isambard Brunel

Harold Bagust
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics
LE10 3EY.

260mm x 210mm 160pp
Hardback £24.99
ISBN 0711031754

In the bi-centenary year of I.K. Brunel, this is a biography of his father Sir Marc Brunel whose influence and earlier experiments are considered by many to be the foundation of Isambard's engineering genius and fame.

The author narrates Sir Marc's life from his birth in France, through his struggle for recognition in Britain to his

Below: 4-CEP units plied the Kent Coast rails for almost as many years as the figures in the headcode suggest. With two sister units in tow, No.1561 leads a Ramsgate-bound service through Brixton on 25 October 1990.

Photograph: Frank Hornby.



ultimate success in the world of engineering. The peak of his career, for which he was knighted, was the design and construction of the Thames tunnel from Rotherhithe to Wapping, the first under-river tunnel in the world.

It was Sir Marc who first used the 7' railway gauge. He organized an early production line for mass-produced pulley blocks for Nelson's Navy, filed 18 patents and was responsible for many of the designs which Isambard developed and for which IKB is usually credited.

The book is comprehensively illustrated with both modern half tones and contemporary prints and engravings. The author's well-researched text is supplemented by details of Sir Marc's impressive range of patent applications.

This is a valuable work of reference, well presented.

The Somerset & Dorset Line

David Cross
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics
LE10 3EY.

280mm x 205mm 96pp
Softback £14.99
ISBN 0711030847

This album is the latest in the publisher's *British Railway Pictorial* series. David Cross has compiled a selection of his late father Derek Cross's photographs taken on the S&D in its final years, 1960-66. During that period David himself was a little lad, but he was privileged not only to accompany his father on railway photography trips, but also on occasion to stay with Ivo Peters and his son Julian at their home in Bath and even to ride across the Mendips in the Peters Bentley.

The photographs include all the favourite S&D icons, the double-headers, local trains and semi-fasts, the *Pines Express*, the Saturdays-only through trains, coal traffic and, sadly but inevitably, the last-day specials. Locomotives of course are equally iconic and feature 4Fs, 7Fs, 9Fs, SR Pacifics and, towards the end, a number of other Standard classes and GWR engines.

The choice of favourite locations does not disappoint and includes Bath Green Park station, Devonshire Bank, Wellow, Masbury Summit, Winsor Hill Tunnel, Cole, Templecombe etc.

A fourteen-page colour section is a delight, exhibiting unmistakably the

gentle tones of forty-year-old colour photography, providing authentic weathering information for modellers and, lest our retro-spectacles become too strongly rose tinted, reminding us of the all-over grime which often served as the true steam locomotive livery of the early sixties.

A couple of the captions merit comment: 1962 was the last year of the summer trains but not the last season of the 9Fs; also a Southern train at Bournemouth West is misidentified as a Bristol working. These apart, the book is a fine record of a fine route.

Engine Workings CD

Published by the Midland Railway Society and available from Andrew Cholerton, Highview, Roade Hill, Ashton, Northampton NN7 2JH.
£9.95 incl. postage.

Garth Ponsonby has prepared a CD-ROM of working documents showing the circuits (or diagrams as they were known) worked by BR engines passing through the Derby area during the Winter Timetable of 1959/60.

Garth's aim in undertaking this task was to ensure that examples of this type of typical operating document were preserved and the information made available to people who would otherwise never be aware of it.

By their nature, such documents are ephemeral, thrown out when the timetable finishes and these particular examples were very much working copies that had been in use for half a year when Garth 'rescued' them, and as a result the clarity is not always as good as it might be, particularly when the sheet had been manually altered.

The sheets were originally produced by cutting Roneo stencils on a typewriter in the then familiar way and printing them off on an office rotary printer. This produced a result which sometimes fell short of the standard which we would expect from a scanned or duplicated document today. For the CD, these originals have been scanned and saved in PDF format.

The CD has an introduction and an index. The index shows stations in

Below: doyen of the S&D 7F 2-8-0s, No.53800 leads a freight train south through Midsomer Norton c.1958.

Photograph: the late Les Pickering, courtesy Bob Brown.

alphabetical order, with train departure details set out in chronological order using the 12-hour clock.

Only Monday to Friday departures are shown, although generally in winters most Saturday departures were similar. A few freight workings are shown, usually as the return trip of a passenger or parcels working. Shunting locos are not shown in the index, but do appear in the actual engine workings.

Jack the Station Cat and the Tail's End Tickets

Alan Cliff
Gwasg Helygain Ltd, 68-70
Kinmel Street, Rhyl,
Denbighshire LL18 1AW
210mm x 145mm 32pp
Softback £2.95
ISBN 0955033853

This is the ninth book in Revd Cliff's JTSC series of stories for 5 - 8 year olds. As usual, half the author's royalties go to The Children's Trust which helps youngsters with severe disabilities.

This story tells of the theft of a priceless set of Llanberis and Sittingbourne Extension Railway tickets from Tail's End station. Jack, of course, recovers the tickets, with the help of Harri P. Otter from the local river!

Harri is a new character in this story, at least to your reviewer. and so is Henry the railway (Ford Anglia) delivery van and Vernon J. Toddington Ramsbottom, a railway enthusiast, also with a van. Many regular players are also present, including Aunty Buzz, Gareth the Cornish Railway Snail and Jack's nautical cousin Tom.

The story is satisfying and achievable to read for the recommended age group and, as always, is enlivened by Nigel Cliff's sketches and puzzles by Brenda Wyatt.

Stratford upon Avon to Birmingham (Moor Street)

Vic Mitchell and Keith Smith
Middleton Press, Easebourne
Lane, Midhurst, West Sussex
GU29 9AZ.
240mm x 160mm 96pp
Hardback £14.95
ISBN 1904474772

This is in the publishers' *Country Railway Routes* sub-series and includes also the Hatton to Alcester route. The area described is a largely GWR part of the Midlands but relief is provided by an ex-LMS 3F tank running into Alcester with a train from Evesham.

The nature of the routes described provides considerable variety between the once rural ambience of Henley-in-Arden, Shirley and other country stations, and the city-centre surroundings of Birmingham Moor Street. The latter elevated terminus, still extant and working, once possessed both locomotive traversers and wagon lifts and

is an example of extremely compact station design which would make an unusual and challenging model.

The OS map extracts are as useful for modellers as ever, perhaps particularly the urban areas such as Moor Street, Bordesley and Tyseley. At the latter place, the Birmingham Railway Museum is given two early photographs.

The Bembridge Branch Line

Peter A. Harding
Published by the author at
'Mossiel', Bagshot Road,
Knaphill, Woking, Surrey GU21
2SG.
210mm x 145mm 32pp
Paperback £3.50 + 50p P&P
ISBN 0955240301

This latest addition to Peter Harding's delightful series of light and branch railway booklets is a revised edition of his first on the Bembridge branch which was published in 1988.

The booklet follows the author/publisher's established style with card covers containing pages of high-quality paper with resulting very good photographic reproduction. In fact there are over fifty photographs in this edition, some of which have not been published before, spanning a period from the very early days to closure in September 1953.

For modellers, simple but useful trackplans are given for the installations at Brading, St. Helens (station and quay) and Bembridge. A photograph of the replacement of the small engine-release turntable at Bembridge in 1936 is of particular interest.

This is a valuable revised edition of the much sought-after original which has been out of print for many years.

Castle Cary to Durston

The story of a railway

Edited by Nancy Langmaid
Available from the editor at
32 Highfield Way, Somerton
TA11 6SQ
295mm x 210mm 148pp
Softback £10.00
No ISBN

Unusually, the Acknowledgments page tells us that this book is mostly the product of a group of ladies. Solid railway history is supported by the reminiscences of ex-railway workers, local residents and reports from many sources including the W.I.

It covers a period that saw the introduction of rail routes to this area of Somerset and the significant changes that occurred to the indigenous countryside. 2006 is the centenary of the Castle Cary to Durston line. The region is now well into another phase of its life, the railways having been reduced in status. This is all just within the scope of a very long memory.

Sometimes, books containing the stories of local individuals can be a little too personal to be of great interest to a general readership, but this is not



the case here. There is some overlap and repetition of some of the anecdotes, but they are recounted from different angles and reinforce each other to create a tangible and fascinating story.

Maps and documents are reproduced to a good standard and pave the way along the line and its country towns. The details of viaduct construction and other civil engineering works are described well and are illustrated by contemporary photographs.

The subsequent demolition of railway buildings is given equal attention as is the fate of some of the buildings and people during wartime. The continuing changes in human lifestyle form a thread running through the book that will not only be of interest to those who live in the area. The historian and modeller is supplied with operational and architectural information that might not be found elsewhere.

More books of this type would be welcome.

Severn Valley Railway

A view from the past

Michael A. Vanns
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics
LE10 3EY.

240mm x 170mm 96pp
Hardback £15.99
ISBN 0711025991

This attractive illustrated account of the pre-preservation SVR was first published in 1998 and reviewed in RM for December of that year. After introductory chapters describing the promotion and construction of the line and the motive power employed from the early days, the route is followed, calling at all stations, from Shrewsbury to Kidderminster. There is also a GWR map which puts the route in context with its railway neighbours and surrounding counties. The well-captioned photographs are all in black and white apart from those on the covers.

Although the book has not been revised, neither has the 1998 cover price, which in itself must be seen as an achievement.

Potters Bar to Cambridge

Vic Mitchell and Allan Mott
Middleton Press, Easebourne
Lane, Midhurst, West Sussex
GU29 9AZ.

240mm x 160mm 96pp
Hardback £14.95
ISBN 1904474705

This trip into Great Northern territory is a new addition to the publishers' *Eastern Main Lines* sub-series. It covers the route described by the title in the usual pictorial Middleton style. The intermediate stations encountered are Brookman's Park, Hatfield, Welwyns North and Garden City, Knebworth, Stevenage, Hitchin, Letchworth, Baldock, Ashwell & Morden, Royston, Meldreth, Shepreth, Foxton, and Harston.

Right: under a lowering sky, Class 317 No.317 369 arrives at Welwyn Garden City with a Kings Cross-bound service on 8 April 1998.

Photograph: Frank Hornby.

The pictorial journey is preceded by notes on the route's geographical setting, historical background and passenger services over the years. Gradient profile, timetables and OS map extracts throughout the book support the text and photographs.

As is usually the case with the Middleton series, the photographs span the period from pre-Group to the present day, and the railway infrastructure is given treatment equal to that of the trains themselves, much to the benefit of modellers.

The East Lancashire Railway

Mike Heath
Halsgrove House, Lower Moor
Way, Tiverton Business Park,
Tiverton, Devon EX16 6SS.

220mm x 230mm 144pp
Hardback £14.99
ISBN 184114 5246

This is the latest in the publisher's *Railway Moods* series of colour photographic collections depicting preserved railways. This time it is the turn of the ELR, dating back to 1846 and now a busy preserved line running steam- and sometimes diesel-hauled services between Bury Bolton Street and Rawtenstall. This is Mike Heath's fourth album in this series and, as before, the technical standards of the pictures are very high indeed. Nevertheless, we feel that many modellers, and enthusiasts in general, will feel that his work is too 'arty' for their purposes. Over twenty night shots in this collection alone seem to bear this out, but indeed the pictures and captions are quite in keeping with the *Railway Moods* of the title.

In any event, the book would make a splendid souvenir of a visit to this attractive and rather different preserved railway.

Railways Restored 2006

27th edition

Edited by Alan C. Butcher
Ian Allan Publishing,
Hersham, Surrey KT12 4RG.

235mm x 165mm 240pp
Softback £14.99
ISBN 0711031223

The very fact that this is the 27th edition of this guide to railway preservation (first published 1980!) should be all the assurance that prospective users require as to its usefulness and reliability. This edition sees a number of new entries, colour illustrations and a convenient 20-page timetable supplement.

The listing includes both preserved railways and railway and transport museums, and this year miniature lines



have been 'promoted' to the main section, together with the addition of a few more.

The entries give much information, including length of line, dates of special events, telephone numbers, OS map reference, access by public transport, facilities for the disabled, ticketing, and often a locomotive roster.

Now an institution, *Railways Restored* is an attractive and useful aid for those planning a 'preserved railway' weekend or holiday.

Hexham to Carlisle

Roger R. Darsley
Middleton Press, Easebourne
Lane, Midhurst, West Sussex
GU29 9AZ.

240mm x 160mm 96pp
Hardback £14.95
ISBN 1904474756

Here is another volume in the *Eastern Main Lines* series, but this time the predominant railway is the NER with the historical background of the Newcastle & Carlisle Railway and the Earl of Carlisle's Railway. The branches to Alston and Brampton are included, and the former has the additional interest of being the present-day 2' gauge South Tynedale Railway.

After introductory text on geographical setting, historical background and passenger services, the traditional Middleton pictorial itinerary is divided into five sections, namely Hexham to Haltwhistle, the Alston Branch, Over the Summit, Brampton to Lambley and Brampton Fell to Carlisle. The well-captioned pictures are supported by many Ordnance Survey map fragments, a number of which show basic track layouts and placement of signals and structures.

LMS Journal

Number Fourteen

Editor Bob Essery
Wild Swan Publications Limited
1-3 Hagbourne Road, Didcot,
Oxon OX11 8DP.

270mm x 205mm 80pp
Softback £9.95
ISBN 190518414X

In this latest issue of the high quality journal/partwork devoted to LMS matters, Editor Bob Essery leads with Part 3 of brother Terry's popular and authoritative series on railway practice *How it was Done*. The subject this time, *Primary Training on Bank Pilots*, gives

the reader an insight into what was actually required of a young fireman, and an idea of how he was trained for the arduous career which lay ahead.

Other subjects covered in this issue of the *Journal* include *The Stamp Medal* by Nelson Twells and Graham Warburton, *Cumbrian Engines in LMS Ownership* by Michael Peascod, *LMS Dining Cars in Scotland Part 2* by David Jenkinson, *Railway Work at Bemrose & Sons Ltd* by Cyril H. Sprenger, *Caledonian Railway Locomotive Valve Gear* by Graham King, *A Buxton Motor Train* by Michael Holland, and further instalments of *Once a Midland Man* by Ted Harrison and *By the Book* by Don Rowland.

Book Reviews and Letters complete another interesting and varied issue, and as always printing and production are first-rate.

Garden Railways

from the ground up

David Pratt
Published by the author and available from Garden Railway Specialists, Station Studio, Dept RM, Summerleys Road, Princes Risborough, Bucks HP27 9DT.
272mm x 205mm 92pp
Softback £18.99 plus £1.00P&P
ISBN 0955259800

This attractive all-colour manual deals with practically all the aspects of designing, building, operating and maintaining a garden railway in gauges 1, 3, G, SM32 etc. The subjects covered include planning and surveying, building bridges and tunnels and managing water, track types, track laying and cleaning.

Under the heading of motive power, both live steam and electricity are discussed, with analogue, and digital control described for the latter. Radio controlled steam and battery power are not forgotten. On the electrical side, a section is devoted to controllers, reed switches, semiconductors and various electronic aids.

Weatherproof buildings, accessories and figures are given a dedicated chapter, as is the subject of planting. The latter is supported with a useful list of suitable plants.

The colour photographs are of a high standard throughout the book and naturally come into their own when illustrating the inspiring gardens and railway systems described in the text.

If you have been considering building a garden railway, this book could easily influence an early decision.

DCC weekend at Pecorama



It was with great pleasure that we welcomed hundreds of visitors to our third 'Digital – As Easy As DCC' weekend, which was held on 10 and 11 June.

Once again we assembled together the UK's leading manufacturers and distributors of DCC equipment and products 'under one roof' for this unique event. This included, for the first time, Gaugemaster Controls and Hornby Hobbies, as the newest entrants to this market.

In our marquee, found within the grounds here at Pecorama, were model railway displays and trade stands for each of the manufacturers.

Throughout the weekend, the representatives were on hand to answer any queries that may have been raised regarding DCC. Visitors were encouraged not to be afraid to ask 'silly questions', as the experts were only too willing to help them understand more about DCC – after all, it's in their interest as well! In addition to this, we had a number of interesting talks and demonstrations taking place in our Lecture Theatre.

We are very grateful to all our exhibitors who have supported this event enthusiastically over the past three years.



News from DCC Supplies

DCC Supplies is pleased to announce that it is the official UK distributors for Pricom Products and Fantasonic Sound Scenes.

Pricom manufactures a DCC Pocket Tester that allows you to see the data on your track, find out why a loco will not respond, or troubleshoot. The DCC Pocket Tester is a complete protocol analyser and data capture device for the serious DCC user and provides full details of commands for on-board and accessory decoders alike. It also decodes the new analogue whistle packet and has an ops mode monitoring screen.

The Dream Player, also by Pricom, is a self-contained sound board which is not installed into a loco, but adds sound to the whole layout. The unit

includes a solid state player, isolated external input triggers and control outputs for activating automated layout devices or auxiliary functions. It allows you to record your own sounds and trigger them by any means, even a DCC decoder. By adding an amplifier and speakers, the layout can be immersed in realistic sounds.

Fantasonics produce large range of twenty-four ambient sound scenes using recording industry standard techniques. They are available on CD or SD memory card.

Full details, manuals and sound samples are available from:

DCC Supplies Ltd, Suffolk Lane, Abberley, Worcestershire WR6 6BE.
Telephone 01299 896198.
www.dccsupplies.com

Freightliner flat cars kits in 4mm scale

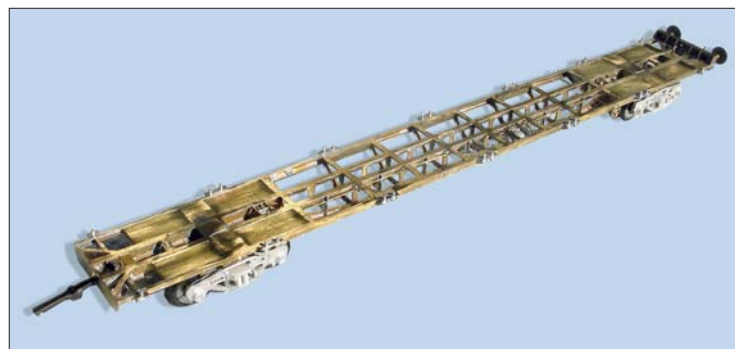
A new 4mm scale kit of the FGA/FFA container flat cars has been released by Colin Craig. The etched brass and pewter kit contains enough parts to build a highly detailed five-car fixed rake consisting of two FGA outer cars and three FFA inner cars.

It comes supplied with all wheels and couplings required to complete the set and a very comprehensive instruction manual. The manual

includes numerous exploded and three-dimensional diagrams to assist with construction.

The first batch of kits is only available for P4 and is priced at £145.00. Versions to suit EM and 00 gauges should be available by the end of the year.

Contact: **Colin Craig, Ty Cadwyn, 2 Chain Road, Abergavenny, Monmouthshire NP7 7BS.**



VR narrow gauge passenger stock

Steam and Things in Australia has introduced a coach kit in 7mm scale for those modelling the Victorian Railways narrow gauge.

Coach codes NBC, NC, NBH, NBHC, NAB(NAC) and NBB(NB) are listed. These are important to specify when ordering.

The kits are etched brass with

whitemetal castings for bogie sides and other features. Comprehensive instructions with drawings and photographs accompany the kit.

Including insured air mail, the kits are £85.00 from **Steam and Things, PO Box 277, Surrey Downs 5126, SA, Australia. Telephone (+61) 08 8265 1570.**



Manchester Show advance tickets

The Manchester Model Railway Show will be held from Friday September 29 until Sunday October 1 at New Century Hall, New Century House, Corporation Street, Manchester.

Times are 17.00-21.00, 10.00-18.00 and 10.00-17.00 respectively. Admission is £5.50 adults, £3.00 junior, £4.50 pensioner and family (2+2) £14.00. Advanced tickets may be pur-

chased by post only from August 1 until September 23 from **Robert Fysh, The Oaks, 57 Moss Lane, Timperley, Altrincham, Cheshire WA15 6LQ.** Please enclose an SAE with your remittance. Advance ticket prices: adult £5.00, junior £2.50, pensioner £4.00, family (2+2) £12.50.

Visit the website for up-to-date information: www.mrms.co.uk

SHOP NEWS

OPEN

GT Models, Attenborough

If you go to Attenborough station, on the former Midland west of Nottingham, and look under the footbridge, you will see GT Models. It used to be a Post Office, but this brand new business stocks the leading brands of modelling goods for die-cast and railway enthusiasts.

Philip Elliot and Andrew Slater ran a mail order model business for the past year, but have now expanded to the shop as business grows; the mail order still continues.

Unusually, they have launched a loyalty card. Customers who spend over £20.00 benefit from a



5% discount, or 10% if the purchase is more than £50.00.

GT Models, 221 Attenborough Road, Nottingham NG9 6AL. Telephone 0115 9225757. www.gtmodels.co.uk

Ffestiniog and Welsh Highland Railways, Porthmadog

This Porthmadog shop has started to sell model railway items again.

The shop concentrates on specialist narrow gauge models, mainly of FR and WHR prototypes. The range encompasses Peco, Parkside Dundas, Roco, Chivers Finelines, BAL Models, Chris Veitch, Langley, Wills, Ratio, Auhagen, Gaugemaster, Preiser and others. Most of the shop goods are 4mm, but the firm also sells Cooper Craft SM32 wagons and is the only retailer of John

Fozard ready-to-run and kit brass FR coaches known as 'Bug Boxes'.

Also available are railway books, DVDs, clothing and gifts. **Rheilffordd Ffestiniog Railway, Harbour Station, Porthmadog, Gwynedd LL49 9NF. Telephone 01766 516033.**

Contact can also be made via the webshop at: **www.festshop.co.uk** or by following the link from the main website at **www.festrail.co.uk**

Lochgorm Kits latest news

Further to our item in the February RAILWAY MODELLER about Lochgorm Kits, the firm has announced an etched brass kit for a Fox 8' bogie in 7mm scale. They are available at £12.00 for the pair.

Look out too for the body-only etch for the Highland Railway 4-4-0 'Loch'

Class locomotive priced at £85.00 and the associated nickel silver chassis kit at £45.00.

Send an SAE for a copy of the 4mm and 7mm catalogues to **Lochgorm Kits, 3 Broomhill Court, Keith, Banffshire AB55 5EL** or visit **www.lochgormkits.co.uk**

Model Buildings in 4mm

This Suffolk cottage industry produces a range of over thirty buildings in 4mm scale with more to come.

They are produced in very hard casting plaster then hand painted and weathered. Some N scale/2mm buildings will soon be added to the range.

This diverse collection ranges from

a small garden shed to a row of four terraced house fronts; something for many types of layout.

Contact the builder: **Mr.D.P.Halls. www.modelrailwaybuildings.co.uk** or by post to **294 Nacton Road, Ipswich, Suffolk IP3 9JH on 01473 273333.**

Large scale success

The Association of Larger Scale Railway Modellers Ltd. held a very successful day at the Rivermead Leisure Centre. Over 2000 visitors attended to see 22 layouts in various scales, over 85 traders, society stands, a bring-and-buy, lectures and an auction sale.

A new venture was a shunting display in 5" scale held outside, plus rides for children.

Pete Waterman presented three nebulisers, two to the Reading Hospital and one to a hospital in County Durham. These were provided by the Warley Charity Link which had a stand at the show to raise more money for another three nebulisers to be distributed next year.

The show next year is on May 12. For more information, call Michael Price on **07768 364052.**

Tower Autocoach in 7mm scale



The latest additions to the Tower Brass 7mm scale range will be four GWR/BR autocoaches. Two versions of the A28 featuring the GWR 7' wheelbase bogies will be available alongside the later A30 with 9' bogies.

Both the A28 and A30 will be available in both early and late versions. The autocoaches, when built in GWR days, had windows fitted at both ends. After a few years' service, it was found that coal from the bunker of the autotanks to which they were coupled kept dropping down and breaking the windows in the trailing end. The answer was to panel over the end. Both types remained in service in this fashion until the end of their working lives. The preserved A30 at Didcot has been restored to its original condition with windows at both ends.

The Tower Brass autocoaches come

complete with sprung buffers, screwlink couplings and include internal partitions. All that is required to complete them are seats, paint, glazing and transfers.

The unpainted coaches will cost £215.00 and Tower Models can supply them finished in any livery, complete with seats and glazing for a total price of £390.00. It is hoped to have these coaches available around October.

To accompany the autocoaches will be a 14xx Autotank available in both early form or as the later version with a topfeed. The price for the 14xx will be £399.99 unpainted and it is hoped to be able to show samples of this a little later this year.

Contact: **Tower Models & Co., 44 Cookson Street, Blackpool, Lancs FY1 3ED. Telephone 01253 623797 or 623799.**

George Smith receives MBE

Everyone at Dapol is proud to announce that Managing Director, George Smith has been honoured by Her Majesty the Queen with the award of Member of the Order of the British Empire in her recent Birthday Honours list.

The award was listed as 'for services to the community of Llangollen'. George has spent over twenty-five years within and supporting the community and has held positions such as Chairman of the Llangollen Round Table and Lord Mayor.

7mm Narrow Gauge convention

Saturday June 20 was the date of the 7mm Narrow Gauge Association's convention. Attendance was high at the Town Hall, Burton-upon-Trent where visitors, exhibitors and traders had a very successful day.

The winner of the Don Mason Shield for scratchbuilt locos was won by Tony Bond with his model of FR *Linda* (illustrated below). The John Stitson Shield for kit-based locos went to Frank Sharp and his three-truck Shay. The Don

Stoneham Trophy for freight stock was won by Don Mason for a fire fighting consist. The winner of the Monckton Wyde Shield for the best entry by a novice was carried away by David Wilmot for a diorama. Brandon Evans' *Rivendell* received the David Taylor Cup for the best layout at the convention.

The 2007 convention will take place on Saturday May 19 at the same venue.



Digital crane in 4mm now available



Brian Lovett is delighted to announce that the kit version of the very impressive working harbourside crane which he originally developed for his own layout will soon be available commercially from Rainford Models (see RM August 2005 for views of the development prototype).

He would like to record particular thanks to Andrew Crankshaw of Rainford Models for his participation and co-operation in this venture – without his input the project could not have been realised.

The kit consists of a large quantity of photo-etched brass and cleanly cast whitemetal parts. The castings are factory pre-drilled to ensure accuracy and ease for assembly.

The working version comes with all motors (high quality can types) and mechanical parts, gears, bearings, fixings, brass wire and rod, chain, rail, wheels, etc.

The model is superbly engineered – e.g. upper body runs on ball race.

Several different lifting attachments are available – as well as the conventional basic hook, also offered are a large claw, a large clam bucket, a giant clam bucket, a container lift clamp, and an electromagnet.

The instruction manual – an A4-size ring-bound volume of more than 100 pages – must be among the most comprehensive guides to construction of a

kit and the resulting model that we have seen. It is fully illustrated (with colour inkjet printouts of digital pictures that are more than adequate for the purpose) with photos showing parts laid out and labelled for clarity. In addition there are thorough parts lists to assist identification, step-by-step sequences to guide assembly, and actual size templates where parts need to be formed or trimmed to size. Assembly is divided into logical and manageable stages.

The booklet naturally also includes advice on the use of the crane as well as its construction, with weight limits indicated.

Note that the control panel is an integral part of the model and is included in the package. Assembly of the electronics is not required – this is already done. (Some wiring of the motors and lights in the crane will be necessary.)

Although the workings exploit digital technology (five decoders are used), the model is self-contained and does not need to be connected to a digital control system – it is fully independent and can be used on conventional analogue layouts.

Orders are now being taken: a deposit of £500.00 is required, with the balance due when the kit is ready for delivery, which should be within three to four weeks.

Kits are supplied in strong wooden packaging.

Cranes can also be provided (to UK customers) assembled and ready to use – contact the manufacturer for a quotation.

Prices: static kit – £595.00. Working crane kit, with two attachments – £1,695.00. Extra attachments – £19.95 (each). Extra etched sheet (ladders, railings, etc.) – £11.95.

Contact: **Rainford Models Ltd., Unit 34, Bingswood Industrial Estate, Whaley Bridge, High Peak, Derbyshire, SK23 7LY. Telephone 01663 719119. Fax 01663 719109. enquiry@rainfordmodels.co.uk www.rainfordmodels.co.uk**

New postage rates and rules

The Royal Mail introduces new postal rates in the United Kingdom from 21 August. This is not simply an increase (though, hardly surprisingly, that is the general effect!) but a major change in the way even basic letters and the smallest packets are assessed.

The postage charge will no longer simply be based on weight, but under the principle of 'pricing in proportion' the size and shape will also be taken into account.

The criteria seem to have been arranged so that envelopes holding common paper sizes will automatically fall into the next price band up – for example, it will not be possible to send even a single sheet of A4 (if unfolded) at the basic rate.

We know of one specialist society where the cost of sending their monthly A4-size newsletter (carefully calculated as to the number of pages and even the weight of the paper plus the envelope to be within the existing price band) will cost £1.92 per member per year more in postage.

Admittedly, the weight allowance in this band is greater so there is the possible benefit of the option of including more pages – presuming a voluntary editorial team can produce more!

Small packets will also be significantly affected – we were told of the case of a small box 25mm thick which will not go through the prescribed slot for a particular rate, with the result that the cost of sending it practically doubles compared to the previous charge for the same item.

It does seem that the increases will be most marked on smaller and lighter letters and packets.

The full implications will probably take some time to become apparent, though hopefully senders will eventually find ways of optimising their despatches.

So readers are requested to be sympathetic if society subscriptions rise and the cost of postage & packing on mail order purchases – especially of relatively small parcels – seems to leap.

Ace 'Terrier' in Gauges 1 and 0

The first kit in Gauge 1 from ACE is the LB&SCR Class A1 and A1X 'Terrier' 0-6-0T. The kit allows all the different versions to be modelled, including the loW engines and a model of *Stepney* which runs on the Bluebell Railway.

The chassis is 30thou etched nickel silver and the body 22thou brass. The price is £159.99.

The 0 gauge version of the Terrier is

also available. Other 0 gauge kits include the LNER Gresley K4 2-6-0 and the Southern Maunsell L1 4-4-0. They are £159.99 too.

4mm modellers will be interested in the GNR/LNER Ivatt D2 4-4-0, launched recently. This kit is £89.99.

Contact: **ACE Products, 7 Ringley Park Road, Reigate, Surrey RH2 7BJ. Telephone 01737 248540.**

Belfast to Dundalk First Class

First Class Simulations now has *Irish Enterprise North* as a new item in its catalogue of Microsoft Train Simulator add-ons.

The full route will be produced in two parts, this north section goes between Belfast and Dundalk, a journey of 55 miles. It is set during the period of 1995-2005. Featured is rolling stock ranging from the British-built Mk.II

stock to the French De Dietrich *Enterprise* stock, based on the Eurostar coach design. *Irish Enterprise South* will cover the stretch from Dundalk to Dublin and will appear later in the year. The add-on is £24.95.

Further information is available from **First Class Simulations, PO Box 586, Banbury, Oxfordshire OX16 6BY. Telephone 01869 338428.**

NRM news summary

Flying Scotsman: now completely dismantled for the first phase of the overhaul. Frames are stripped for crack testing. Work started on pipework, valve gear and bearings. The right-hand cylinder from No.60041 *Salmon Trout* is being prepared for machining to replace the existing cylinder. Wheels sent to Toton Depot for machining too. New copper firebox is progressing. V2 No.4771 *Green Arrow*: now at Great Central Railway in Loughborough after repaint in apple green. Running-in new centre big-end bearing. A load-tested run is scheduled from York to Scarborough in July.

G2 0-8-0 Super D No.485: brake cylinder diaphragms replaced prior to leaving for the North Yorkshire Moors Railway where it will operate until the end of July. BR Type 3 Class 37 No.6700 (37 350): coolant and lubrication problems meant that it was unable to attend the NYMR diesel gala in May. Currently awaiting repair. Class 08 diesel shunter No.08 911: work progressing towards main line certification to enable its use for yard-to-yard shunts during Giants of Steam operations. Currently in the paint shop to receive a livery to identify it specifically as part of the NRM's workshop equipment.

City of Truro No.3717 (3440): winter maintenance programme completed during April. *Gladstone* No.214: minor cracks in the firebox cladding repaired to meet the standards required for static display at the NRM.

Other news: rotten timbers replaced in the replica Liverpool & Manchester Railway carriage. When completed, it will carry passengers behind *Rocket* replica.

Eustace Forth and *Rocket* replica underwent repairs for summer operations. *Eustace Forth* left NRM to work at Locomotion, the NRM at Shildon. Carriage pest control in progress at Shildon and York to prevent moth damage.

NRM Workshop is preparing for the Giants of Steam operations hauled by *Green Arrow*, *Sir Lamiel* and *Lord Nelson*.

The Scarborough Spa Express will run every Tuesday with the help of the 5305 Locomotive Association which operates *Sir Lamiel* and the Eastleigh Railway Preservation Society which is restoring *Lord Nelson*.

The NRM will also operate The Hadrian Express, The Dales Discoverer, The London Lights Express, The York Festive Flyer and The Westmorlander. An electronic power controller was fitted to the Gresley Buffet car to enable the light levels to be reduced. This should reduce heat generated by lamps and potential light damage to the interior.

Work is underway with the storage of collectables, the NRM library and soon the photographic collections prior to the Search Engine building works. The main construction work should be completed by July 2007. Opening date for the new library and archive is anticipated to be October 2007.

Website: www.nrm.org.uk

New from West Somerset Railway

A new leaflet from The West Somerset Railway could be interesting to modellers. It gives details of toy and train sales, The Railway Modellers Club, The Exmoor Modelling Club's exhibition at Minehead, The Taunton Model Railway Group and the RailEx Exhibition at Richard Huish College, Taunton. The Station Shop at Bishop's Lydeard is a specialist model shop with a wide variety of stock.

Other events include a Steam Fayre

and Vintage Vehicle Rally, CAMRA Real Ale Festival, Autumn Steam Gala, Grand Trains Extravaganza and, in good time, Christmas Trains!

There is also a leaflet about the combined ticket scheme between the West Somerset and the Lynton and Lynmouth Cliff Railway and Lynton and Barnstaple.

If you would like these leaflets, call 01643 704996 and they will come in the post.



Missenden Abbey weekends

After the last, very successful railway modellers' weekend, three more weekends are planned.

Locomotive kit construction, covering such topics as etched chassis construction (see photo) will be on October 27-29. Tutors will be Bob Alderman (covering 7mm scale) and Tony Wright (4mm). The course on electronics for railway modellers is on January 26-28 2007 and the railway modellers' weekend will be on March 16-18 2007. These seem a long way

off, but if you would like a place, book soon. The places are available on a first come, first served basis. Bear in mind that the last course sold out in record time.

The courses are very practical and provide uninterrupted modelling. Good food, excellent accommodation and a well-stocked real ale bar add to the atmosphere.

Contact C.J.Langdon on **01923 854784** or e-mail cjlangdon@chrasco.co.uk for details.

G.P. Middleton 1924-2006

George Peter Middleton was born into a railway family in Middlesbrough and his uncle made 0 gauge clockwork NER locomotives. Peter, as he was known, served in WW2 in the Home Guard and then joined the Royal Signals when old enough. He went to India with the regiment and returned before partition. Peter joined the District Engineer's office at Ipswich on the LNER, where his father was Station Master. In 1952 following the Harrow accident he became part of the team that developed the AWS system.

He worked closely with S.C. Pritchard of Peco and this co-operation continued when he left the railway to establish Highfield Models in 1965. He

was commissioned by Mr Pritchard to make Belah viaduct in N gauge for Pecorama and this model featured on the cover of the January 1965 issue of RM. He also worked on the Peco Hymek, dock tank and Fairburn tank in N. Other brand names he used were Cameo and Thornton.

Peter always had time for visitors to his North Yorkshire workshop in the dales countryside – if they braved the German Shepherd dog! He leaves two children, Stephen Peter, who is proprietor of Stately Trains, and Jane Elizabeth.

Editor's note. We are grateful to Stephen Middleton for the foregoing obituary.

Corgi Club celebrates

The official Corgi Collector and Aviation Archive Clubs attract members worldwide, all subscribing to a regular magazine. 2006 sees Corgi celebrating fifty years of diecast model manufacturing with birthday events taking place throughout the year, which members are welcome to attend.

Other benefits for members include two catalogues a year, listings of aircraft and Original Omnibus Company

product from their inception, annual exclusive Club model and discounts from selected retailers.

Further information about joining the Clubs, subscriptions and availability of Club models, contact **Susan Pownall, Corgi Collector Club, c/o Corgi Classics Ltd., Meridian East, Business Park, Leicester LE19 1RL. Telephone 0870 607 1204** or send an email to:

susie@collectorsclubs.org.uk

Bachmann Brassworks 03 for 7mm

Four versions of the Class 03 diesel shunter have been released in 0 gauge by Bachmann Brass. It is available with flower pot or cone chimneys and with or without air tanks. The unpainted brass model retails at £337.50. Painted versions will be available later.

230 Class 03 shunters were built at Doncaster and Swindon between 1957 and 1962. They were used on all regions initially, but were later concentrated on the Eastern and London Midland regions. Eight Western Region locos allocated to Landore (Swansea) were fitted with cut-down cabs for working between Burry Port and Cwmawr which had a restricted loading gauge.

Weighing only 30 tons, the Class 03

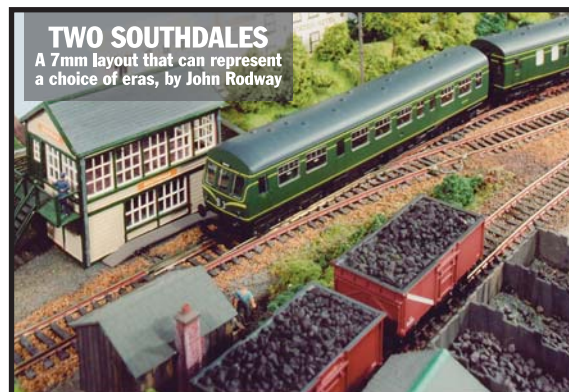
could be used on lines with severe weight limitations. 51 have been preserved and a number remain in industrial use in Belgium, Italy and the UK.

The locomotive can be ordered from any Bachmann stockist.

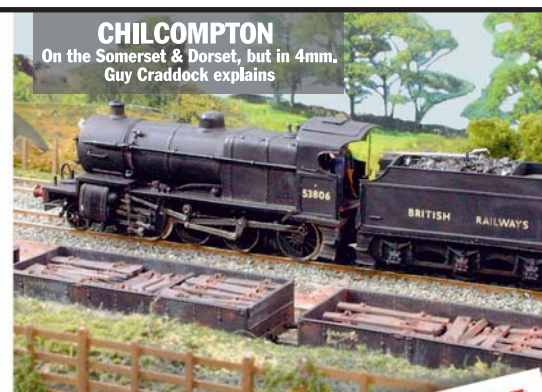
Richard Parker

As this issue closed for press, we were saddened to learn of the death of Richard Parker, Exhibition Manager of the Exe Model Railway Society. He was 63. We hope to publish a fuller obituary

in due course, but in the meantime anyone with correspondence to send to Mr Parker is asked to address it c/o **Dave Harding, The Model Shop, 4 St. Davids Hill, Exeter, EX4 3RG.**



TWO SOUTHDALES
A 7mm layout that can represent a choice of eras, by John Rodway



CHILCOMPTON
On the Somerset & Dorset, but in 4mm. Guy Craddock explains

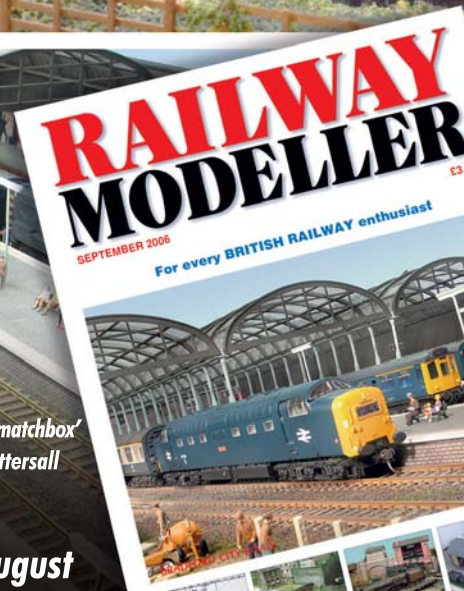
BRADFORD CITY ROAD
West Yorkshire in the 1970s in 00,
by Neale Burrows

Coming next month

- **GOG GOLDEN JUBILEE** *The origins of this society, by Jack Ray*
- **8750 PANNIER-2** *Chris Gwilliam completes a Scorpio 7mm scale 'matchbox'*
- **L&YR 2F 0-6-0ST** *Aspinall tanks drawn and described by Ian Tattersall*

plus all the regular features

September Issue - Out Thursday 17 August



Porthmadog show

The star of this year's exhibition is the work of the late Don Boreham. His narrow gauge, 16mm locomotives and stock will run on *Merioneth Town* (Cooper Hire MRC) together with a display of earlier, differing scale narrow gauge items.

The large list of layouts also includes those in 0 gauge, EM, 00, N, 5.5mm, HOe, 009, 4mm standard and narrow gauge in British, American and Continental outlines.

It will be held over the weekend of August 8 and 9 at Glaslyn Leisure Centre, Nr. Cambrian Coast Railway Station, Porthmadog. Opening hours are 11.00 until 17.00 Saturday and 10.30 until 16.00 Sunday. Admission is £4.00 adults, £3.00 for senior citizens and children.

Details from **Vaughan Glynne Jones** on **01766 522739** or glynne6@glynne6.force9.co.uk

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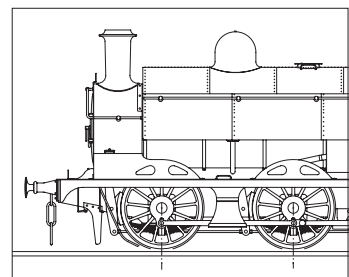
BRADFORD CITY ROAD
OO Terminus in 70s West Yorkshire



TWO SOUTHDALES
A Tale of Two 4mm Layouts



CHILCOMPTON
OO Gauge Somerset & Dorset



DRAWN & DESCRIBED
4mm Scale L&Y 2F 0-6-0ST

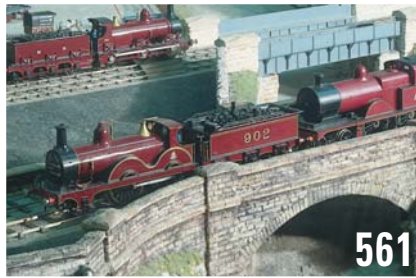




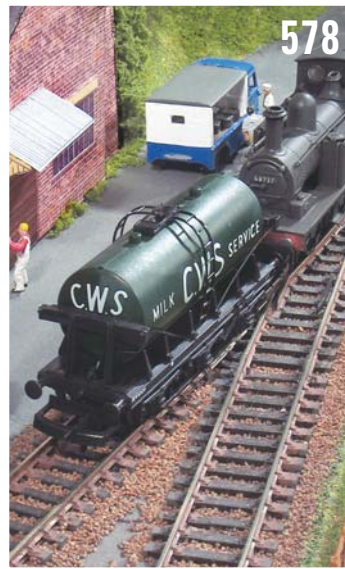
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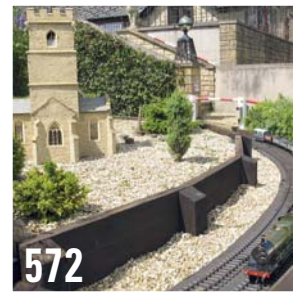
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Published on the second Thursday of the preceding month.

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Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

General & Advertisement Manager JOHN KING

Advertisement Assistant SUE DAVIS

Classified Advertisements NICOLE CHARLTON

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Black gold

Across many decades railways and the transportation of coal have been linked closely.

Today, much of the coal is imported, and carried in efficient, high-capacity bogie wagons hauled by equally efficient diesel traction. Not so long ago, however, things were quite different: long strings of four-wheel minerals carrying home-mined coal around, 12 tons at a time. Before the Great War, places such as south Wales extracted and exported so much tonnage worldwide that the nickname, above, was apt indeed (if not necessarily for those who did the extracting...).

In model form long coal trains are so impressive, especially in the smaller scales. The writer well remembers seeing Chiltern Green at a late-70s EUFMO, and being impressed no end by the long, slow procession of tiny private owner wagons. A layout does not have to be as sizeable as CG to convey the coal industry and its interaction with the railways, as Richard Bardsley demonstrates with his compact Hilltop Colliery layout suggestion elsewhere in this magazine. He also illustrates the changing wagon scene, progressing from POs through 16-tonners to HAA hoppers.

Away from the Valleys, and the midlands and northern coalfields, many other less-famous parts of the country had thriving collieries, such as Somerset. Over the years, the region supported as many as 80 collieries, but the last one closed in 1973. Bob Petch has created a loft-based 00 system based around the coalfields in the north of the county, and describes the results on pages 564-567.

From PO days to current this source of traffic offers a thick seam of inspiration for the modeller, so get digging!

Peco exhibition – reminder

This issue will be catching your eyes only a week and a half or so before our Diamond Jubilee model railway exhibition, to be held on the Sunday and Monday of the August Bank Holiday. Full details were published in last month's issue, and are repeated in Societies & Clubs herein, so come along and enjoy not just the exhibits, but our own permanent model railway exhibition, the Beer Heights Light Railway – all the locos are planned to be active – and the attractive Pecorama gardens, now with a new grotto feature. All this and live jazz too!

Talking of jubilees...

This month marks the Golden Jubilee of one of the premier scale societies in our pastime, the Gauge 0 Guild. To mark the occasion, the Guild's founding Chairman, Jack Ray, has penned a short piece (pp.561-563) on the background to the Guild's formation. Jack will be well known to many through his famous outdoor layout Crewchester: he has provided an account of the setting-up of the Guild fifty years ago. If you have thought about moving into 7mm scale, the Guild's Convention at Telford on 9 and 10 September – details of which are also in Societies & Clubs – is a must-visit.

With regard to Telford, and also to take place a short time from publication date of this issue, the Exhibition Centre will be the venue for the attempt on the world's longest train pull, details of which were given in last month's issue. The dates for the diary are Thursday 24 and Friday 25 August. So go along with a wagon or two to help out and be part of a world-beating effort! See last month's letter page (520) for contact details.

Southern Electric RTR

Elsewhere, in the news section, we have a report on the 2006 Bachmann Open Days, held over Sunday 16 and Monday 17 July, for the benefit of retailer and press alike. Several new items and developments were revealed, but the best bit for us Southern Electric devotees is the forthcoming 4-CEP unit in 00. It's not the first RTR SR EMU of course, but it will be a fully-21st century one, particularly given the high regard in which the firm's BR Mk.I fleet is held.

We cannot help but think that, in due course, a version of the 4-CEP (and other types) might join the Graham Farish N gauge range. The size required to model the multiple-portion aspect of the SR electric multiple unit scene is quite great in 00 (think Faversham, or Ashford, in CEP-land) but in N not great at all. Out with the graph paper, tape measure and sharp pencil...

Cover: An MLV scoots through Bedlam Heath as a Class 33 finishes shunting.

Photograph: Steve Flint, Peco Studio.

Bradford City Road

4mm scale 00, set in 1970s
West Yorkshire

A gentle reworking of history and a classic Cyril Freezer track plan, combined by
NEALE BURROWS.

Back in November 2004 whilst at the Hull Exhibition I was looking at one of the new Bachmann DCC starter sets and wondering what I could build to justify buying one. The fact that it was British outline was a radical departure from my norm. I usually model US outline, and my knowledge of British prototypes is limited. After talking to a fellow club member and friend (Roger Epps) we discussed building a small Scottish layout set in the 1970s diesel period, and with this in mind the set was purchased.

At this same exhibition I also revealed our plans to Roger Nicholls of the Wakefield Model Railway Society, who said that if we got it built we could show it at the 2005 Wakefield exhibition, then 12 months away.



▲ The evening Pullman awaits signal to depart after train 2M51's arrival.

▲ A Class 20 waits with a trip working, formed of an empty bogie bolster for the DMU to enter the station.

Photographs by Steve Flint, Peco Studio.

He always likes to get them first. We now had a deadline but no real plan. So a few Friday night sessions and a couple of beer mats later, our Scottish layout became a northern dock layout on the premise that Scottish had mainly been done. The dock layout proved to be a problem as it began to become big with no real variation to the operation. A few more Friday night sessions and we found our plan changing again but this time to a more local theme, working on the West Yorkshire area, still in the 1970s and blue diesel era. The concept was to build the layout with the flavour of a city terminal with some

goods and parcels traffic, and commuter DMUs with a few intercity services thrown in for good measure.

So how to get all that and make the layout fit into your average estate car? The transport of a layout is a big factor. I think a reasonably-sized layout needs to be transported and erected easily, thus making it affordable when offered for exhibitions. Van hire and fuel cost become a big factor for exhibition managers at today's ever-increasing rates.

After all this brainstorming we were now nine months away from the planned debut at Wakefield and still had no track laid.

The Layout

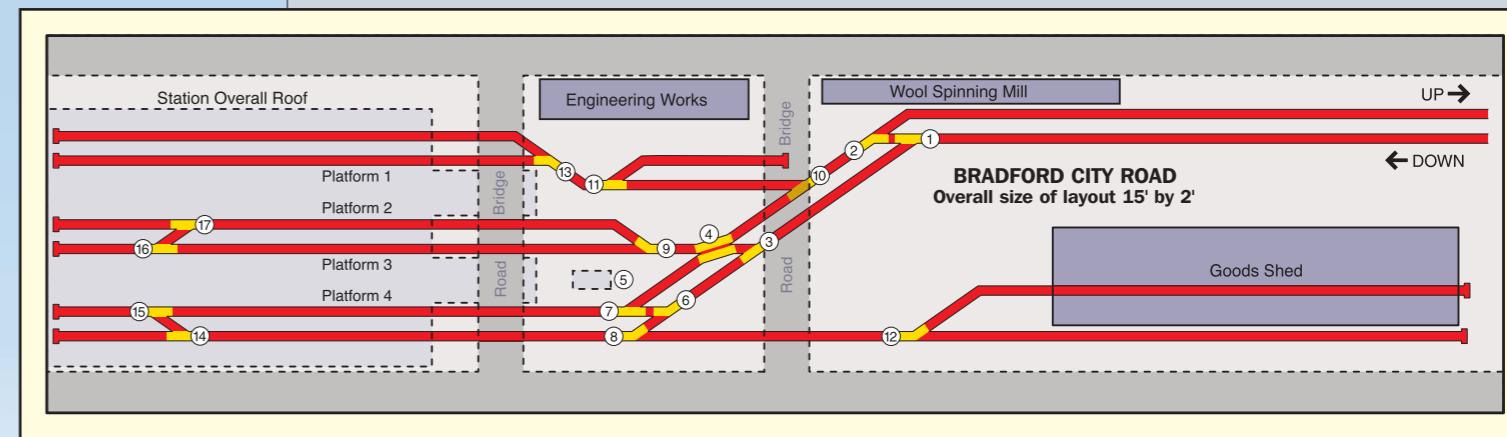
The concept of the city terminal was the result of looking at the history of Bradford's two main stations, Exchange (the old station) and Forster Square, but we did not want to model either, as this would be an enormous construction job and would take too long.

This is where the modeller's licence comes into play. If history had followed a different path and the Great Northern Railway had decided not to connect with the Lancashire & Yorkshire Railway and build the Exchange station, but went on its own and built a passenger terminal alongside the company's own goods depot at City Road, then the outcome would be a third station in Bradford; see attached map. This would also foil the purists and perfectionists who decry wrong doings.

After scribbling many plans and browsing all the track plan books in the club library, one plan always kept coming back. This was *Minorities* by CJ Freezer, published in the Peco book *60 Plans for Small Railways*. This was our basis for the terminal and apart from a couple of extra sidings on each side and the addition of goods sidings it is very much the original plan. The average

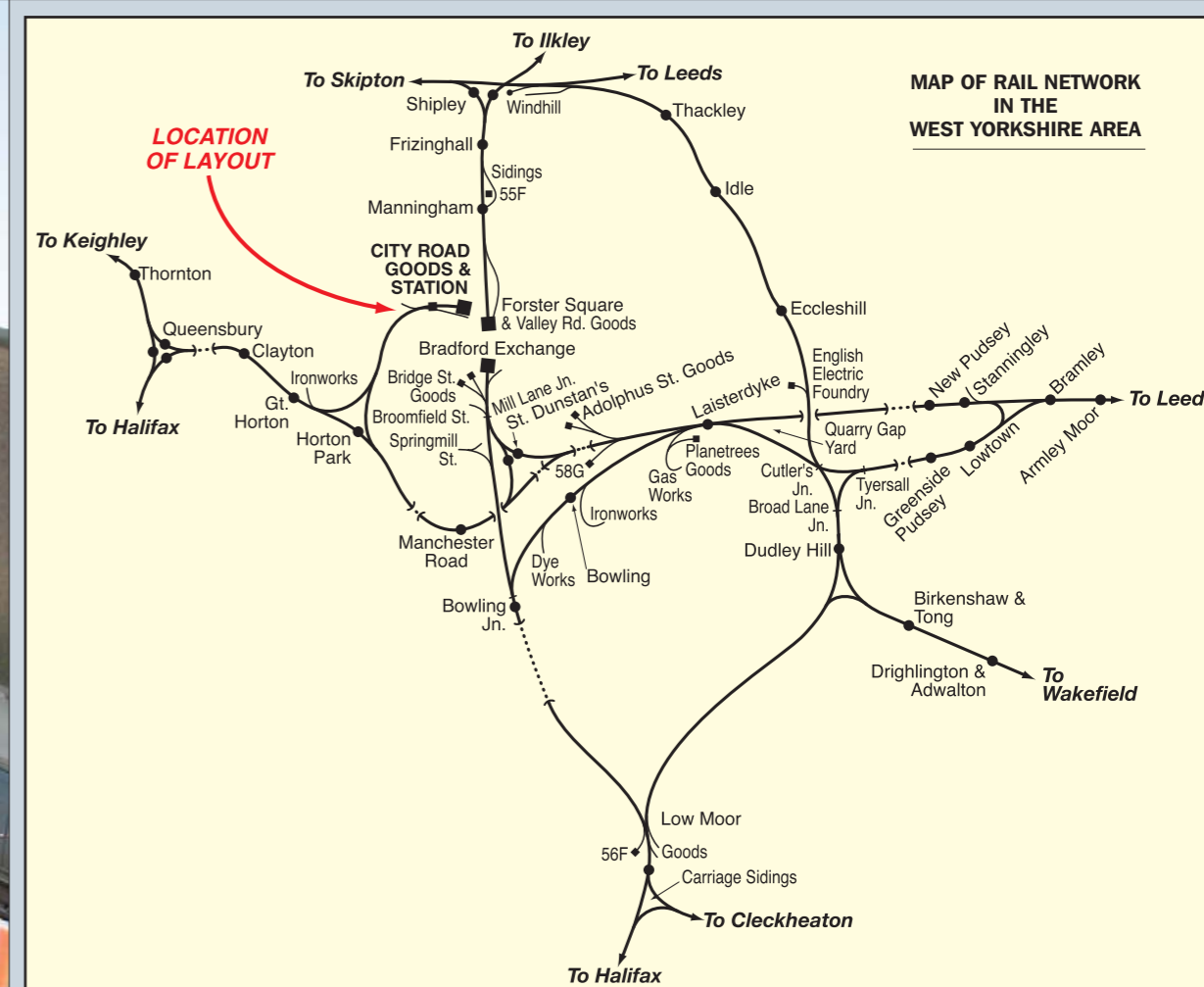


▲ A porter loading parcels onto BRUTE trolleys from a recently arrived train.



▲ D7675, on a trip working has just dropped its brake van in the station and prepares to collect its train from the goods shed.

▲ Looking across from the road bridge as an 08 shunts parcels stock and a 110 departs with a local commuter run under headcode B2.



◀ View across the end of the station concourse.



size of most estate cars will allow a baseboard length of about 60" (1.5m). Therefore we planned to have two scenic boards and a fiddle-yard to give an overall length of 15' (4.5m) and width of about 2' (600mm).

Standard frame baseboards were built with plywood tops covered with cork and sealed with masonry paint. The framing was with 2" x 1" timber and the outer frame was 6mm MDF to give a smooth backscene and a strong rigid square box.

The legs were made integral with 2" x 3" timber, which allows all the boards to slide into the car on their backscene sides without having to worry about stacking legs and bracing frames. The boards are joined by 10mm bolts and T-nuts. This method uses a threaded T-nut and a non-threaded T-nut with the bolt sliding through to engage the thread on the opposite board and pull them together. The fiddle-yard is a basic train turntable. As this is a terminus layout trains have to be turned to run back to the station with loco at the front, so to avoid handling stock the



The advantage of using 10mm bolts and T-nuts is that when setting up at exhibitions all you need is a socket set and cordless drill as all bolts are the same size. For simplicity power to the light fittings is connected using standard computer power cables of the type found on monitors. The cable is cut in half and wired to the light fittings' connector block so that the male plug is fed out one end and the female the other end. The power is then connected to the female end with a PC power cable and the light fittings connect through to the next fitting along the layout; a simple daisy chain. This means only one 13 amp socket is required and any number of fittings can be joined together with ease and in any order.

The legs fold out from under the baseboard and lock in place by metal rods. In order to compensate for uneven floors a door stop on a 10mm bolt can be screwed up or down on each leg.

The real estate

As Bradford City Road is a fictitious station we had to have a reason for its existence. It is located along from the Great Northern goods depot and just to the west end of Bradford city centre. This means that the track is down in a valley setting so we could feature the trademark stone retaining walls found at the other two main stations. These were built using Slater's 7mm stone sheets that give a coarser effect and dominate the track below. The tops were capped with strips of balsa wood cut to form the large shaped capping blocks. The complete wall was spray-painted with acrylic desert yellow with a brown tint for the classic sandstone look, then oversprayed with varying strengths of NATO Black (this is more a greyish black) to give the soot-stained effect of 1800-1900s pollution from coal-powered factories and of course the passing steam trains.

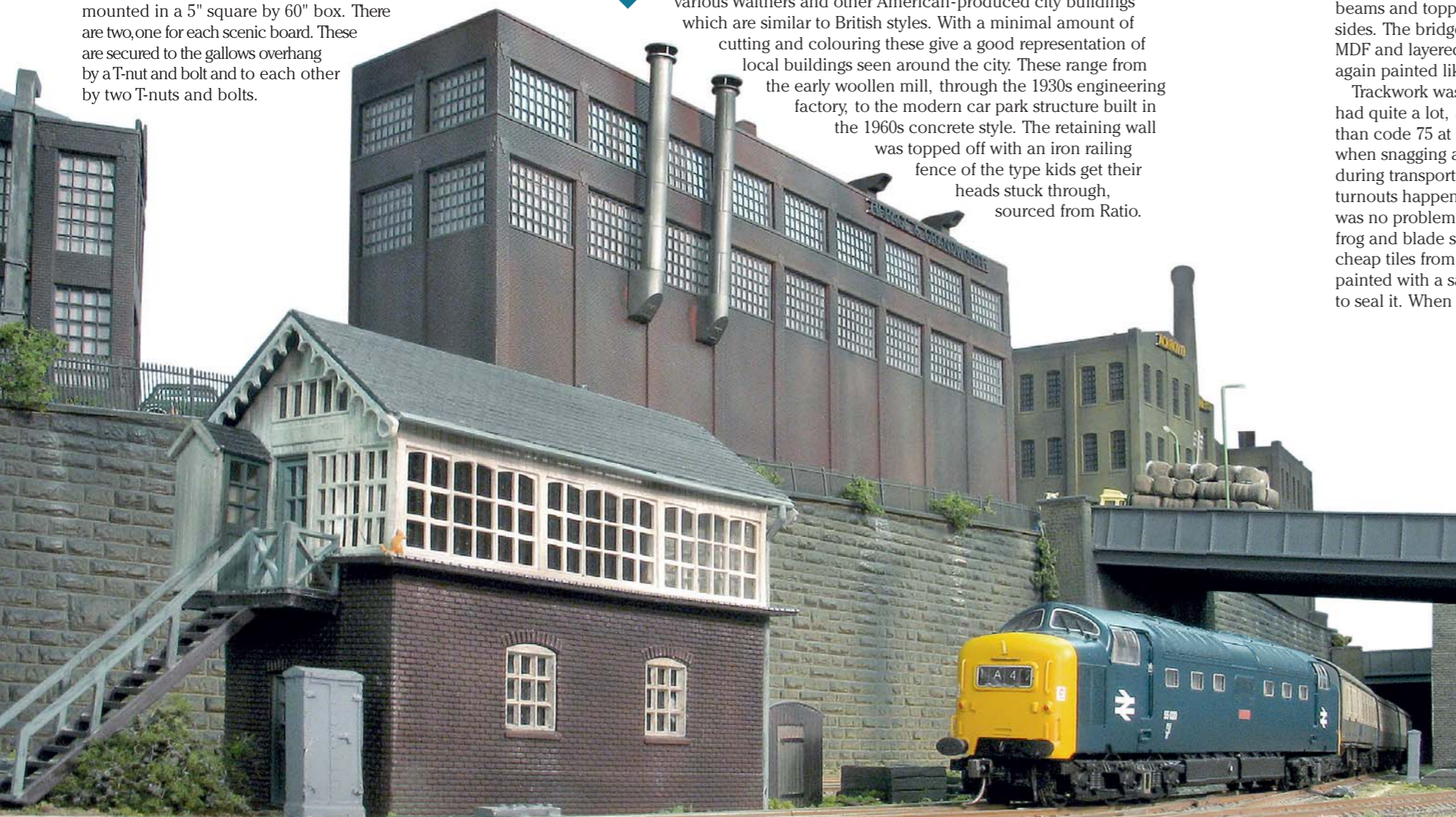
The backscene and low-relief buildings were built from the various Walthers and other American-produced city buildings which are similar to British styles. With a minimal amount of cutting and colouring these give a good representation of local buildings seen around the city. These range from the early woollen mill, through the 1930s engineering factory, to the modern car park structure built in the 1960s concrete style. The retaining wall was topped off with an iron railing fence of the type kids get their heads stuck through, sourced from Ratio.

whole 10-track fiddle-yard is pivoted in the centre and can then rotate 360 degrees.

All exhibition layouts require lights and these are a fairly simple addition if they are planned during the construction of the layout. I used a simple gallows-style frame that hooks on to the backscene and locks to the baseboard frame again by a T-nut and bolts. The lights are 4" tube fittings mounted in a 5" square by 60" box. There are two, one for each scenic board. These are secured to the gallows overhang by a T-nut and bolt and to each other by two T-nuts and bolts.

▲ A view looking from the station roof over the canopy to see the busy road traffic on the bridge and a DMU on train 2L20 arriving.

▼ The signalman's cat, perched on the walkway, watches the arrival of 55 020 Nimbus with the afternoon Pullman from London.



◀ Class 110 DMU departing as 37 308 arrives to collect a parcels train.

down and feed wires soldered on, the whole of the track was sprayed with an oxide rust colour. Ballast was sprinkled on using Woodland Scenics cinders and rust browns mixed together and glued in place with 45/45/10% glue mix (45% PVA, 45% water, 10% detergent).

Outside the track area dark sand was used along with various grass and earth colours, again Woodland Scenics. This being a 1970s layout it was deemed that the signals would have been upgraded to colour lights and eventually the signal box would give way to a main area power box, so cable trunking would be needed. This comes in the form of plastic product from both Ten Commandments and Unit Models. The cork bed was cut and the trunking dropped in and glued running to all signals and to the turnout motor castings (from Knightwing).

The station

A city warrants a grandiose terminal and as the other two Bradford stations were

impressive in size, we couldn't let the side down. The platforms were straightforward: they use a timber base, edged with Metcalfe stone platform sides and covered with that firm's tarmac tops. The canopy was formed using the Peco Manyways overall roof (4.5 kits) but raising the pillars to give a higher roofline so as to allow viewing through the supporting wall into the station concourse, and give a better feel of a larger station complex towering over the platforms.

Our station is also a parcels facility: the back wall represents the parcels warehouse, so an abundance of BRUTE trolleys and boxes stacked around can be seen by the concertina door which leads through to the storage shed. The platforms are completed with benches, handcarts and people awaiting their trains. The main building to the rear is built from chopped-up Metcalfe stone station kits; there seems to be a lack of good plastic stone buildings.

Trains

Not having modelled British outline before I needed a crash course on train formations and the types of stock required to model the 1970s period. Armed with a list I set out to acquire

There are two roads that cross the railway on bridges which were constructed from a plasticard deck supported on Plastruct I-beams and topped with Wills Vari-girder sides. The bridge supports were made from MDF and layered with Peco stone sheet, again painted like the retaining walls.

Trackwork was all Peco code 100 (I still had quite a lot, and code 100 is a lot stronger than code 75 at the edges of the baseboards when snagging and bumping can occur during transport and assembly). All the turnouts happened to be insulfrog so there was no problem having to insulate potential frog and blade shorts. Track was laid on cork; cheap tiles from a DIY store. This was painted with a sand-coloured masonry paint to seal it. When all the track was pinned



▲ Ackroyd's wool-spinning mill is kept busy with regular truckloads of wool bales. The models are plastic kits from Walthers in H0 scale, but are still large structures in an O0 scene.



◀ The goods shed is kept busy as large volumes of wool bales are delivered for local mills. The structure was made from an assortment of Metcalfe printed sheets.

what was available both from new and second-hand, along with stock I could borrow from club members for exhibition running.

The first acquisitions were a couple of second-hand Hornby Class 110 DMUs in blue, and a white refurbished-livery unit. As my layout is DCC-controlled I had to fit decoders to the DMUs: this was not a problem; I use Lenz Silver series decoders. The main problem was the size of the standard wheel used on these DMUs and the width of the tyre; it was wide enough to short out on insulfrog turnouts. The decision was taken to re-wheel, and at the same time to replace the motor units for Black Beetle motors. These are the pinpoint-axle type with 12mm disc wheels, along with brass bearings in the bogie journal boxes. They just clip in place after cutting the bottom of the bogie frame away. Contact strips were added to the front bogie and the decoder was fitted to the under floor space. Extra weight in the form of model aircraft stick-on metal weights were added above the motor bogies to aid traction. Front end pipes and replacement buffers from A1 Models were fitted, and the underframe details were painted and weathered.

The decoder was programmed with the last two numbers of the headcode, which is the same at both ends. The feedback was switched on and the models have run flawlessly since. This procedure was applied to all the Class 110 DMUs and to the others from club members as well. As the majority of traffic on the layout is DMU stock it had to perform well, so thanks to Branchlines for obtaining the Black Beetles from Australia. It was a worthwhile investment.

The other passenger trains consist of a Pullman (worked by a Bachmann 'Deltic') and a trans-Pennine run (hauled by a Class 40). Both these are formed of Bachmann Mk.I coaches. The other main line coaching

The Class 04 station pilot shoves parcel stock into the end road as a DMU departs with a local service, carrying headcode B2.



▲ A Class 20 brings a local goods train in to drop off vans at the goods shed.

stock forms the parcels trains. These are a common sight on the layout and are found regularly in the parcels bays. They are mainly hauled by Class 25 and 37 locos, also by Bachmann. Parcels feature in the timetable regularly so a couple of station pilots are kept busy moving the coaches to release the locos for the next trip. This is usually done by the 08 or Class 20s found idling nearby.

All the locos are fitted with DCC decoders, again the Lenz Silver series type. Most were plug-ready so it was a straight 'plug and play' operation. All locos are identified by their D number or last four digits on the TOPS number, unlike the DMUs headcodes. The only problem found with a lot of the newer stock was with the NEM coupler pockets. I am using Kadee® couplers on all but DMU stock and very few NEM sockets come close to the official standard, especially for height, so there was some cutting and drilling to get the coupler heights all correct so that the track uncouplers worked correctly.

The goods shed is basically for the storage of wool bales (a common west Yorkshire industry of this era) and is served by van traffic with a few opens and flats for the engineering companies around. This stock is of various ready-to-run and kit-built manufacture. There is a run-round track at the front of the layout to receive and despatch trip workings.

Control

I think that a layout should be as simple to control as possible and should be free from requiring excessive thought and concentration to run a train from one end to the other. It should also be capable of being run by several operators or just one; good for lunch times at exhibitions.

Using the conventional system for cab control would mean having a control panel and a mass of wiring to it with block sections and switches, and the common problems associated with this like stopping on a section gap or leaving a section active etc. I want to keep it simple (a bit like the operators), and since I started using DCC over ten years ago it was a safe bet I was not going back to the old methods. The advantage of using DCC is that the system is not just dedicated to the one layout. It was always the case when building non-DCC layouts that the main obstacle which non-electrically minded people had was wiring up the sections and control switches, and then having the end result dedicated to the one layout. With DCC control the only wiring is the plug and socket to the layout's track bus and the control bus for the cab controllers. All the turnouts are wired locally to each individual baseboard via the accessory decoder so that the only connections across the baseboards are just two simple phono plugs: one is for the track feed bus which supplies track power and signals from the command station to all the

The evening Pullman leaves City Road for London.

track (which is constantly live); and a second plug for the 16v AC power to the decoders for turnout control.

Because only two connectors are used, the command station can be connected to the layout at any baseboard joint. This is useful when doing work on only one board on the workbench and testing. The cab controllers are plugged into a series of panel-mounted sockets along the front edge (RJ-11 type) and allow a number of operators to connect to the layout. The absence of a control panel means that a track diagram is required to identify the numbers of the turnouts for operators with poor memories. The trains can be worked by a number of operators anywhere along the layout, or by one operator from end to end.

A feature of DCC is the adaptability of the system. Most of the equipment is just plugged in and ready to use, i.e. handheld controllers, radio controllers, and a personal computer. A PC is a valuable tool for layout operation with DCC. Using one of the commercially available packages (from Railroad & Co) you can build a track diagram and run trains just by simple mouse clicks on a screen, and as more DCC products become available they are just added into the system. If the track arrangement is changed on the layout it is just a matter of editing the screen diagram and renumbering the turnouts; you're done in minutes, try that with a conventional panel.

My layout uses an old laptop PC so that the operator can select track routes on-screen whilst using the handheld controllers for the actual trains, a bit like having a signaller in a box and a train driver in the loco. This combination is surprisingly easy to use and everybody who operates agrees. By selecting a button on the screen the loco sets out from the fiddle yard to the selected platform and vice versa. We all tend to have standardised on the same DCC system and there is no shortage of operators with their own handheld controllers which, as they are all fitted with the same plug connection, can be used on any layout and kept around for backup if required.

A recent development for making operating easier was the addition of a small touch-screen monitor. This allows the operator to select the routes physically by simply touching the screen at the appropriate symbol and the PC does the rest via the PC interface.

The system used is a Lenz 100 along with extra handheld controllers and a PC interface. The turnout decoders are also Lenz LS150 units, each of which operates six turnouts. Each output can be configured with its own address and set up with a pulse length to give each turnout time to throw across. These can also be used with solenoid or motor type turnout motors.

Summary

This was a change from the normal North American type layout I normally get involved



with and was an interesting challenge. The layout still has more to do in the way of improvement to the backscenes (another job for the PC and photo manipulation) to get a true feel for the sandstone Victorian buildings found around Bradford. The main station building doesn't seem to be impressive enough for a city terminus so I am still looking for a better model to use. The canopy kit was worthy of note in how versatile the parts could be for other building projects and how adaptable the model is. There is still a lack of ready-to-run DMU models so at present I have a few DC Kits models under various stages of construction to give a little more variety.

What started out as a small layout has tended to mushroom into the present formation and if required has scope to be extended. So far it has been to two exhibitions, has performed to expectation and, with bits of fine-tuning to the rolling stock and couplers, has run well. The operators have not found any cause to moan, and as the layout is operated from the front it also gives the public an operator's view of how we control everything and a chance to ask questions without too much distraction. People also like to look at the information displayed on the touch screen and handheld

controllers, but a few like to have a nose under the curtain and are surprised to find only a small command station sat on the floor. The only problem I have found is trying to get to operate my own layout after showing people how simple it is.

Maybe the next step is to follow the American idiom and pursue sound-equipping the locos. Imagine the sound of the twin Napier engines of a 'Deltic' under the station roof...

Acknowledgements

Building a layout requires favours and products from various sources so in the time honoured fashion here they are. For the goods shed ballasting and general labouring I thank Roger Epps, Dave Hewitt of Unit Models for the wool bales produced at short notice, Branchlines for the special pinpoint Black Beetles (no longer a stock item) and the rest of whoever volunteers for the operating at shows and loaning of rolling stock. And mainly to Roger Nicholls for taking a layout unbuilt for the Wakefield Exhibition 2005 on a planned idea.

City Road will be at the Shipley Model Railway Exhibition this month. Details in Societies & Clubs.

Donegal

Part 1 – first step in Irish narrow gauge modelling

This evocation of the Irish 3' gauge in 4mm scale is described by G.A. GEE.

The 3' gauge County Donegal Railways main line ran from Londonderry to Strabane and then to Stranorlar, Donegal and Killybegs, which is the largest commercial fishing port in Ireland. Branch lines also ran from Stranorlar to Glenties and from Donegal to Ballyshannon.

It was the cost of these branch lines which forced the original Donegal Railway into financial difficulties, and in 1906 it was purchased jointly by the Great Northern Railway of Ireland and the Midland Railway based at Derby. The new undertaking operated as the County Donegal Railways Joint Committee. The Joint Committee then financed a further extension of the railway joining Strabane to Letterkenny in 1909, which resulted in a physical connection with Donegal's other 3' gauge railway, the Londonderry & Lough Swilly Railway. The final track mileage of the CDRJC was 124, making it the largest narrow gauge railway in the British Isles.

The partition of Ireland in 1921 cut the County Donegal Railways in two, with customs posts being set up at Strabane, Castlefinn, Caldy and Lifford. Eventually the railway repositioned its operation, centring traffic on its head office at Stranorlar instead of Londonderry.

In the search for economy of operation the famous General Manager of the CDRJC, Henry Forbes, introduced railcars to take over the schedule timetable passenger services. The first diesel railcar to run in the British Isles was County Donegal Railways No.7, which was introduced in 1930. Steam tank locomotives were still used for heavy goods traffic and to haul the famous Donegal excursion traffic. Bernard Curran who followed Forbes as General Manager built up a sound integrated Rail and Road Transport Operation.

These policies kept the railway alive until 1959 when, due to the fact there was little



money left to replace the infrastructure, the whole line closed on 31 December.

At the subsequent auction, a lot of the County Donegal Railways stock was sold to Doctor Cox, an American who intended to ship it to the United States. However, this did not occur and it is now possible to see Dr. Cox's purchases at the County Donegal Heritage Centre at Donegal, the Ulster Folk

and Transport Museum at Cultra, near Belfast and at the (at present closed) Foyle Valley Railway Centre in Londonderry.

It is also possible to ride in County Donegal diesel railcar, No.18, at Fintown on the Fintown and Glenties Railway, where a two-mile section of the old Glenties branch has been restored. The County Donegal Railways Joint Committee ran a bus and road haulage system



Left: Class 5 2-6-4T No.6 *Columbkille* passing through Donegal station with a goods train from Strabane to Killybegs. Coal for the fishing fleet at Killybegs and the transport of live-stock were important sources of revenue for the CDRJC.

Below far left: railcar No.20 passing under the footbridge at Donegal en route to Killybegs. The Walker railcars could haul two or three goods wagons depending on the gradients on the route. This made them very versatile in operation.

Below left: railcar No.17, one of the first full fronted Walker cars supplied to the CDR in August 1938. Sixteen months later it was destroyed in a head-on collision at Hospital halt near Donegal.

Right: halfcab railcar No.14 made from a Backwoods Miniatures kit leaving Donegal for Strabane.

Photographs by Steve Flint, Peco Studio.



to replace the railway until 1971 when the company was then fully incorporated into the Irish National Transport Authority, the CIE.

Recommended books, which give a more detailed history of the County Donegal Railways are given at the end of this article.

I first became interested in the Railway whilst on holiday in County Donegal when I came across the architectural remains of stations, railway buildings and bridges. However, it was the purchase of the Colourpoint books by Robert Robotham and Joe Curran, the son of the last General Manager of the County Donegal Railways entitled *The Last Years of the Wee Donegal* and *The Wee Donegal Revisited* that first made me consider modelling this railway.

Since finishing my last layout, *Wisconsin Central*, which appeared in the October 2003 CONTINENTAL MODELLER, I have been searching for a suitable subject that would enable me to model as accurately as possible a specific location and also introduce me to kit and scratch building. All my previous modelling experience could be described as proprietary modelling. My layouts were basically results of my imagination and the rolling stock came from major manufacturers. I had repainted and super-detailed locomotives and kit bashed building kits but my knowledge of soldering was simply joining two wires to the track.

There were many locations which it would be possible to model, allowing for artistic compression, on the County Donegal Railways system, but I concluded that if I could not make the rolling stock to run on the layout it would be pointless following the usual approach of first making the baseboards and then laying the trackwork.

I knew I would never be able to purchase ready-to-run County Donegal stock in 4mm scale, everything would have to be built from etched brass kits or scratch.

Rolling stock

Working in 4mm scale the modeller is able to use Peco H0m trackwork (12mm) which gives the correct 3' gauge of the County Donegal Railway. Backwoods Miniatures and Worsley Works make etched brass kits for items of County Donegal rolling stock and two plastic wagon kits are also available from Nine Lines.

Alphagraphix supplies several card kits for County Donegal and also some Londonderry & Lough Swilly rolling stock. Therefore, the modeller has a starting point and not everything would have to be scratchbuilt in order to model the railway.

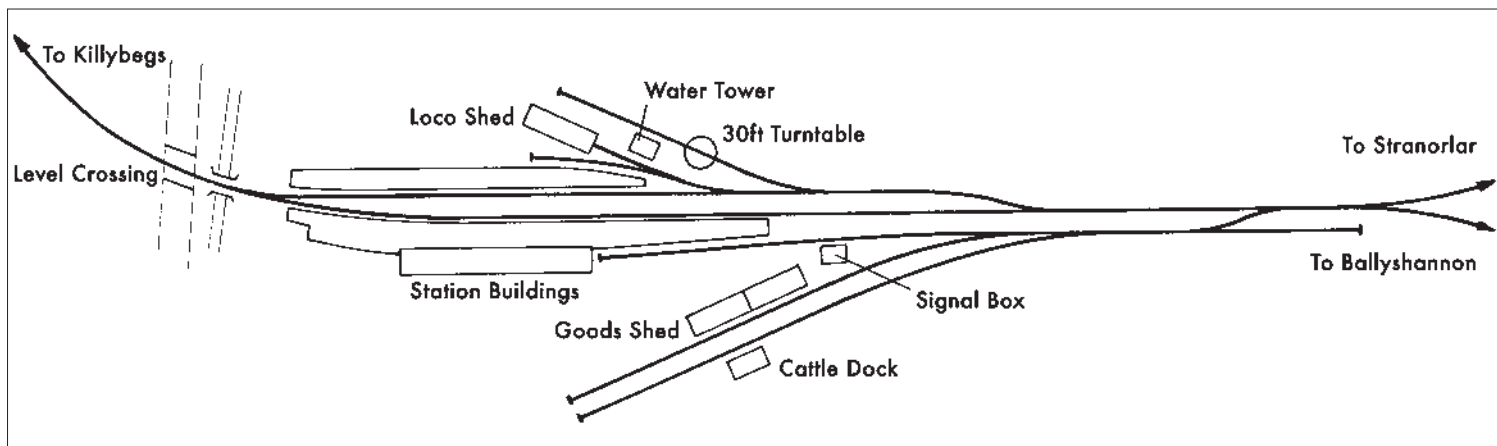
I told Peter McParlin of Backwoods Miniatures of my intention to model the County Donegal Railways and he recommended that I start with his kits for the 9' wheelbase goods van and goods/cattle van,

which were purchased by the Joint Committee for the opening of the branch line to Letterkenny. The Backwoods Miniatures require only the addition of couplings and transfers. I eventually standardised on the Greenwich couplings and obtained County Donegal Railways transfers from Blackham Transfers. The Backwoods Miniatures van kits consist of an etched brass chassis, a white-metal body and a plasticard roof. Instructions supplied are very comprehensive and I had no real difficulty in following them to produce a first class model.

The Nine Lines plastic kits for the CDR are based on the wagons and vans supplied by the Oldbury Carriage & Wagon Company in 1893. These kits are totally made from moulded plastic components and are therefore very easy to assemble.

I then turned my attention to the Backwoods Miniatures coach kits which covered the Oldbury Carriage & Wagon coaches, which are the 31' bogie composite 1st/3rd, 3rd class and brake 3rd, supplied to the Donegal Railway in 1893. Again these kits only require transfers and couplings.

The techniques I had learnt in making the van brass chassis, greatly assisted me in constructing these coaches. For example using bending bars to obtain a perfect brass fold, making sure all items to be soldered were perfectly clean, and using grease to protect areas





Left: Class 5A 2-6-4T No.2 *Blanche* approaches Donegal with an excursion train for Ballyshannon. The first coach, No.57, made from Worsley Works brass etchings, is one of the Ballymena & Larne boat train stock, three coaches of which were purchased by the CDRJC on the closure of that line.

Below left: *Blanche* is being turned at Donegal. The locomotive is combination of a Backwoods Miniatures Class 5 kit and brass etchings from Worsley Works which convert the original Class 5 kit into the longer Class 5A locomotive.

to which you did not want solder to adhere, such as a captive nut.

Additional tools, however, were needed to complete these coaches. These were a set of bending rollers to assist in the roof fabrication and an airbrush and compressor for painting. I had been able to paint the goods wagons and vans using an aerosol spray, matt black paint for the chassis and grey aerosol paint for the sides. However, to finish the coaches in the beautiful geranium red and cream livery, introduced by Forbes from 1937, masking and then airbrushing would be the only way. Fortunately Phoenix Precision Paints does have Forbes' colours as items in its paint range.

After increasing my modelling skills and learning the arts of airbrushing for the first time, I turned my attention to a range of etched brass modelling aids for the CDR manufactured by Allen Doherty of Worsley Works. Whilst the Backwoods Miniatures kits are almost complete, Worsley Works supplies just the etched sides, floor and ends of the coaches, although etches are available for the bogies. Worsley Works makes a large range of these etchings for many Irish narrow gauge railways, but I was particularly interested in the ex-Ballymena & Larne boat train corridor coaches made by the NCC at Belfast. These were sold, when that line closed to the County Donegal Railway. Two of these coaches (No.57 & No.59) were 54' long, making them the largest coaches ever to run on the narrow gauge in Ireland. Using the principles previously learned, these and other Worsley Works coaches were completed.

I now had 24 wagons and vans and 12 coaches but as yet no locomotive or rail cars to haul them. Peter McParlin had warned me when I had first spoken to him that the CDR Class 5 locomotive kit which he manufactured was not the easiest to make up as it has outside frames, and the valve gear at the front end was very tight to fit. I therefore decided to purchase next a Backwoods Miniatures kit for railcar No.10.

This was the smallest of the CDR articulated railcars having been first made for the Clogher Valley Railway. Forbes purchased this on the closure of the CVR in 1947.

Railcar No.10 lasted until the end of the CDRJC in 1959 and now can be seen in the Ulster Folk and Transport Museum at Cultra.

The Backwoods Miniatures kits include the motor and gear train. Assembly of the articulated rear coach was similar to all previous coach construction except that a whitmetal shaped roof is supplied. The front motor sec-



Right: railcar No.20 leaving Donegal for Killybegs is about to pass the down starter signal. The corrugated iron building with the curved roof was the telegraphy office at Donegal. Behind it are the gentlemen's convenience and the station master's house.

Below right: railcar No.10 being turned at Donegal. The main disadvantage of the Walker railcars was that they could only travel short distances in reverse gear. Therefore there had to be a turntable at each terminus. The Ballyshannon branch railcars all had to be turned at Donegal.

tion consists of an etched brass chassis onto which the cab is located.

Under the cab a motor, through reduction gears, drives a central layshaft with worm gears that transmit the drive to the axles and wheels. The instructions are excellent and easy to follow but I had great difficulty in obtaining perfectly satisfactory running and I doubted if, under exhibition conditions, my mechanism would last.

In 1907 Nasmyth Wilson of Manchester manufactured to a design of R.H. Livesey, the County Donegal Railways Joint Committee's locomotive superintendent, a 2-6-4 tank locomotive, which was designated Class 5. Five of these tanks were manufactured and three of them, No.4 *Meenglas*, No.5 *Drumboe* and No.6 *Columbkille*, survived to the closure of the line. *Drumboe* is on view to the public at the Donegal Railway Heritage Centre in Donegal. Backwoods Miniatures makes a kit for the Class 5 locomotive and Worsey Works makes a conversion kit to alter this to a slightly larger Class 5A locomotive which was introduced in 1912.

There were three Class 5A locomotives, also manufactured by Nasmyth Wilson. They were named No.1 *Alice*, No.2 *Blanche*, and No.3 *Lydia*. *Blanche* is at the Ulster Folk & Transport Museum at Cultra.

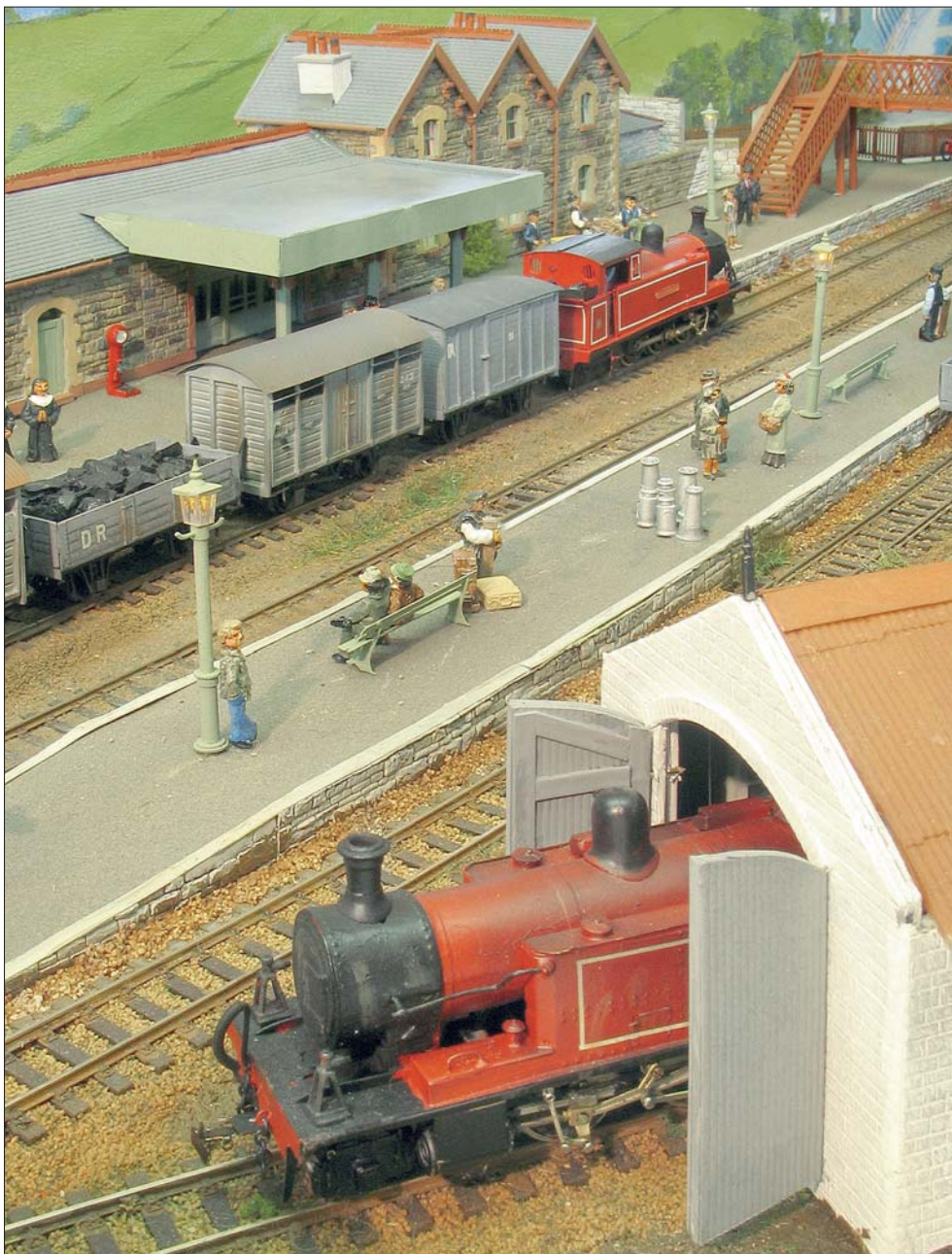
The Backwoods Miniatures kit is supplied complete with motor, gearbox and brass castings for the chimney, dome etc. The superstructure was completed without any difficulties, the etched brass parts soldering together perfectly.

Peter McParlin had warned me about the chassis being difficult to make but I found it to be near-impossible, age and inexperience being against me! Peter had recommended filing all the front end valve gear parts as thin as possible, but even after this there simply was not enough space to assemble and get the valve gear working correctly.

This was the lowest point in my dream of modelling the *Wee Donegal* but, undaunted, I ordered a new Class 5 kit from Backwoods Miniatures as I was determined somehow to succeed. However, help was at hand in the form of three experienced modellers, for without their skills and assistance this article would terminate at this point.

I had been asked to exhibit my H0 American *Wisconsin Central* layout at the Macclesfield Exhibition. A member of the 5.5mm Society, Mike Chinery, was also exhibiting a North Wales Narrow Gauge layout. On talking to Mike I learned that fellow members





Left: two Class 5 2-6-4T locomotives are seen at Donegal. No.6 *Columbkille* is passing through the station with a goods train to Killybegs and No.4 *Meenglas* waits on shed.

Below left: *Phoenix*, the CDR's only diesel shunting engine making up a goods train at Donegal. The loco is constructed from a Backwoods Miniatures body kit fitted on to a Halling powered chassis.

of the 5.5mm Society had also had problems with narrow gauge chassis construction. So Mike, and his colleague Malcolm Savage, had started making a series of ready-to-run chassis and motor bogies in whitmetal and nickel silver to sell to their members. They had produced a motor bogie in 4mm scale to fit under the now out of production Anbrico model of the County Donegal railcars Nos.19 and 20. Mike offered to look at a replacement for the Backwoods Miniatures brass chassis used on the railcars and in due course was able to manufacture this for me. All my railcars now use Mike Chinery's motor bogies and they perform perfectly for hours on end.

The Macclesfield model railway exhibition always has modelling demonstrations and one of these was by Jeremy Suter on locomotive construction. Jeremy is a professional model maker and I explained to him my Class 5 chassis problems.

To my surprise Jeremy knew instantly what I meant as he had built many Backwoods Miniatures Class 5s for previous clients. Jeremy quoted me for making up the Class 5 chassis and together we have now built the following locomotives: No.4 *Meenglas*, No.5 *Drumboe*, No.2 *Blanche* and No.1 *Alice*.

To be continued.

Donegal will be exhibited at the Halifax Model Railway Exhibition on 23 and 24 September. See the Societies & Clubs pages for full details.



Bedlam Heath

1980s nostalgia in the Garden of England

GEORGE WOODCOCK describes his minimum space 00 gauge Southern Region layout.



The Tardis has landed

The year is 1980 and the world, as ever, is changing fast; even in Kent. Bedlam Heath is a small country station situated on the secondary line from Ashford to Maidstone. On the surface little appears to have changed for a number of years but the times indeed are a-changing. There is still a goods yard which

receives domestic coal in 16T MSV wagons and animal feed and fertiliser in 12T box vans but its days are numbered and it will be closed within months. The station looks tidy and cared for but the stationmaster's house is now a private dwelling and the ticket office is only manned during the morning to cater for the commuters who are the mainstay of the pas-

senger service. Recently the signal box and semaphore signals went and new colour light signals, together with modern station lights and corporate signs became the visible evidence of the new order. Traffic on the line is healthy enough though, with the passenger service provided by 2HAPs. There are mail services consisting of both loco-hauled trains and MLVs. As well as the traffic for yard, which is tripped from Ashford, there are through freights from Dover consisting of traffic from the Continent and occasional engineers trains as required.

Back to the future

Sad to relate this rosy-hued scene never really existed. *Bedlam Heath* is another of those might-have-been scenarios that I have dreamed up over the years. The layout was

Above: 2HAP 6059 pauses at Bedlam Heath with a Maidstone to Ashford service. The unit is built using MJT sides on Lima Mk.I underframes with Southern Pride detailing items.

Left: evening shadows fall across Bedlam Heath as 73 106 heads a short parcels train to Dover. The sun is setting in more ways than one with the imminent closure of the yard.





originally conceived as yet another entry for the DEMU small layout competition, but never made it. It is still a small layout though, as that is what I can manage, not only to build, but also to transport to exhibitions. I know they are not to everyone's taste but I like them; size, as they say, is not always everything.

Bedlam Heath is based on Lenham in Kent, which did indeed have a goods yard in 1980 but not quite like the one modelled: that is one of several reasons for the name change, some of the others are; the omission of one of the sidings and the down loop, moving a road bridge half a mile nearer the station and a few other minor omissions and compressions.

Apart from those, anyone who knows Lenham should be able to recognise it from the layout. The station buildings, footbridge and the corrugated goods shed are still the same today, although the latter is now in the privately owned yard. The name change is an amalgam of Bedlam Lane near Lenham and Lenham Heath. Bedlam particularly appealed to me because of its connotations with madness – a state in which we railway modellers are often accused of being!

A few nuts and bolts

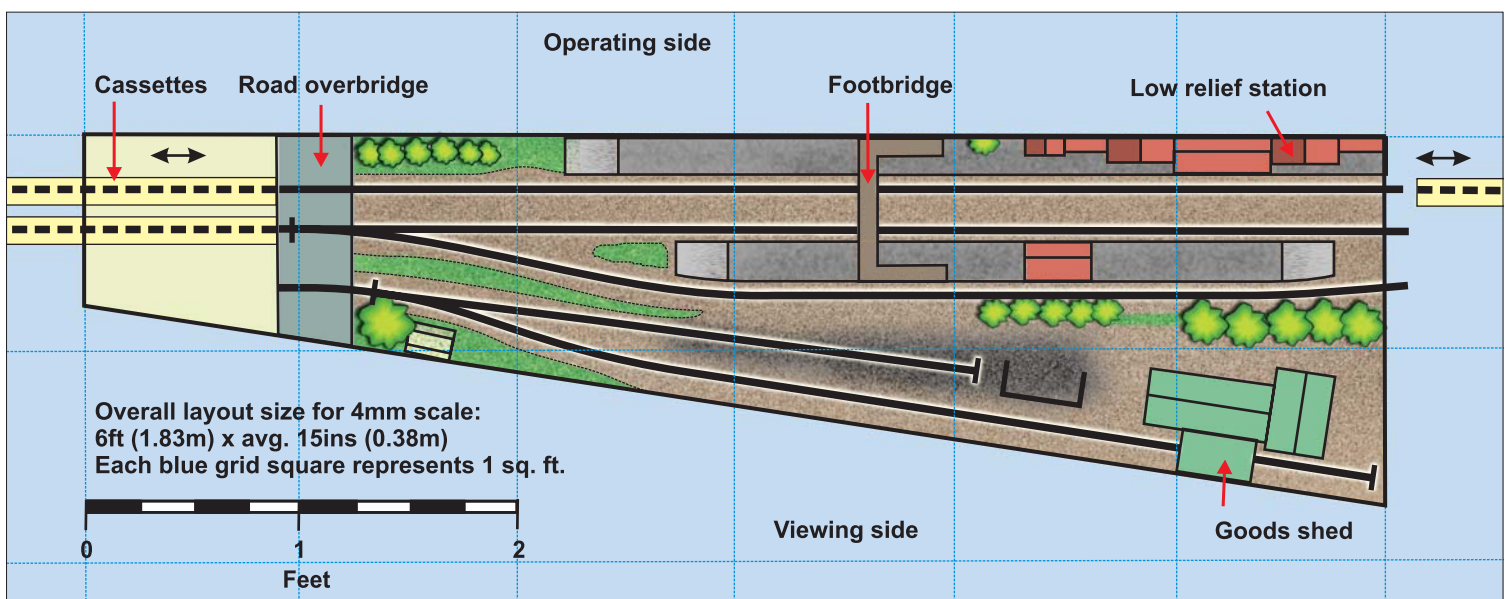
I include this part because I know people are interested in the hardware though for myself, I find it the least interesting aspect of the hobby.

The baseboards are a 2" x 1" softwood frame topped with 6mm ply. The reason for the layout's tapering shape was to accommodate the original competition dimensions and also if it wasn't a success, I could add a neck, paint it starburst, add six strings and make a guitar of which Bo Diddley would be proud!

The track is Peco code 75 and the points (both of them) are operated by lengths of welding rod – my version of 'wire in tube'. As this is an SR layout, it is fitted with a cosmetic third rail made from Peco code 60 rail and plastic moulded chairs.

Left: in this overall view of the layout, 33 017 shunts empty 16T MCVs from the coal yard as a 2HAP unit slows for the station.

Photographs by Steve Flint, Peco Studio.





The electrics, as usual on my layouts, are so simple that DCC would be wasted on it: two wires (feed and return) from the controller routed through three on-off switches to control each track separately.

As the layout is only about 6' long scenically, I have boxed it in at the front in the manner of a proscenium arch to focus the eyes of the viewer on the layout and not the bits off-scene. This seemed especially necessary at the end where the trains just go off-scene without the aid of the usual bridge or tunnel to act as a scenic break. In this case it is just screened by trees. I know this isn't an original idea but I wanted to see if it would work for me. The public will have make up its own mind. The layout is lit by two 20" strip-lights mounted on the back of the aforementioned fascia-board.

For the benefit of those who like to know what happens off-scene the layout is operated using cassettes. This means short length trains, as a cassette longer than a metre is too unwieldy. On the whole this isn't a problem but it does mean that I can't have SR 4-car units. So it goes...

The cassettes are wooden ones, with a length of track pinned in each. The power is transmitted by fishplates soldered onto the rail ends of the track in the cassette, these simply 'plug' into the the rail ends on the layout mak-

Above: 33 017 waits in the westbound loop with ferry vans from Dover to Willesden.

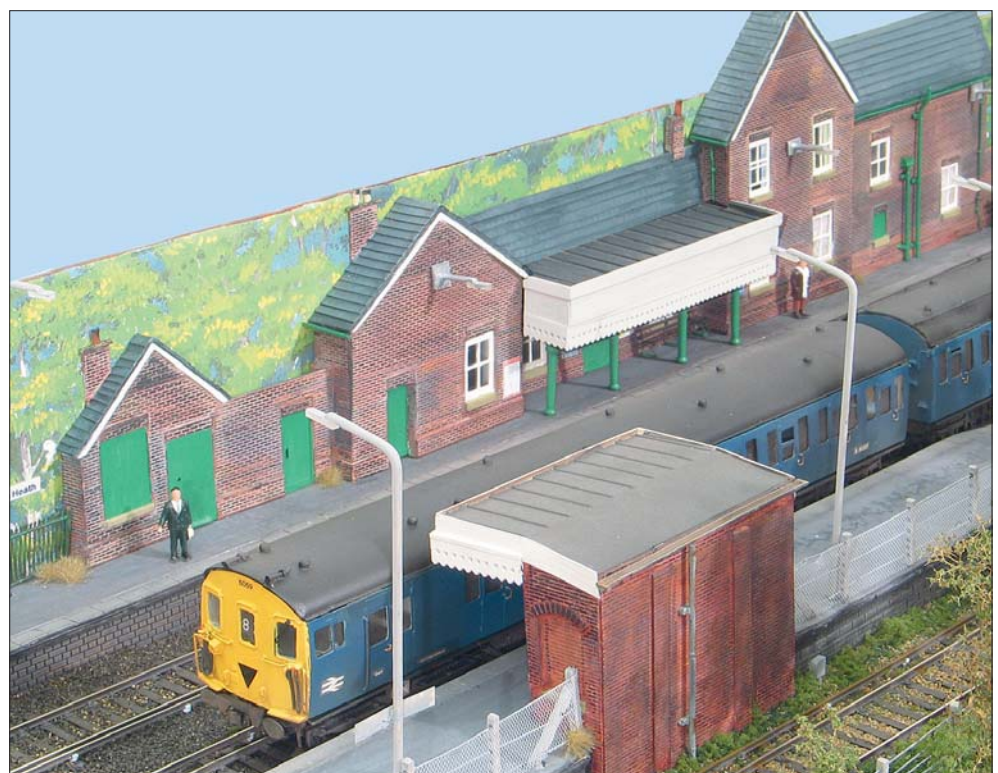
Right: a 2HAP stopping on an Ashford to Maidstone service. The very shallow station building, built to meet the competition criteria, is evident from this angle, though always a useful dodge when space is tight.

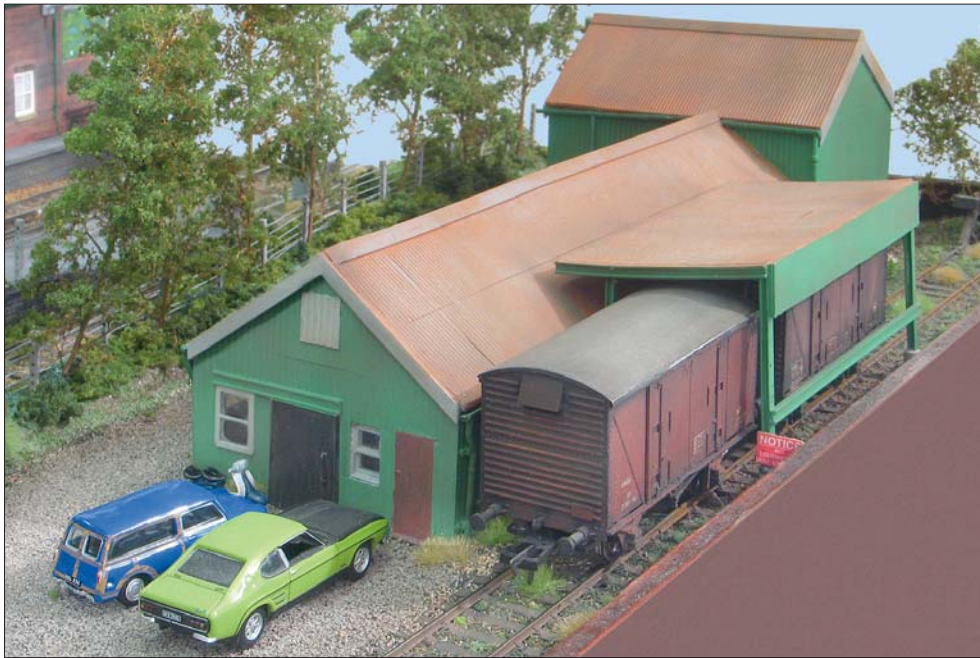
ing both a mechanical and electrical joint. To make attaching them easy, I used code 100 fishplates which are sufficient to conduct power, but loose enough to make connection simple.

Lost in landscape

One of the hardest things to achieve with a model railway is to make it look 'real' and as if it is 'lived in'. To me it is what makes all the dif-

ference between a great layout and a merely good one. Personally, I do not feel as if I am able to achieve it, but I always aspire to it when creating the scenery. It seems to me one of the reasons for modelling a real location or (in this case) basing the layout on one, is that at least you know what it should look like and thus have a head start in the realism stakes. Again I don't know whether I've succeeded; only the viewer can decide.





Left: 12T Vanwides loaded with fertilizer await unloading in the small corrugated goods shed. The Cararama Ford Capri and Mini Countryman give a good sense of the period.

Centre: a busy day in the coal yard as a west-bound ferry van train waits in the loop. The Land Rover in use as a coal lorry was inspired by a photograph of Welshpool in *BR Goods Wagons* by Robert Hendry. It seems most appropriate for the air of decline.

Below: 73 106 heads east on a parcels train.

The majority of the structures on the layout are scratchbuilt from embossed plasticard on 40 thou plasticard sheet. The building dimensions are approximate using either the size of vehicles or door frames etc. to gauge them from photographs. The station building is in (very) low relief due to the narrowness of the layout. The concrete footbridge is by Ratio, as are the station lamps and the shelter in the goods yard. The bridge and hut are the same as ones at Lenham. The lean-to shelter on the goods shed is not there any longer, but it is shown on a 1979 track plan, so I have had to have a guess at the size. The road bridge is pure fantasy and is made from a lot of embossed plasticard, parts of a Peco bridge and girder sections from Wills.

The trees are sea-moss and the foliage is mainly Woodland Scenics and Green Scene, as is the ballast. Scenic items I have used for the first time on a layout and that I have been very impressed with are the Sil-flor products imported by International Models. I especially like the 'tufts' which are exactly what they say and remind me of the 'Tribbles' in a long forgotten Star Trek episode! They are very effective and easy to use. One thing I did was to extend the scenery to the hidden side of the bridge which forms the scenic break to give a sense of depth in a small space.

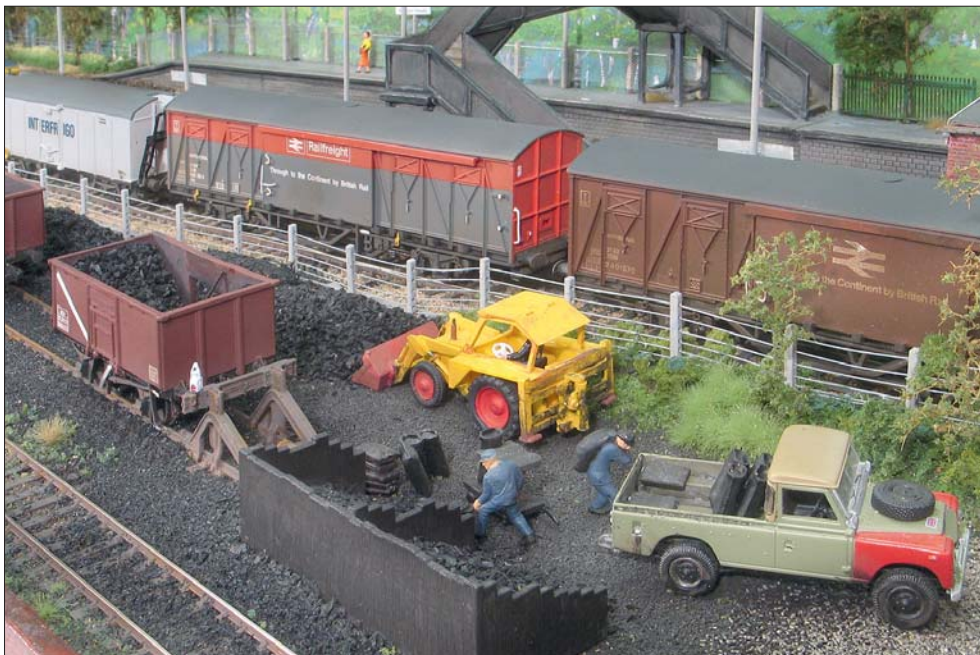
It takes a train to...

The rolling stock is a mixture of RTR and kit-built models. The 2HAP is an elderly rescue job consisting of MJT sides on Lima Mk1 underframes with Southern Pride detailing parts. The MLV is by DC Kits, again with Southern Pride fittings underneath. Both are powered by Black Beetle motor bogies. Being on the SR, the locomotives consist of two Lima Class 73s and two Class 33s which have Lima bodies on Heljan chassis. The wagons are a mixture of Hornby, Lima and Parkside kits.

Put your hands together for...

This layout is one of the smallest I have built, but it has taken me the longest time to build for a variety of reasons.

Many thanks to Bob (The Builder) White for the baseboards and all the other timber work, and to Richard Coleman and Dave Tailby for their help and encouragement, also to the Model Shop in Northampton for keeping me supplied with plasticard and all the other bits and pieces we modellers need (support your local model shop if you have one). Thanks to The Suburban Electric Railway Association for letting me photograph the 2HAP and MLV at its Coventry site. I also would like to say a





special thank you to Paul Wade for all the plans, photographs and technical information supplied, as without his help this layout would not have been built. Finally, to all the people I've missed out you know who you are.

And finally

It has been an enjoyable experience both in planning and building this layout which is set in an area and an era outside my normal modelling orbit. Variety is always the spice of life. I have said to various people this may be the last model railway I shall build...but, having completed it, the old urge to do it again is coming upon me: we shall see.

Bedlam Heath will be making its first public appearance at the **Soar Valley Model Railway Club's exhibition at Loughborough on 25 and 26 September 2006** (see *Societies and Clubs* for full details). If any other exhibition managers wish to book the layout they can contact me by letter via the RAILWAY MODELLER office.

Above: 47 282 speeds through with a charter formed of Mk.1 carriages as an MLV heads for Ashford and Ramsgate and an unidentified 73 waits in the loop.

Right: 73 140 heads west with a rake of loaded Grampus wagons, probably heading for Tonbridge West Yard; a lot of old rubbish seemed to end up there. The bus is the usual scene setter, it has a driver and some passengers, and a road tax disc in the windscreen.



Chilcompton

The Somerset & Dorset in the 1950s

This club layout, set in 1955, is described by GUY CRADDOCK, Secretary of Redditch MRC.

Back in May 1997 we told of the day in 1967 when the now famous, but late, Ivo Peters drove his Bentley car on the forecourt of Gorcott station. In December 2000 we told of how in 1955 he had also visited the Somerset and Dorset station of Wincoleton.

Readers will know liberal amounts of modellers' licence were used to bring you those layouts but now we stay in 1955 and visit the station of Chilcompton on the Somerset & Dorset Joint Railway: this did really exist, somewhere that Ivo Peters visited many times.

The prototype station

The station of Chilcompton was situated some 14 miles from Bath Green Park in the north and 57 miles from Bournemouth West in the south. This route formed the main line of the Somerset & Dorset Joint Railway. The station, which was just to the south of Midsomer Norton, was some 600' above sea level, which often caused problems with snow in the winter.

The village of Chilcompton had somewhere between 600 and 800 inhabitants throughout the life of the railway. Other than on the railway or the land the main employment was either at Chilcompton Saw Mills which was adjacent to the station or at the New Rock Coal Mine which was close by.

Chilcompton station was opened on 20 July 1874 and was situated on the south side of the valley of the river Somer. The railway through Chilcompton from Bath to Evercreech Junction was opened as a single line. Following a decision at the S&DJR Officers meeting of 21 October 1875 a passing loop was provided at Chilcompton early in 1876. This resulted in the opening of the first signal-box at Chilcompton, which was the subject of



a Board of Trade Inspection report in March 1876. Progressively the section from Midford to Evercreech was doubled between 1886 and 1892. The doubling of line through Chilcompton was completed around 1886. The line from Chilcompton to Binegar was doubled in 1885, and from Chilcompton to Radstock in 1886. In conjunction with this the first signal box was closed in 1886 and replaced by a Type 2 box mentioned in a Board of Trade report dated 14 April 1886. The station was closed with the rest of the line on Saturday 5 March 1966. The last special trains

actually ran the day after on Sunday 6 but the line was closed to normal traffic after service on the Saturday.

The second signal box was opened in 1886 and closed on 11 April 1965. It was built to the standard S&D Type 2 design and was equipped with a 13-lever Stevens-pattern frame with levers at 4 1/8" centres. The signalling at the station was unusual in that no ground signals were provided when the second signal box was built and all shunting was controlled by hand signals. During 1960 the signal box was open between 0640 and 2110



on Mondays to Saturdays and was closed all day on Sundays. The box had a closing switch, which meant that trains could pass through the station when the box was closed as long as access to the goods yard was not required. During the life of this second signal box brickwork was added to the upper storey under the windows. It is thought that this was due to rot or other damage and it is in this condition that we have modelled it.

The down yard was provided with a goods shed and a 5-ton crane. There were also two water towers for replenishing the tanks of locomotives used to bank freight trains up the 1 in 50 grade from Radstock to Masbury Summit. Freight trains were banked on the SDJR, and passenger trains were piloted thus providing the spectacle of double headed passenger trains.

In the 1930s the sidings at the station were extended to provide a loading dock so coal could be brought by road from the New Rock Colliery. The Colliery was opened in 1819 and was closed on 28 September 1968. It had a 4'6" diameter winding shaft and employed around 200 men. The goods yard had ceased to handle traffic on 15 June 1964.

In our period, the early 1950s, much of the freight services are still in the hands of the Fowler 7Fs that were built for the line. It is another five years before the line will benefit from the Standard 9F 2-10-0s. Passenger trains are in the hands of a mixture of Midland, LMS and Southern locomotives with streamlined 'West Country' Pacifics being used on a frequent basis following their successful trial in the early years after nationalization. The Fowler Class 2Ps are still being used on front-line duties to pilot the heavy passenger trains. Our chosen period is unusual for modelling the SDJR as many either opt for pre-grouping S&D blue stock or British Railways around 1960 with the Standard 9F 2-10-0 locomotives in use on summer passenger trains.

The model

The club has built a number of fictitious Somerset & Dorset Joint Railway-based layouts, including *Wincoleton* (RM December 2000) and *Otterly St Mary's*. For our new S&D layout we decided to base it on a prototype from the Railway's main line from Bath to Bournemouth. In order to keep the trains moving under exhibition conditions, it needed to be on the double track main line section. We drew up a short list of Shepton Mallet, Cole,



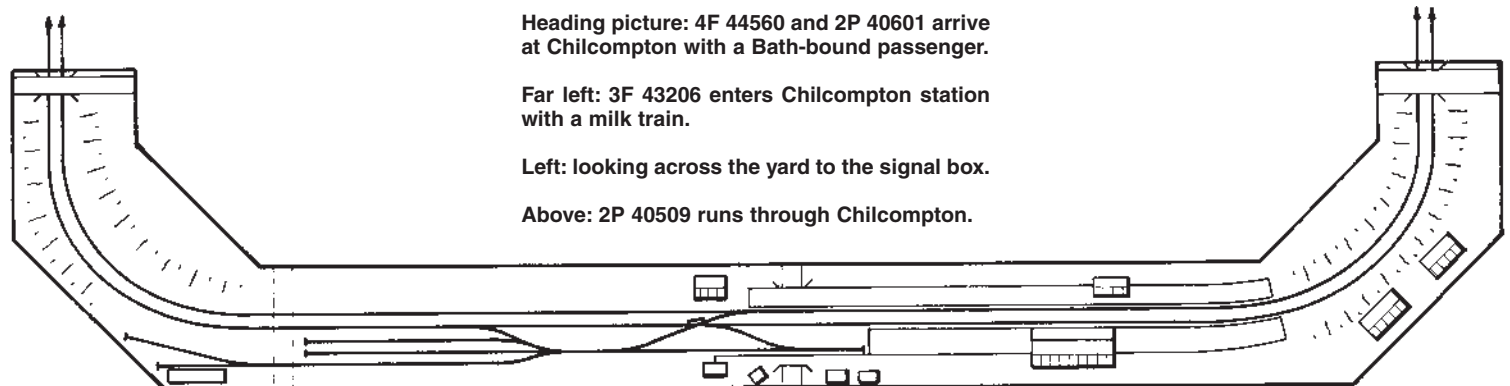
Evercreech New and Chilcompton. Shepton Mallet was rejected because our self-imposed layout length restriction would not allow us to do the station justice; Cole because we would have needed fairly wide boards to model the goods yard; and Evercreech New as the freight yard was too small. This left us with Chilcompton and so this became our layout project.

Initially we pulled together all the information we had in the many books published on the line and a full-sized track plan was drawn out on the back of some old wallpaper and so the process of turning an idea into a model started. Over a period of around two years we acquired copies of as many contemporary photographs as possible of the station and made at least six field visits to the remains. Like so many stations that were closed 40 years ago, very little on the face of it remains. At Chilcompton none of the railway buildings remains but once we worked out where to look we found much of the earthworks that once made the railway still exist together with a number of the railway bridges in the area. What we did find were sections of the former platforms and, by measuring them and counting bricks we have been able to scale up the buildings that don't remain from photographs.

The layout was conceived for display at model railway exhibitions. From the start it was designed to entertain the visitors with a variety of trains constantly moving. The layout is built to 4mm scale and occupies an area of 18' x 9'. As with all the recent layouts we have created, it is a package of not just the railway but also correctly-formed trains for the era portrayed. This does not mean detailed locomotives pulling out-of-the-box ready-to-run stock. It seems strange that so many modellers spend hours constructing prize locomotives with little regard for the stock they then pull around their layouts, although the recent increase in the variety of stock from the ready-to-run manufactures is now addressing this.

The foundation

The baseboards are standard sizes. All the straight boards are 36" x 18" and are constructed round plywood frames. We have previously used the more normal method of 2" x 1" timber frames. We were keen to keep weight down so we have experimented with plywood. We paid a visit to the local timber merchant. After we convinced them we were serious they cut up an 8' x 4' sheet of red maranti plywood into suitable-sized strips. Using this method produced the cost saving over the use



Heading picture: 4F 44560 and 2P 40601 arrive at Chilcompton with a Bath-bound passenger.
Far left: 3F 43206 enters Chilcompton station with a milk train.
Left: looking across the yard to the signal box.
Above: 2P 40509 runs through Chilcompton.



Left: Midland 1F 58086 on a passenger train.

Below left: 7F 53808 in Chilcompton yard as a passenger train passes by.

Below: Chilcompton signal box was fitted with a 13-lever Stevens lever frame.

of normal wood. With careful bracing and the use of a jig for construction we have ended up with some very stable boards.

The baseboards formed are of a conventional 'solid top' construction with the tops being made of chipboard. The boards are joined together using pattern makers' dowels for alignment. These have been made specially for the club and consist of a rectangle of steel plate that has been bent into an L shape. Two of these L shape pieces of metal make the joining plate one for each board end. A peg and bolt hole is placed in one side and screw holes in the other. The plates are mounted on the boards around the bottom edge of the board frame so that the side with the screw holes is used to attach the plate to the underside of the frame. The dowels allow the layout to be assembled quickly at shows with the track being correctly aligned, every time. The whole layout is supported on trestles, each with chain to adjust the height. For transportation the three straight scenic boards are paired with the corresponding fiddle-yard boards to form a box. The two corner boards box in pairs face to face.

Trackwork and wiring

With previous layouts the tracklaying has unfortunately not been one of the club's strong points. Was this mainly because there

was a desire to get the tracklaying out of the way and move on to other more interesting parts of construction? This time we decided to take our time. We used Peco code 100 track for the whole layout. This was laid onto a cork base using double-sided tape. A cheap tip here is to use cork wall tiles from a DIY centre. The sleepers on the track immediately each side of all the baseboard joints have each been replaced with a copper-clad one. The rail has then been soldered to the copper-clad sleeper for added strength.

The fiddle-yard is a standard unit we have constructed with the intention of using it for a number of layouts. Currently the same fiddle-yard is used on our *Gorcott* layout (RM May 1997) and *Chilcompton*. The club is also constructing an as-yet un-named London suburban-based layout and there are ideas for a modern image layout, which will both use the same fiddle-yard. The common use of a fiddle-yard has many advantages such as keeping down costs of new layout construction and helps to speed up the production of layouts. However it does mean that there has to be common track centres out of the ends of the fiddle-yard and it restricts you on the actual length of layout that can be constructed.

The fiddle-yard is laid out as independent up and down loop lines with eight in each direction. This means a total of 32 trains can

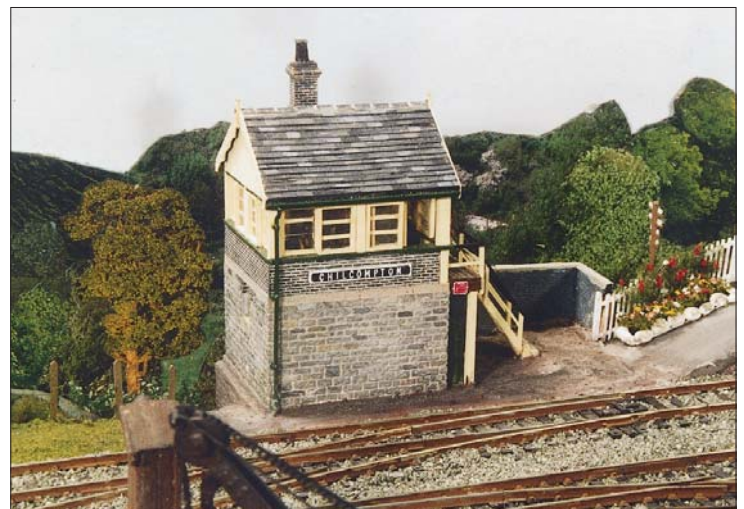
be stored at any one time. Normally we run the layouts with around 24 separate trains so as to give a variety of train lengths.

The layout is wired for cab control common return system. All the section switching is done from two panels at the front, one each for the up and down lines. Each half of the fiddle-yard has its own control panel which is wired so that one push-button controls the points at each end of the layout. This cuts down the number of buttons that need to be pressed to allow a train to move and means that two people can operate the layout if really necessary, one in the fiddle-yard and the other for the station area. All the points are motorised using trusty old H&M motors in the fiddle-yard and Peco point motors on the scenic parts of the layout as we had at the time exhausted our supply of the former motors.

In order to improve their reliability and to ensure a positive action, the H&M motors in the fiddle-yard are powered via a capacitor discharge unit run at around 30 volts and we have yet to burn out a motor! There is certainly a positive thump when the points change. The Peco motors on the front of the layout run at a more normal 16 volts. Actual control of the trains is via two Gaugemaster hand-held controllers. These are each of the feedback variety. We have found these hand-held controllers are an advantage at exhibitions as operators are not fixed to one point on the layout but are able to chat to spectators at any point along the layout, whilst still keeping the trains moving. After all it is important to remember that this is what the visitors have come to see!

Buildings

All our recent exhibition layouts have featured scratchbuilt buildings and *Chilcompton* is no exception. In building a prototype there is actually normally no way of avoiding this so as with previous layouts all the buildings are based around card carcasses. The main station building is actually based on scale drawings



Right: 7F 53806 runs through Chilcompton on a freight train.

Below: 3F and 7Fs meet at Chilcompton.

Below right: the station cottages at the Bath end of Chilcompton station.

we had for Midsomer Norton, as the building was very similar. By using the drawings and contemporary photographs of the actual building we were able to produce the model.

The signal box was scratchbuilt from drawings of the actual box in an issue of the SDJR Trust Journal. The signal box is a standard design for the line and of part-wood part-stone and brick construction. This building was also created around a card shell but the timbers were either scored on or made from balsa wood and the stone and walkway is plasticard. The roofs of all the buildings were made from strips of thin paper. This was then suitably coloured and scored to represent roof slates.

When it came to making the buildings in the goods yard there were no drawing available so we resorted to the photographs. We were lucky that the quality of some was such that by the use of a specialist photocopier we were able to enlarge the useful sections of the pictures. From these we produced a set of models of the buildings that we thought were there.

The layout made its exhibition debut in this form in February 2002 at Biggleswade but within a week of the show we had found some more photographs from the extensive collection held by Roger Carpenter who kindly printed the bits we wanted from the original negatives. This proved that our assumptions about the land behind the goods yard buildings were wrong and so by the next exhibition date in April at Derby the whole goods yard area had been remodelled based on the new photographs we had.

Scenery

The track, once tested, was weathered with the rail sides being painted rust colour. The track bed was then ballasted using a 2mm scale product. The whole track formation was then suitably toned down. The contours of the landscape were built up using a type of expanded foam that is used as cavity wall insulation by



builders. The foam has the advantage that it can be easily shaped with a knife or a file, without crumbling. Once covered in either paint or DIY filler there appears to be some sort of chemical reaction and the water in the product being applied causes the foam to become very solid. Carving the foam can effectively form rock faces. The foam also has the advantage of being very light.

The greenery was added using various scenic foam compounds or foliage. In order to give some depth and variety of colour to the ground cover, several layers have been added over a period of time together with various dried mosses. These were collected in the autumn and allowed to dry out very thoroughly before use. The moss was glued to the layout with PVA and then sprayed with a cheap hair spray to help preserve it.

Trees were made both from wire or using products from the Woodland Scenics range. Much of the scenic detail is down to one club member, Derek Collett, who by his own admission admits he had not done any scenic modelling before this project. Following a conversation and some inspiration from one of the demonstrators at a Kidderminster Model Railway Exhibition and some patience, Derek is producing much of the detail seen with scenery. A speciality of his is now the rose bay willow herb, which was very prolific on the

embankments of the former Somerset & Dorset. Each plant is individually made around a bristle from a broom. Colour pieces of foam from the Green Scene range are stuck on and once dry parts are highlighted with poster paint. Each one is individually 'planted' on the layout. We estimate there are over 300 plants on the layout.

A recent feature on the layout is the adding of stone walls around the two cottages at the Bath end of the layout. The construction method is the same as we used on our *Gorcott* layout and has provoked much questioning at shows over the years. It was important to portray them effectively and as realistically as possible. There are several commercially produced wall sections on the market. When about twenty feet of them was required for *Gorcott*, it would have worked out rather expensive. We therefore had to find some way of making them.

After some thought and experimentation we hit upon the idea of using cork tiles. These were broken up into small random 'stones' of a suitable size and then individually horizontally laid to make up the wall. The tops were made from more suitably shaped tile pieces laid this time vertically. Once assembly was finished the whole wall was spray painted with grey car undercoat paint. This provided a base to which the weathering colours were added





Left: still with LMS livery, 7F 13806 arrives on a Bath-bound passenger train.

Below: a Midland 3F arrives at Chilcompton with the cottage gardens in the foreground.

Photographs by Mick Clements.

Operation and presentation

Having a continuous circuit of track on the layout, it is quite obvious that the trains that leave the fiddle-yard and travel round the layout will enter the fiddle-yard again at the other end. This makes the running of the layout from the operational point of view very simple. The art is to make what the spectators see out at the front as realistic as possible. To do this we have a variety of types and lengths of trains.

We aim to run a variety of trains on *Chilcompton* to represent the era from around 1950 to 1955. Extensive use has been made of ready-to-run models to represent prototypes that once ran on the line. However all have, at the very least, been detailed and weathered. There are a number of locomotives such as classic S&D 7Fs and 3F tender locomotives which have been scratchbuilt, although all run on adapted ready-to-run chassis.

Our modelling does not stop with the locomotives as the rolling stock used is all prototypically modelled. Many of the coaches have Comet brass or scratchbuilt sides to represent the more unusual types. The wagon stock is a mixture of ready-to-run with an ever-increasing number of kit-built items. As with the locomotives all the rolling stock has also been weathered.

Conclusion

We had the opportunity of exhibiting the layout at Burnham on Sea in the summer of 2005 which is right on former Somerset & Dorset country. It was nice to receive praise from those that remember the real station, which shows we must have got something right.

Further information

Whilst constructing our *Chilcompton* layout the club has found a number of sources for prototype photographs and they are all able to supply copies from their respective photograph collections.

Colin Caddy – Transport Photographer, 55b Spa Road, Weymouth, Dorset, DT3 5EP

R.K. Blencowe – Historic Railway Photographs, 48 Cherville Street, Romsey, Hampshire SO51 8FD.

Kidderminster Railway Museum – Photographic Collection, Station Approach, Comberton Hill, Kidderminster, Worcestershire, DY10 1QX.

Roger Carpenter – Photographic Collection, 407 Highters Heath Lane, Hollywood, Birmingham, B14 4TR.

The layout can be seen at the second Birmingham Model Railway Exhibition promoted by the Redditch Model Railway Club at the Cocks Moors Woods Leisure Centre in south Birmingham on 1 and 2 September 2006. Details in *Societies & Clubs*.

to produce what we think are very realistic walls.

The backscenes also provoke a fair amount of comment at exhibitions, as they are three-dimensional. This gives a very effective sense of depth without taking too much space. Many of the pictures are taken from old calendars though there are a couple of pictures really from Chilcompton so as to portray such things as the farm behind the station as accurately as possible. Many hours were spent finding the right perspective and building the cuttings up to form a picture.

Using contemporary photographs of the time a rough drawing was made of what the backscene should look like to position any

landmarks. The pictures are mounted on card and using two or three layers of these pictures, with card spacers between them, the effect is created. Once these are made up some careful painting of some pictures is done using poster paints to remove modern-looking items such as cars and so on. Before they are installed, the whole units are matt varnished to remove the shine.

The signals have been constructed from Ratio kits and are based on the actual signals at Chilcompton. All have been suitably weathered. The signals do not work at the moment, though the signal arms do move with a little human help. We are though experimenting with making them fully operational.



The Gauge 0 Guild

Fifty Years of Progress

*This account of the Guild's formation was written by **JACK RAY**, its Founding Chairman.*

2006 sees a quite remarkable anniversary, the fiftieth birthday of the Gauge 0 Guild. With some 6000 members it is an institution which has become accepted today as an integral part of this great hobby, and is probably the largest organisation in the world dedicated to one specific gauge.

Every year, two great exhibition halls in Telford are crowded with gauge 0 enthusiasts who gather round the vast array of traders' stands which offer just about everything from ready-to-run models to kits, parts, and tools necessary for building one's own models, and during the year similar regional exhibitions are staged in various parts of the country for the convenience of those who cannot travel to Telford. Working layouts of a standard undreamed of 50 years ago are on display, and demonstration stands offer expert advice on most of the problems encountered in model-building.

It was not always so, and 50 years ago gauge 0 presented a vastly different picture, one that as time passes is fading in the memory of those old enough to have been there at the time, and is only dimly perceived by today's generation of enthusiasts. It is well to place the facts on record before they become lost in speculation and lost archives. How did the Gauge 0 Guild come into being, and why?

In order to answer this, it is necessary to look at the situation in the world of railway modelling in 1956. Gauge 0 (or scale 7mm to the foot) had been the dominant gauge for over 50 years, with most boys possessing either a Hornby tinplate train set, or more affluent families enjoying the better-detailed models of Bassett-Lowke and others. There were many firms of repute supplying models of varying standards, such as Mills Bros. of Sheffield, the Leeds Model Co (Rex Stedman), and Walkers & Holtzapffel of London, with continental firms like Bing swelling the market place.

The 1939-45 war put a virtual stop to this, with the famous suppliers now turning to munitions, and after the war as the nation staggered back into peacetime, gauge 0 found itself facing competition from the smaller gauges, principally 00. Houses were becoming smaller, with less room for gauge 0 layouts, and plastics were making their appearance everywhere. Gone were the spacious cellars and

Above left: two trains ready to depart on *Crewchester*, the author's own extensive outdoor 0 gauge system.

Right: *Bigston*, by the late Geoff Bigmore, was set in north London, and was featured in *RM* in August 1971 and August 1972.

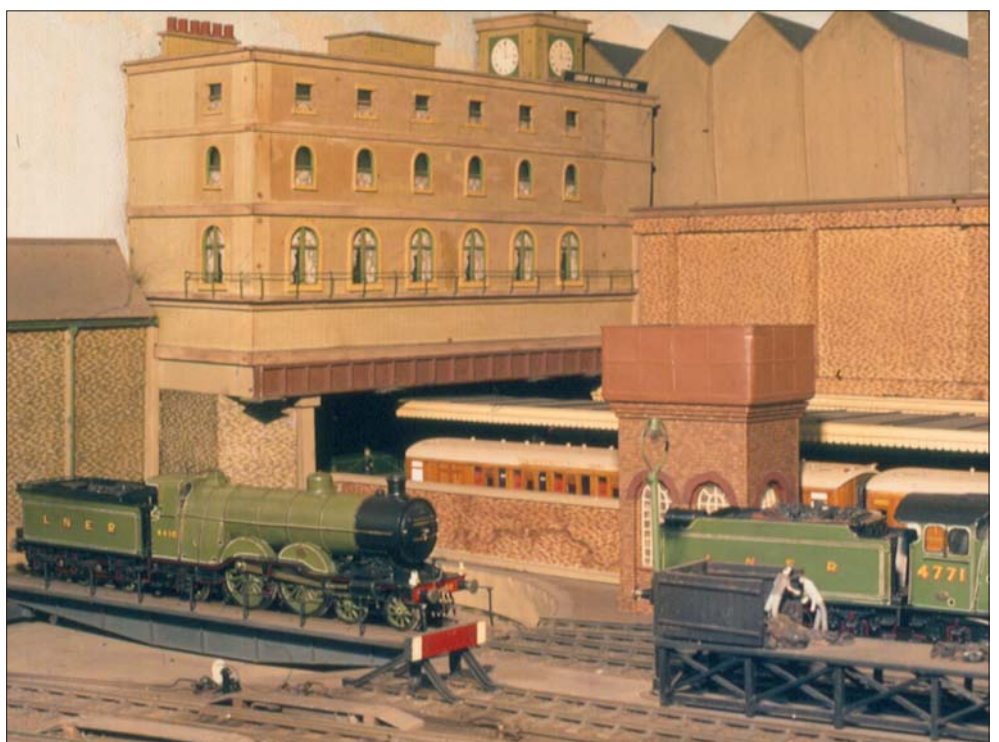
Photographs courtesy Mike Howarth.



lofts of the Victorian houses, and more people were living in flats with their limited space for layouts. One by one the famous names of gauge 0 manufacturers either ceased production or turned to other media. No longer did gauge 0 remain the unchallenged first choice of the railway modeller. The plain fact was, by 1956 gauge 0 was dying save for a relatively small number of dedicated adherents.

Cometh the hour – cometh the man. A letter

appeared in the February 1956 issue of *Model Railway Constructor* bitterly complaining about the demise of gauge 0 – and why didn't someone do something to try to rescue it? The letter was signed by a pseudonym 'Auld Reekie', an Edinburgh solicitor whose real name was Loch-Kidston. The letter was seen by a man in South London named Harold Bower, who decided that he would actually try to *do* something about the situation, rather





Left: other landmark 0 gauge layouts over the past 50 years include *Millers Dale* (see RAILWAY MODELLER May 1983).

Photograph: Brian Monaghan.

Below left: a scene on the 0 gauge outdoor line by the late David Jenkinson.

Photograph: Ron Prattley.

Opposite page: through the 1990s (Paul Jones' *Hadley Road*) and the turn of the century (*Ramsgate Harbour*, Peter Smith) to the present day (*Rothern Bridge*, Crawley MRS). See RMs Sept. '97, Sept. '00 and Apr. '06.

Photographs: Len Weal, Peco Studio.

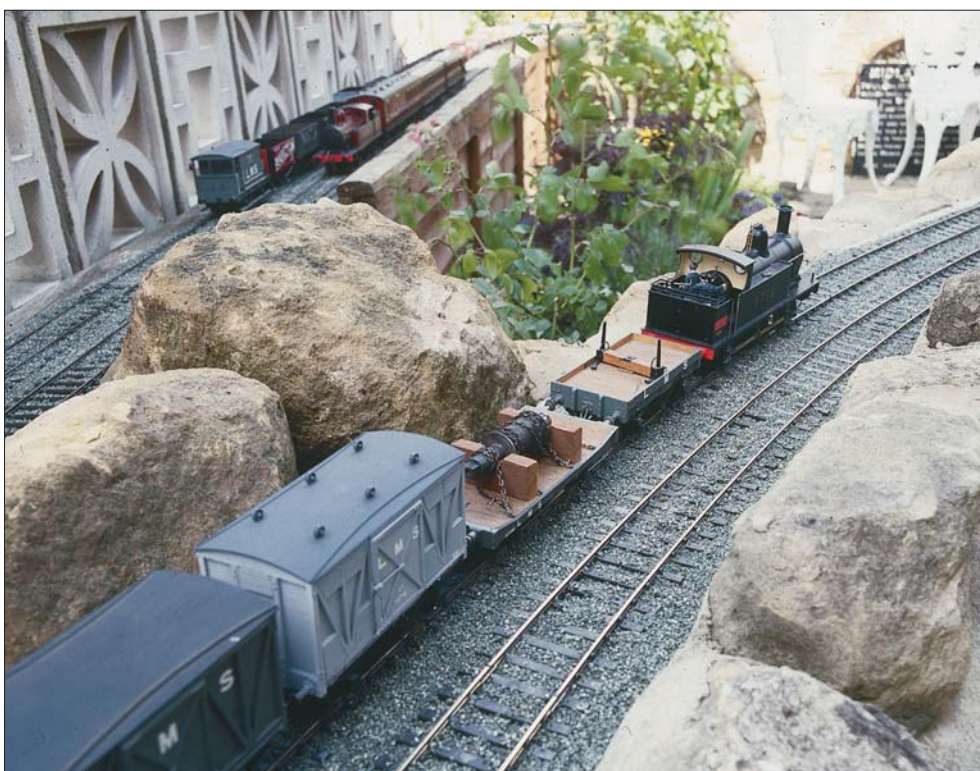
than just sit about lamenting the passing of his favourite gauge.

In 1956 he solicited the cooperation of the three principal model magazines by persuading them to publish an announcement that a meeting would be held in August in a railway building in Euston Square, adjacent to the station, where it was hoped some sort of Association might be formed to present a united front to the remaining few traders, and persuade them to recommence production of gauge 0 items.

Some 30 die-hard gauge 0 enthusiasts attended that meeting where Harold Bower took the chair, formed a quorum of Secretary (himself), a Chairman, a Treasurer, and a Trade Liaison Officer, an *ad hoc* agenda was prepared, and the name Gauge 0 Guild adopted. The dictionary defines the word 'Guild' as an association for mutual aid; an association looking after common interests, providing mutual support and protection – a singularly felicitous definition of what was hoped had been started on that August afternoon in 1956.

Many such associations have been formed in a burst of enthusiasm and then, as quickly as they were formed, have sagged and died for various reasons, the deadliest of which was almost certainly apathy. Indeed, there were those who prophesied a similar fate for the Guild. Thanks to the untiring efforts of those few pioneers in the renaissance of gauge 0, gradually the trade began to wake up to the fact that the gauge, far from being dead, was very much alive, and very slowly but inexorably the supply of 7mm items began to trickle back on to the market. A start had been made and for the first few years Harold Bower provided the inspiration and impetus to keep enthusiasm alive, often battling against apathy and downright opposition from some quarters.

One of the abiding problems with an organisation such as the Guild is that with a membership scattered worldwide, with no permanent HQ where all members could meet regularly, it was extremely difficult to generate a recognisable entity, an awareness of our fellowship with other like-minded people. The first step to overcome this problem was to appoint a Press and Publicity officer whose job it was to liaise with the model press, and produce a quarterly newsletter which took the form of typed and duplicated foolscap (remember foolscap?) sheets. This later went into properly printed booklets of A5 size, and eventually to the A4 quarterly journal which is



now circulated to members and which bears comparison with the best of the professional model railway magazines. Indeed, it has been calculated that to find as much information on gauge 0 matters as can be gleaned from the *Gauge 0 Guild Gazette*, one would have to subscribe to the three existing model railway magazines for ten years!

In the early days of the Guild, fine scale was still in the minority, and clockwork propulsion was enjoying a substantial following. However, with the demise of the established manufacturers, it was now impossible to obtain springs for clockwork mechanisms. An enthusiastic member who ran a clockwork system travelled the length and breadth of the country to find a source of spring supplies. Specially tempered and dressed spring-steel was imported from Sweden, three principal types of spring designed and manufactured to specifications drawn up by yet another Guild member who was a brilliant engineer, and the hungry market for springs was satisfied.

Similarly, another Guild member who had perfected a method of controlling the speed of spring-driven locomotives without loss of tractive effort, had approached Bassett-Lowke with a view to incorporating this ingenious device into their clockwork mechanisms, and was met with a negative response.

The device was publicised by the Guild and distributed to the members. It was known as the 'teleguv'.

Many an item on sale today found its way into traders' catalogues as a direct result of suggestions emanating from the Guild. Example of this are etched-brass awnings for platform roofs, and even more importantly, the now famous JH motor designed by the late John Hart would probably never have seen the light of day were it not for the fact that it was initially funded by the Guild.

The rapid growth of the Guild brought with it problems for the management, all of whom gave their services voluntarily, and in order to safeguard themselves and the membership the Guild was formed into a Limited Liability Company without share capital, but still managed by volunteer labour. The fact that the Guild has survived these often daunting problems over half a century, and is a thriving community today, is tribute not only to those dedicated people who give up their time and labour to run the Guild, but to the quite remarkable spirit of fellowship which exists within the membership.

As the Guild celebrates its 50th birthday with pride and gratitude, it faces new problems in the coming years which demand other people of the calibre and courage of Harold Bower to lead it forward into the second half-century. No longer is the Guild a lone figure fighting for the very survival of gauge 0, but a strong force uniting those who follow this gauge, and presenting a ready market for those traders who try – and succeed so well – to fill the needs of gauge 0 modellers.

The GOG Membership Enrolment Officer is Peter Matthys, 1 Station Cottage, Ystrad Meurig, Ceredigion SY25 6AX.





Hilltop Colliery

The scenery stands still in a colliery setting

RICHARD BARDSLEY presents a compact N gauge plan.

How many of us model a layout set in a specific period, and yet accumulate rolling stock that falls either side of that period, or in a completely different one? I am no exception – my layout is 1920s Great Western, with rolling stock to match and a few models that fall either side of this period. However, I also possess rolling stock for 1950s BR London Midland Region, BR 1970s, and BR modern era late 1980s/early 1990s, even a bang up-to-date Class 66. All this latter rolling stock is allowed to stretch its legs on the layout from time to time, but you do have to suspend a little disbelief as a train of Merry-Go-Round (MGR) hopper wagons races past a stone-built goods shed and a hand crane – contrast indeed.

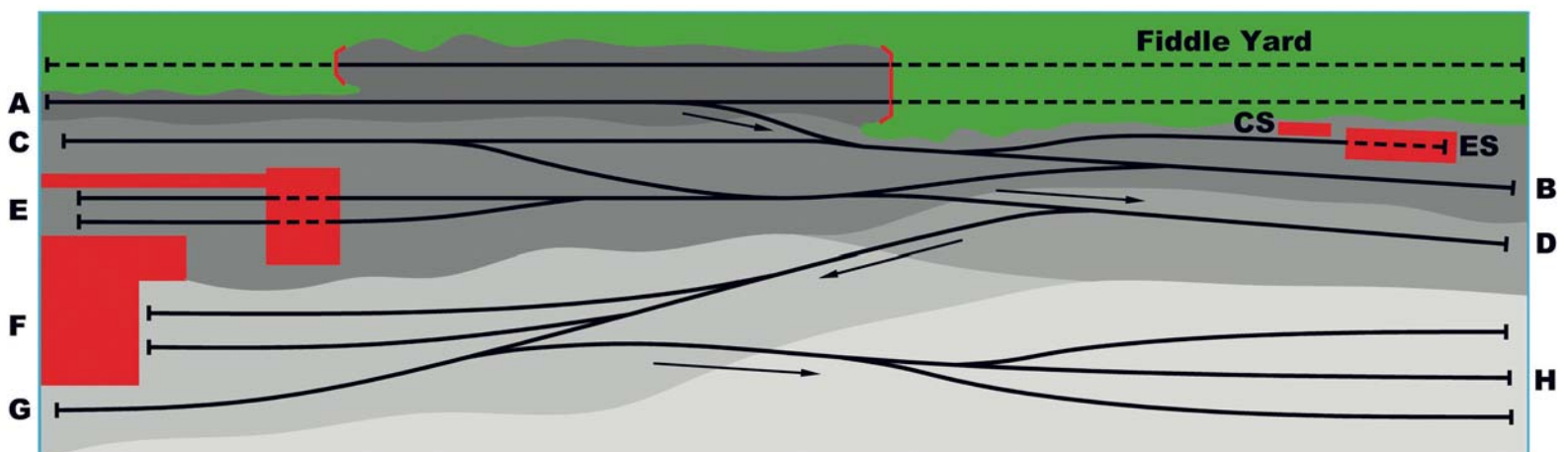
So what is the answer? A few modellers have created layouts where the time period moves forward. This may be over a short period, the

most popular being the transition from steam to diesel, starting completely with steam and then introducing the diesels and phasing out the steam. Other modellers have chosen a far wider period, showing perhaps the transition from a pre-Grouping company to one of the Big Four, and perhaps beyond into nationalization. Such layouts are to be applauded for their ambition, but while it is relatively easy to change the rolling stock over the course of the timetable, it is less easy to change the surroundings, an obvious example being road vehicles which themselves see a transition from horse and cart to early petrol engines to modern cars.

What is needed is a layout where the main focus of the display would change little over the course of up to 100 years. The answer came while flicking through Iain Rice's book

An Approach to Model Railway Layout Design which features a number of layout suggestions for the space-starved modeller. Towards the end is a plan for *Deep Navigation Colliery* and although my final plan bears little resemblance to that of Iain, I must give credit where it is due. Further inspiration came from Rob Johnson's book *Modelling Aspects Of The Coal Industry* which is worth buying just for the photographs of coal wagons as far as the eye can see; however, it is also invaluable for the drawings and photographs of a colliery headframe and loading screens, and photographs of industrial shunting locomotives at work.

The movement of coal by rail has always interested me, perhaps because it is the reason that railways were built in the first place. However, it does not have to be a colliery, any industrial setting would support my layout



suggestion. There is quite a lot of track, most of it taken up with siding space but this is a shunter's layout to keep the operator really busy dealing with incoming trains of empties, sorting them into the loading sidings and then marshalling them into loaded outbound trains. The plan is drawn for N gauge as this is my chosen scale, but its small size would allow it to be scaled up for the larger gauges quite easily.

Design

I introduced the idea of the 'wallpaper' layout in my plan for *Sluchers Lane* (RM June 2005) so called because you can draw the entire plan in N Gauge on a piece of wallpaper. The baseboard size in this case is 60" x 18", or basically one 5' baseboard which removes the need for joining boards and track joints.

I envisage an open-topped plywood baseboard which would allow different areas of the track to be on different levels, as proposed in Iain Rice's plan. The most obvious approach would be to have the high ground at the rear, as it makes it easier to get at the rolling stock, particularly if you uncouple by hand. Alternatively, you can do as Iain suggests and build the high ground at the front, since you then 'look into' the layout which gives a great perspective with which to support the illusion of blocking out the rest of the world. If this constructional approach is a bit daunting for the less experienced modeller, there is no reason why all the track cannot be accommodated on a flat baseboard. On the plan I have used different shades of grey to denote the different levels with arrows indicating the direction of the down gradient. Thus the track falls from A to B, then C to D, then D to G and finally G to H.

The fiddle-yard is really just a single line which would suffice, as a limited number of trains would be dispatched and received. However, as the intention is to show a transition from one period to another, there is actually a requirement for quite a lot of rolling stock for such a small layout. For this reason, the cassette system is suggested, as this will allow rolling stock to be transferred to and from the layout quickly and safely.



Above left: the MGR hopper has had a long life and they are still in service today, although even this classic design is now finally being replaced by the more efficient bogie hopper design. Traction does not get any more modern than a Class 66 but King Coal is still a classic freight load.

Above right: most colliery freight is simply coal going out but a few supplies would come in, notably pit props. These are Peco wagons with loads from Ten Commandments.

Centre right: a typical scene from the early twentieth century – colourful private owner coal wagons as far as the eye can see.

Right: move forward into early nationalization and the scene has changed only inasmuch as the colour of private ownership has been replaced by the grey unity of standard 16T mineral wagons with only a few interlopers.

Left: overall size of plan 60" x 18".



Left: even into the 1970s, small unbraked four-wheel coal wagons (middle) were still being used in the same way that they had been for over 100 years. Vacuum braking of these wagons had at least been around for a number of years (foreground) while the thirst of the power stations had finally seen the more efficient MGR hopper widely introduced in the 1960s. The Graham Farish model of the Class 08 is quite acceptable.

Below: actual models placed on the plan help to give a feel for what will fit and how it will look. Here, an unpainted Ten Commandments coaling stage kit with a Peco engine shed help to give a sense of what the loco servicing area will look like.

Motive power

There are plenty of shunting locomotives that would be suitable. You can still get hold of the Graham Farish general purpose 0-6-0Ts second-hand, and their basic design makes them perfectly suitable to represent the typical industrial engine. Similar is the current Graham Farish (by Bachmann) 'Jinty', which although a recognisable design, would look at home in the colliery setting. The Graham Farish 57xx pannier is also a suitable candidate but best of all is this firm's J94 Austerity, as large numbers of these small but handsome locos found their way into industrial service. Why not treat one of these locomotives to a repaint to represent the colliery's 'house' colours. See my article *Great Western Might-Have-Beens* in the August 2004 RM for more small loco ideas. Some of the small continental locos could be suitably anglicised.

For post-steam shunting power, there's no difficulty as the Class 08 has dominated, and the model by Graham Farish, while the wrong shape and having inside instead of outside frames, is quite acceptable and there are a few things you can do to make it much better (see my articles *A Well Worn 08* and *Dual Brake 08* in the December 2003 and April 2005 RM respectively). Class 08s have shunted collieries as BR-owned locomotives, but with the downturn in freight traffic and the closure of many yards, a lot of shunters were sold into industrial use, and again, there is an opportunity for you to apply your own colour scheme. Even today, Class 08s are still prominent in industrial use, with companies such as RT Rail providing shunters for long-term contracts or spot-hire, with the 'anything goes' approach to liveries that has developed since privatisation. Again, there are probably a few small diesels from abroad that would be suitable.

Wagons aplenty

There are plenty of wagons that you can get for a colliery layout, but really only one type – open coal wagons. For the greater part of the history of coal by rail in this country, the wagon of choice has been the short 9' or 10' wheelbase open wagon; the change to larger wagons was always going to be long and slow as the colliery owners would not invest in the new track layouts with less sharp curves that the larger wagons needed. This carried on right into BR days, but it serves the modeller well on a plan like this as you can get more of

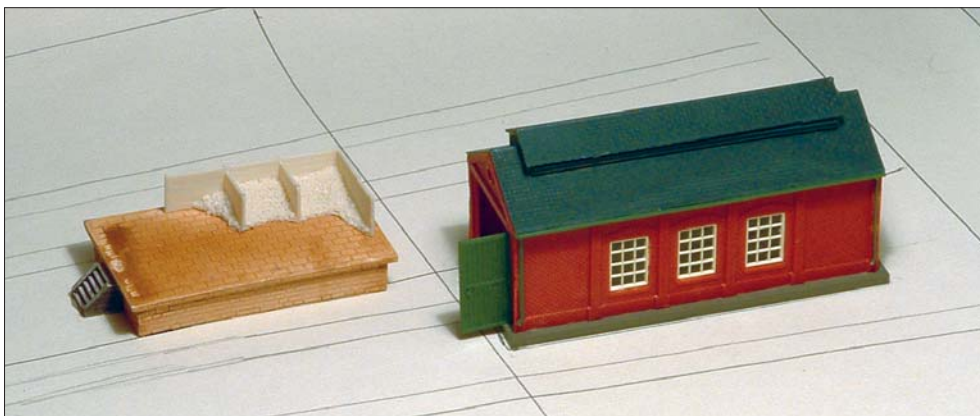
The maximum train length is 24" as this is the length of the fiddle-yard. I used a 12" ruler to see how many wagons of various types would fit in this length and the results are as follows: seven private owner or 16T mineral wagons with a 9' or 10' wheelbase; six 21T steel minerals or hoppers on a 12' wheelbase; four MGR hoppers. My longest locomotive is a Class 66 at 6", which would give this loco and six MGRs. A pre-war train of private owner wagons, with say a GWR 56xx 0-6-2T would be 11 wagons plus a brake van.

There is room at the back for another single line that leaves the fiddle-yard before plunging into a single tunnel. This is 'the main line' and would support a passenger train shuttling back and forth; automatic shuttle unit controls are available from a number of well-known manufacturers for just such a purpose. For steam days, what better than the Dapol 14xx and autococh in either GWR or BR livery. Thereafter, it would be first generation DMUs and then second generation DMUs, each one in a variety of liveries. While this train is only on view for a mere 24", I feel that it adds some regular movement at the back of the layout;

none of these passenger trains needs to turn round and the shuttle unit handles everything so you can concentrate on shunting.

Automatic uncoupling is probably a must for such an intensively-shunted layout, and a number of suitable systems are available, the simplest being the Peco system which does not require any modification to the standard N Gauge coupler other than the addition of the steel tails.

A characteristic feature of many industrial railways is the small shed for the servicing of the private railway's own shunter fleet. This just needs to be a single siding with enough room for a shed and simple coaling facilities (marked ES for Engine Shed and CS for Coaling Stage on the plan). Both Ratio and Peco produce excellent models of single-road engine sheds, though I feel that the brick finish of the Peco example is more appropriate to the industrial setting. It is a superb opportunity to build a detailed little scene with that hint of dereliction that characterises so many industrial settings. The shed would still be required in later times for the maintenance of diesel shunters.



Right: the 1990s saw sectorization and the MGR hopper now reigned supreme with just a few traditional four-wheel opens left to rot at the back of the sidings. The Class 37s were a feature of the Welsh Valleys for years.

Photographs by the author.

these small wagons into the same amount of siding space thus giving the illusion of a busier layout.

Starting with the oldest wagons, Dapol, Peco and Graham Farish all make ready-to-run coal wagons in a number of authentic private owner liveries. If you fancy making your own wagons then you can do no better than the N Gauge Society's kits for RCH coal wagons, with suitable transfers by ModelMaster which, as with the kits, are exclusively available to Society members.

Mainstay of the British Railways period is the Peco kit for the 16T mineral wagon, supplemented by the N Gauge Society kit for the 21T wagon and also the hopper. ModelMaster transfers for all these wagons are again available to Society members. As British Railways became BR, these wagons continued in service, with new builds and re-bodies such as the later vacuum braked 16T mineral wagon, which is one of the N Gauge Society's recent kits and comes complete with transfers. New 16T wagons of various types have been introduced by Graham Farish too.

Throughout the whole BR period, there has been the MGR hopper wagon in long rakes, and N gauge modellers have until recently had a good model in the long out of production and very expensive Minitrix model; there is now a choice between two new models, from Peco and Graham Farish. The only differences in these wagons over their long period of service has been coding and branding, but the aluminium body colour has remained the same so most wagons will not look out of place over up to a 30-year span. These wagons work best as mobile conveyor belts from pit to power station in rakes of 30 or more, so they look a little out of place on such a small layout, especially as, being longer, you can fit fewer wagons into the sidings. However, it is a minor compromise on a layout that is all about shunting. Modern times have finally seen the introduction of high capacity bogie wagons and I am sure these will be available to the N gauge modeller soon.

In pre-nationalization days there would have been a few other wagons to be seen at collieries. Most of these would have been 5- and 7-plank open wagons just like the coal wagons, but they would have been bringing in a steady supply of wooden pit props. A few other vans and opens would have brought in sundry supplies, but every so often, you could justify a heavy machine wagon such as a bogie well truck to bring in a replacement piece of large equipment such as a new winding wheel for the headgear.

Operation

I would start the layout at the beginning of the 20th century. Trains would consist of large numbers of privately owned coal wagons, with



a few railway company wagons bringing in pit props, and other supplies. Motive power would be the standard small tanks used by the many small Welsh railways such as the Rhymney Railway. Grouping in 1923 sees an influx of Great Western Railway locomotives and that company's wagons. Nationalization in 1947 sees the private owner wagons steadily replaced by BR standard mineral wagons and hoppers. Locomotive liveries change to BR black, or perhaps the colliery line now falls under the Midland Region and haulage is provided by ex-LMS types. During the 1950s and 1960s, steam starts to give way to diesel and soon there is nothing left but corporate blue and standard MGR hoppers. The 1980s see new liveries and the 1990s bring privatisation, and more new liveries and Class 66s. This scenario suits my rolling stock collection and you can change things around to suit yours.

The main line locomotive hauls its train out of the fiddle-yard to the end of the track labelled A on the plan. It then reverses the wagons into the colliery to the end of track B, before uncoupling and returning to the fiddle-yard. The resident shunter would haul the wagons on to the run-round loop between B and C which would allow it to perform a run-round and then back into track D which serves as the headshunt for two sidings (E) under the loading screens. If the wagons are carrying supplies, these can be shunted into sidings F in front of the headgear. If no run-round is performed then the locomotive can move wagons to track D, then reverse to track G which forms the headshunt for sidings H. Loaded wagons can be made up into a train and pushed into track A for collection by the main line locomotive from the fiddle-yard.

There are as many variations and complications around this as you wish. Trains without continuous braking will require a guard's van

which needs additional shunting. You can deliver trains of empties one after another to keep things busy and require wagons to be stored in the sidings (H) before they can be loaded and reverse the procedure for despatching loaded trains.

An interesting challenge is how do you load up the empty wagons since this layout is all about despatching loaded wagons. Best of all would be to load the wagons with real coal! You can buy crushed coal, or suitably coloured scatter material (which is a bit lighter and cleaner) and it would not be too difficult to build a means of getting the coal into the wagons under the loading screens. You don't need a complicated set of motors and conveyors – I have drawn the conveyor on the plan coming from the side of the layout, but if this is actually inclined down to the loading screens then gravity will do the rest and all you have to do is pour the coal in at the side.

If all this seems beyond you, then there are ready made coal loads available. Peco makes plastic inserts for its wagons, Ten Commandments does a range to fit most open wagon sizes, and Peco, Ten Commandments and Parkside Dundas all make coal inserts to fit all the makes of MGR hoppers.

The design of the loading screens could be altered so that these inserts can be placed in the wagons out of view of any potential exhibition audience, and 'unloading' in the fiddle yard is much easier than using real coal.

I did a quick measurement of the total siding space on my full size plan and I reckon I could get over 70 short-wheelbase wagons onto the layout in one go. Even I have not got that many wagons (yet!) so this is a layout design that offers plenty of room for rolling stock expansion, especially when you consider how many different eras it can support.

Coal mining in North Somerset

A once-thriving industry explored and modelled in OO

BOB PETCH runs a mix of GW and S&D stock in a colliery-dominated setting.

The North Somerset landscape is one of valleys and hedged hillsides interspersed with woodland and rich pastures. This scene is occasionally punctuated by a magnificent perpendicular church tower dating from the wealth of the 16th century wool trade. Somerset had for centuries provided minerals of various kinds and Mendip had been mined for its lead by the Romans. Later, in the 18th century, coal began to be mined in north Somerset and the opening of Old Pit at Radstock in 1763 signalled the beginning of coal mining on a wide scale in that area.

Pits came and went as the coalfield developed over the next 200 years. They stretched from Pensford in the north, to the edge of Frome in the south, and from Bishops Sutton in the west to Braysdown and Writhlington in the east. The rich, undulating coal seams were worked by some 80 collieries over that period, the last to close being Kilmersdon on 28 September 1973.

In some places small wooded hillocks conceal the toil of the previous two centuries where coal spoils, or dirt batches, have been well camouflaged into the scene.

Only one black cone remains to cut the sky-



line above Midsomer Norton as coal mining in this area ceased over thirty years ago. With many of the small pits closing throughout the 20th century from around 1908, the valleys returned to quiet rural life so today it is almost

impossible to imagine how some areas would have looked, sounded and smelt a century ago.

The Somersetshire Coal Canal was the first major transport artery to be grafted into the landscape at the beginning of the 19th century, cut from the Kennet & Avon Canal at Limpley Stoke. It provided the means by which

Above: looking towards the small village of Camerton where two pits were once active.

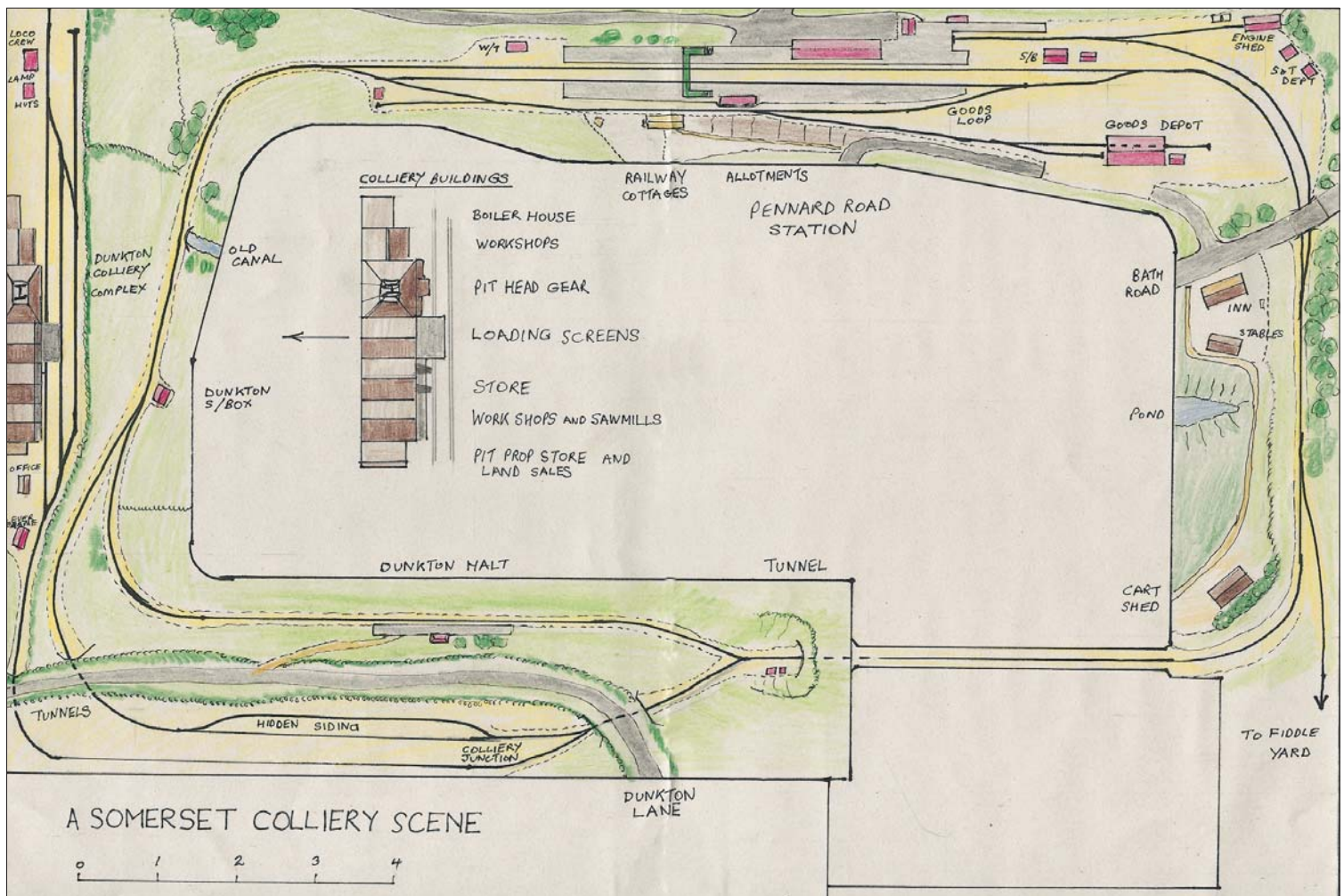
Left: one of the well preserved locks near Combe Hay.

Below left: skyline at Midsomer Norton in September 2004.

Below: preserved remains of the SCC at Limpley Stoke, September 2004.

Photographs by the author.





this precious mineral could be exported to the many markets, primarily Bath at that time. It had two branches to serve the Somerset coalfields, one going to Timsbury and the other from Midford to Radstock; both were very narrow in construction.

The excellent visitor centre near the Dundas Aqueduct at Limpley Stoke shows the routes and remaining landmarks. One of the most impressive scenes is near the village of Combe Hay where several stone locks remain from the flight of some twenty that took the Timsbury branch around and down the hill to the valley floor. The narrowness of the structure can be well appreciated here. In the mid-

19th century the writing was on the wall for the canal as the mine owners could see the benefits of the railways to get their coal to the markets in Bristol, Bath and Southampton faster and cheaper.

The Bristol & North Somerset Railway sought to win the traffic but the Somerset & Dorset Railway was also active with Bills submitted, withdrawn and resubmitted. Gauge differences added to the mêlée and eventually in 1875 the first through passenger train ran from Frome to Bristol. The Cam Valley line began operation in 1882 from Hallatrow to Camerton and on to Limpley Stoke in 1907; meanwhile the canal struggled on until 1901.

towards Dunkerton, Combe Hay, the old S&D viaduct at Midford and Monkton Combe, famed for the film *The Titfield Thunderbolt*.

The small market town of Pennard had become the focus of rural activity in the locality and the more prosperous colliery at Dunkton made the GWR line much more important than history recalls. While the surrounding collieries were in decline and closing (Timsbury 1914, Dunkerton 1926 and Tunley 1930), new seams of fine house coal had been found near the picturesque village of Dunkton.

These turned out to be highly economic to work and, unlike some of the local pits, Dunkton Colliery was a well managed and efficient operation attracting labour from around the area and luring the poorly paid agricultural labourer to go below ground to sustain his family.

Below: the growing dirt batch.

Below right: disused stretch of the old coal canal.

The background for the model

The area I have chosen as the inspiration for my model is the area around Camerton where the valley is long and impressive as it winds





The model

Dunkton Colliery was inspired by Camerton New Colliery and the illustrations in *The Camerton Branch* by Colin Maggs and Gerry Beale which has been like a bible to me over the last two years. On-site visits helped to capture and 'breathe in' the feel of the valley and immediate locality. A visit (or rather a pilgrimage) to the Radstock Museum in the heart of the old mining country and dedicated to its memory was a must. I was rewarded by finding a copy of a local booklet *Coal from Camerton* with many useful drawings and rare photos. So there we have it, the scene is set and the plans drawn up.

Having a colliery on one side of the layout leaves plenty of scope for the rest of the space to be filled. A busy branch line requires a station for the market town so Pennard Road was conceived. On the opposite side of the layout, the branch would divide with the coal line passing under a bridge where the country lane heads towards the village of Dunkton, just over the hill. From the lane a track leads down to the typical small pagoda of Dunkton Halt and its short wooden platform.

This concept of a small halt in a cutting with a track leading down from the lane above had been on the drawing board in my mind for years and could now become reality.

Above left: auto train arriving at Dunkton halt.

Above right: the Bath Road and the *Guss & Crook*.

Below: Dunkton Colliery and coal sidings.

Where the two single lines meet, the track has to pass through the roof braces in the loft so a tunnel, not unlike Devonshire Tunnel on the S&D, was formed. The lane to Dunkton makes a useful façade to conceal a loop that branches away from the colliery line gradient and meets up with the Dunkton branch just below the colliery. The line then passes over a stretch of disused coal canal as it emerges from Dunkton Tunnel, a narrow dark hole in the landscape.

A short curve of track away from the canal and colliery area brings the line into the station that serves the small town of Pennard, namely Pennard Road.

When first constructed, the down platform was an island platform to accommodate branch trains and allow coal traffic to pass through. As passenger numbers declined in the 1920s and coal traffic grew, the outer line was relaid and made into a goods only loop enabling the coal traffic to pass around rather than through the station. A branch line bay

was constructed on the up platform. A busy goods depot, reached from the Bath Road, handles various farm produce and cattle for the nearby markets, plus leather from the tanning factory. Another source of traffic was paper from the town's large paper mill which was a major employer in the district. Later, the pair of Mechanical Horses based at the goods depot were a constant reminder of the GWR as they darted about the small town delivering and collecting goods for the railway.

The station also possessed a small loco shed where one or more locomotives were stabled, mainly to assist with the coal traffic. Whilst these were normally tank engines, occasionally a 4-4-0 or 0-6-0 tender loco would appear, including an old 'Duke' class apparently 'put out to grass' by the Bristol Division.

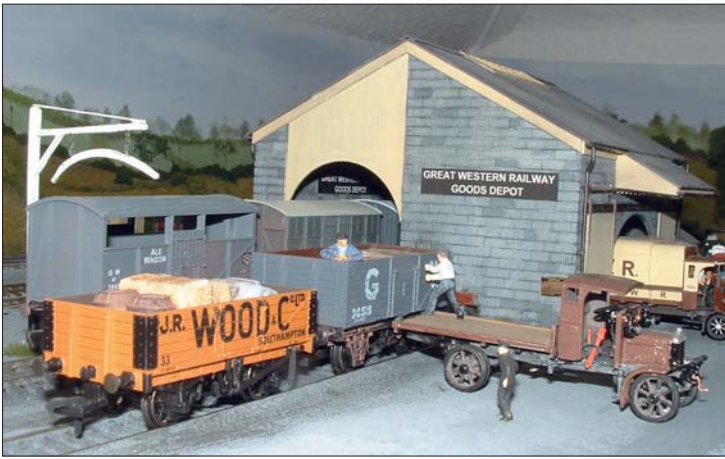
The countryside around Pennard is typical of the area south of Bath, with rolling hills and cuttings. On leaving the station the line passes under a road bridge carrying the Bath Road towards Radstock. This used to be the old toll road where heavily laden coal carts would haul their load to the Bath markets – a full day's journey. In those days there was a good chance that the carrier, on being paid by the city merchants, would spend much of it on beer and return much the worse for wear having squandered most of his profit. Some poor souls fell off their carts and were fatally injured while others ended up in the canal. It was a tough life in those days, especially when the winter was bitterly cold.

Miners' wives would go to the colliery boiler house to carry back hot water to wash those dirty men when they came home.

For those who preferred a good pint nearer to home then the place to go was the *Guss & Crook* public house on the Bath Road, just opposite the goods depot entrance on the edge of the town. The hostelry gets its name from the rope worn around the miner's waist to which was attached a hook, or crook, which was attached to a coal sledge or wagon which the miner hauled along on his hands and knees in the dark.

Behind the pub the line continues past the farm buildings passing through a cutting on its way towards the Bath junction. On occasions in the earlier part of the 20th century the line was sometimes used as a relief line by the Somerset & Dorset as the picture on the opposite page shows.





Above: the busy goods depot.

Above right: a 4-4-0 of the SDJR in the cutting passes behind the pub garden.

Right: Pennard Road Station.

Right lower: a diesel railcar approaches Pennard with the Bay signal off.

Below: 'Duke' Class *Cornubia* awaiting a turn of duty.

Below right: the colliery and boiler house, branch line in the foreground.



The layout can accommodate pretty well any period from 1900 to 1960s and the road vehicles can be adapted to suit. There are many horse drawn carts etc and a few ancient lorries for the early period through to the 1930s. Two rakes of Ratio coaches in Prussian Blue, which I made some 25 years ago, form a splendid S&D contribution. Other stock is mainly Great Western and a rake of six old Triang clerestories fits the length of the platform perfectly, perhaps forming the train to take the miners on their annual outing to Weston super Mare. Football specials for cup matches at Bristol would also be seen and in cases were so full that the guard's van would accommodate some station seats for passengers, just as long as they were returned on the way back! Panniers and Prairies abound and a large number of local colliery and merchants' PO wagons make a colourful impact on the scene. A recently acquired Hornby *Pines Express* set provides the final say in steam rolling stock.



Bob's Folly & Pike Cottage Railway

A Gauge 1 garden layout to complement a feature-filled setting

ROBERT ILES visits a beautiful Dorset garden with a feature that adds extra life to the barbecues.

What do you do with your garden? Bob Lock has created a stunning Gauge 1 feature railway that wends its way around a tranquil garden setting to form a centre of railway and social activity. For one day each month, the garden is open to invited friends who perhaps have differing amounts of railway interest, but all share the aim of enjoying a pleasant time in the fresh air.

Bob and his wife Jill have lived in Dorset for close on 40 years. After a career in industry, there is a little more time to devote to the railway but they are both still very active in several spheres. Jill has been involved in catering for many years so the union of the two interests makes for splendid barbecue-based railway social days throughout much of the year.

Part of the railway's name is derived from the adjacent *Pike Cottage* which borders a very picturesque part of the track. A specially-made wrought iron arch over the track near the station bears the *BF & PC Rly* name with the sign of the crossed pikes to reinforce the message.



The layout is essentially a double-track circuit with a single-track bridge guarded, as in wartime, by a bunker at each end. A reversing loop is close to the storage shelter called *Bob's Folly*, which houses rakes of wagons and coaches including BR maroon-liveried stock and Pullman cars with battery-powered interior illumination.

Support for much of the track is provided by the stonework banks and walls that form the basis of much of the garden landscape work. This enormous amount of stone was already in the garden and has been put to both functional and beautiful use. In addition, vertical wooden stakes and horizontal beams, made from previously used and seasoned house timbers, span other areas. Some sections of track are virtually at ground level. The track bed is topped with ply or planking and house damp course material. This construction has lasted well for 20 years. The track itself is a mixture of

Gauge 1 Association, Tenmille and Marway products. It is simply nailed down to the bed at about 6" intervals. Metal plates are fitted between the rails near some of the signals; this is to prevent sleeper fires if stationary coal-fired locos drop ash.

The signals used to be semaphore style, but after some damage occurred, these were changed to the colour-light type. The signals are electronically interlocked with the turnouts to ensure incident-free running sessions. A sturdy loom of outdoor-quality cables encircles part of the track and disappears into

Above: Bob's Folly, viaduct and bridge from a high vantage point at Pike Cottage.

Below: Flying Scotsman pulling out of the station with a rake of Pullman cars.

a control system under the track near the bridge. 12volt train-detector circuitry registers the presence of a train when the axles short circuit across the track within each working section. It also works out the priority when trains approach the single track section from opposite directions. This system is based on that used on prototype railways.



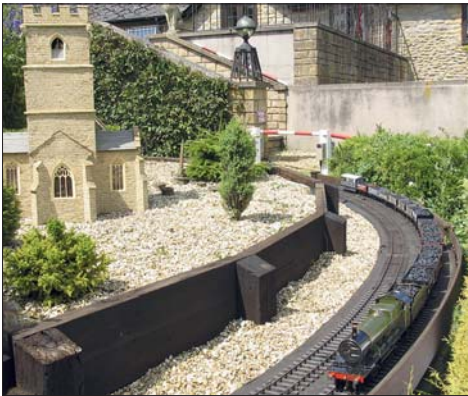


Above: the buffers are either handbuilt or proprietary products. The damp course material and track detail is shown clearly.

Below: the station goods shed, cattle dock and S&D 2-4-0 tank loco.

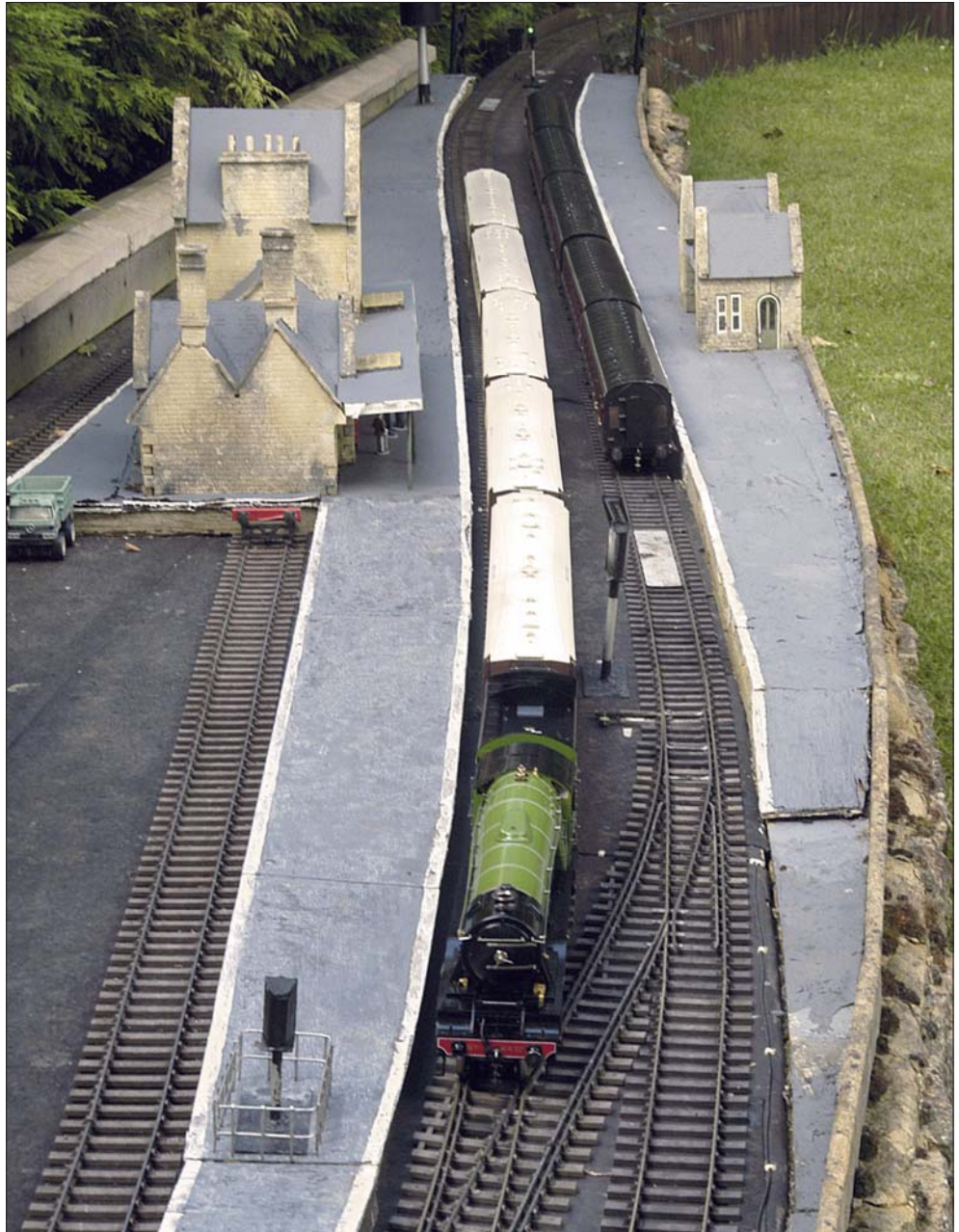
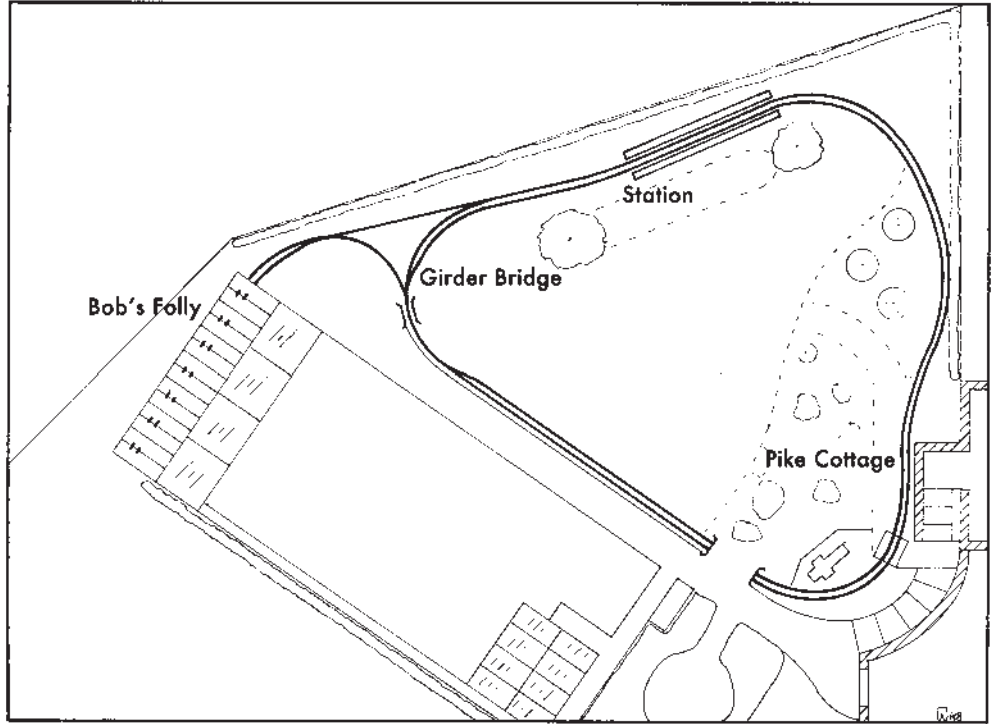
The successful marriage of railway and garden is an example to anyone contemplating such a project. Somehow, the hanging baskets under the suspended track add to the overall effect and charm of a garden railway that is so active in functional and social roles. The garden is full of colour and features a wide variety of plants, trees and tall grasses.

The station building is based on that of Crewkerne in Somerset which is typical of the architecture seen along the former LSWR/Southern/Western Region main line. The building is made from stone that was originally destined for Wells Cathedral. The station's goods shed is made from reconstructed stone bricks,



Above: the Great Western 28xx Class hauls a coal train over the crossing past Pike Cottage. The church has a calming influence on some live-steam goods activity.

Right: Crewkerne station, renamed Pickards Priory after the builder.





Above: the mouth of the Ian Haskett tunnel with the rear of the rake of Pullman cars passing the 28xx Class.

Right: the windmill-powered aircraft carrier!

Below right: the unrebuilt 'West Country', No.34107 Blandford Forum, negotiates the incline towards the station.

Photographs by Jolyon Sargent and Robert Iles.

carefully cemented together. The model's life outdoors has given it a realistic complexion courtesy of the weather and the local insect and bird life.

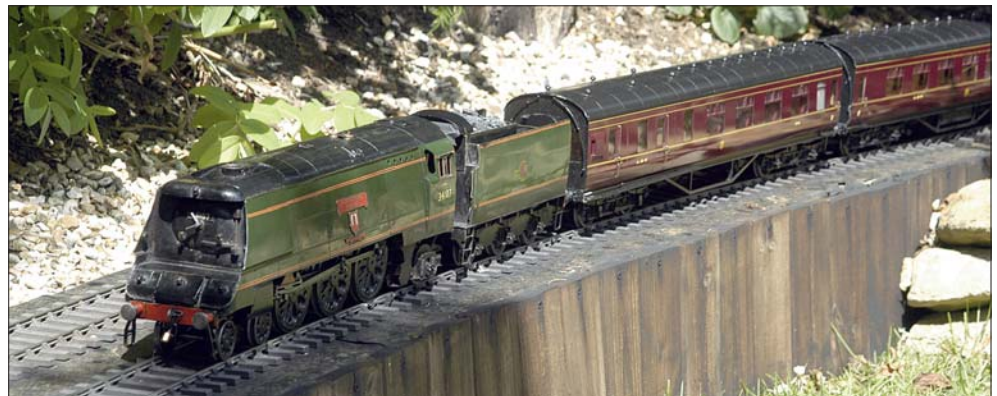
On the opposite side of the garden, is a shrubbery next to which is a magnificent model of the local church. This again is built from reconstructed stone bricks. In twilight, the interior lights shine through the stained glass effect windows. The church sits beside the track in an immaculate setting of shingle, hedges, trimmed low-growing trees and small shrubs. This kind of feature, whilst not strictly connected to the railway, is an added attraction for all those enjoying the garden on running days.

Further around is the *Ian Haskett Tunnel*, named after its constructor and put there partly for the purpose of shielding the track from the overhanging grasses. The tunnel is made from a plywood sheet curved to form the main structure. The mouths are also wooden and painted to resist the weather. It makes a fine twin-track feature.

Near *Bob's Folly*, which doubles as the place to keep the barbecue and lawn mower, is *MacGilroy Bridge*, a girder bridge with sentry bunkers at each end that ensure no suspect train passes. The bridge is also a convenient duck-under point to allow access to another non-railway talking point, a ship.

The railway is very much a garden feature, but there are surprises here and there. A raised garden bed in the shape of a ship carries an

Right: the garden aspect of the railway has equal importance. Here, the hanging baskets are suspended from the wooden track supports. These contrast with the taller foliage and grasses that overhang the Ian Haskett tunnel.



aircraft deck on which is a model plane. But at the stern of the ship is a Dutch-style windmill complete with stone mice! Bob, with his great sense of humour, says that this is to power the aircraft carrier in a way that is undetectable to submarines – of course!

Another surprise was the coal-fired jet engine! What? Tucked away near the storage shelter is the intake section of a fighter aircraft jet engine. When laid horizontally, this makes an ideal base for a supplementary barbecue when filled with coal and a grill placed on top. Extraordinary!

Several friends and acquaintances have contributed to this well-organised railway and all their work is documented. The track plan, wiring and control systems are all drawn out and filed in folders for reference. The track plan includes the main lines only. Near the reversing loop are some extra sidings for temporary storage.

To haul the rakes of carriages and wagons, the eclectic stable of locos includes two 'West Country' locos – one 'Spam Can', one rebuilt – a Black 5, a B12, an S&D 2-4-0T, Great Western 28xx Class 2-8-0 No.2804, plus 'Patriot' Class No.5519 *Lady Godiva* and an LMS 4-6-0. The locomotives and rolling stock have been bought ready-to-run. Various locomotives visit the layout including an *Aster Flying Scotsman*.

The setting is exemplary and the balance of railway and garden is ideal. What will you do with your garden now?

LNWR station footbridge

A structure for Conway in 4mm scale

In response to a reader's encouragement **MARTYN HALEY** describes a new arrival on the layout.

Many thanks to David A. Drane (Readers' Letters, April 2006) for his kind words and encouraging response to my article *Conway LNWR* (Plan of the Month, October 2005). Since our editor has suggested a progress update from me, I hope he won't mind that I have taken this as an excuse to reply with another article!

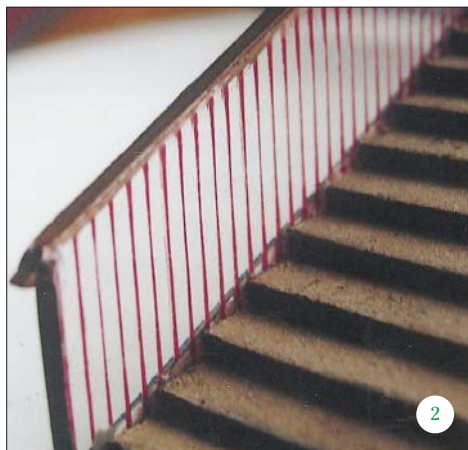
For those who missed the October issue, my 00 layout is in an L-shaped loft (about 36' x 32') and will include Conway and Llandudno Junction stations at close to scale length, plus another LNWR-style main line station to a free-lance design such that typical North Wales trains can be run. (Think of this third station as a fiddle-yard with scenery!)

I began the project in 1999 without any particular timescale in mind although I knew that it would take ages to build. This spontaneous approach was deliberate so that I wouldn't be disappointed should I miss any self-imposed deadlines – our hobby is a relaxation after all!

Looking around the loft this is the current state of play:

- All main line baseboards and track laid and through tracks running.
- Some sidings laid at Llandudno Junction and track layout complete at Conway.
- Not much scenery except at Conway; the two largest structures, Conway Castle and Tubular Bridge complete (these took one year of spare time each!)

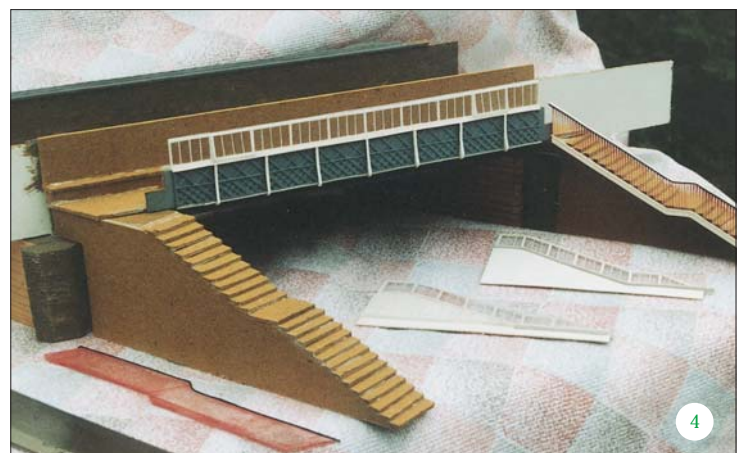
After six years the layout is about half-finished, suggesting there will be a party in 2012! I think that this schedule is perfectly reasonable, given that most modellers will produce a similar amount of model railway in 12 years or so, albeit spread over several different projects. I am just lucky to have the space so that it is all laid out at once. I try to spend some time each day on the layout; it may be just 10 minutes or maybe two hours but as long as I can see some small progress I am happy.



Lately I've been making good progress with the buildings for Conway (mostly on the kitchen table – sorry Sian!) and I hope this station will be largely finished by Christmas.

I took photos to show the construction of the footbridge. These are largely self-explana-

tory but there are a few points which may be of interest to readers. You can see that the solid walls and steps of the footbridge are made from thick card, which gave steps of the right depth. The parts with glazing, however, were made from a clear plastic sheet material about 2mm thick. It is similar to the clear plastic found in Ferrero Rocher chocolate boxes. For strength and simplicity the glazed sides were cut out of the sheet to the full floor to gutter height and length. Thin card detailing was later stuck onto this to give the effect of girder and wood panelling, leaving the windows clear. Firstly the windows were marked out with a ruler and scribe. Then the thinnest glazing bars were produced by making a shallow razor-saw cut along the appropriate scribe lines with the aid of the ruler. White paint was then rubbed into the saw cuts and wiped off the plastic sheet windows. The effect was completed by adding strips of white paper or thin card as appropriate to frame the windows and make the woodwork and girder detail stand



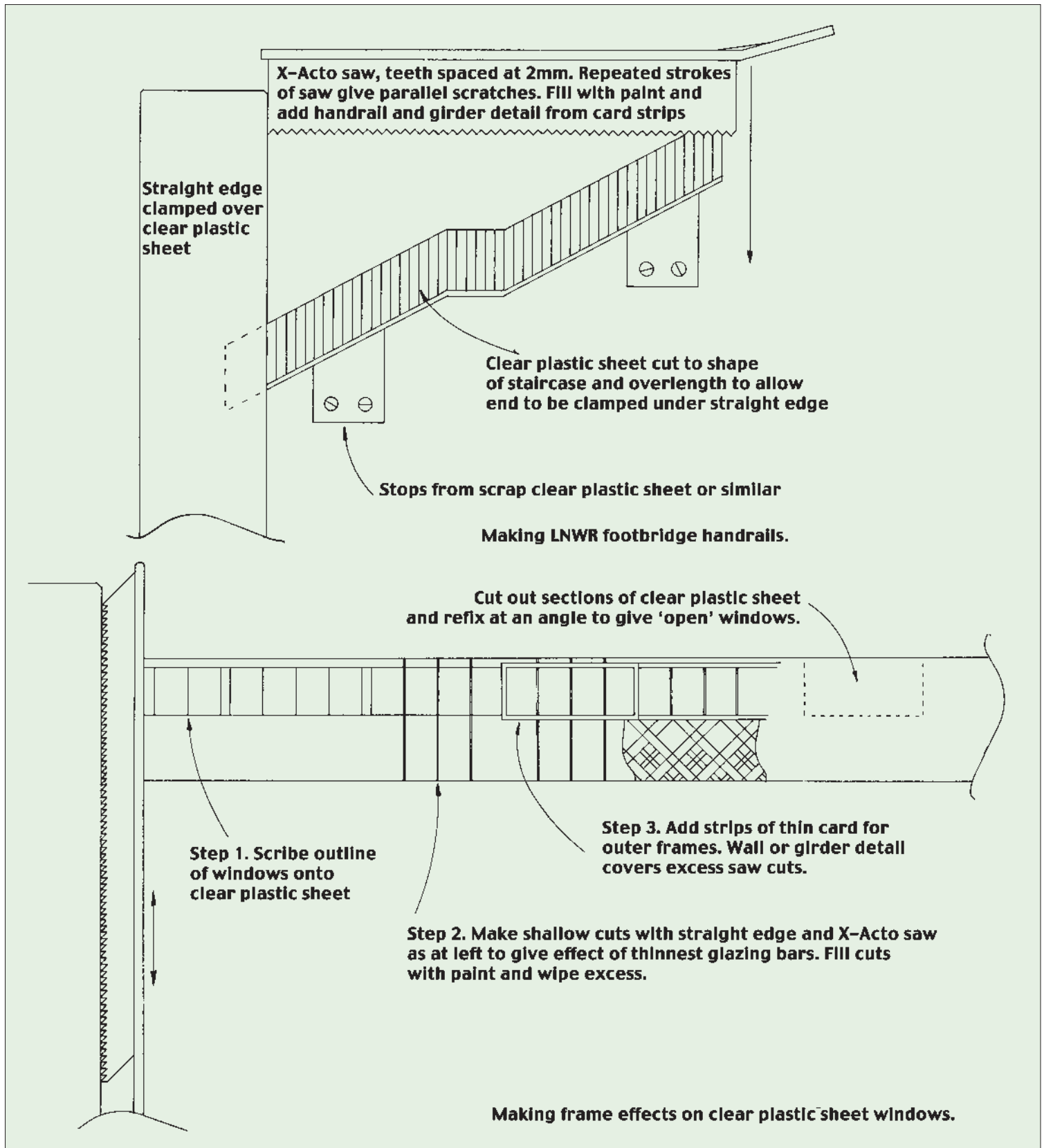
out in relief. I think this method gives a much stronger model than adding separate glazing into opaque materials for such a delicate prototype as a footbridge.

I spent some time trying to make the typical fine LNWR handrails from metal. Pins, fine wire etc were soldered up but the effect was too clumsy and uneven to look like the real thing and there were many burnt fingers. I solved the problem by using the clear plastic sheet again, as shown in the sketch.

Photo 5 shows the cross-bracing inside the

roof which is made from card: the aim is to add strength to the model. You can see that I have fitted six grain of wheat lamps to light the footbridge. The aluminium discs and Meccano bosses visible were fitted to act as heat sinks in case the lamps got too hot within the confined roof space. They are probably not necessary but I was worried in case an accidental high voltage set fire to all my hard work! This station is the first time I've fitted lighting in a model and it really does add an extra dimension and is well worth the effort.

The first photo shows how the complete footbridge fits into the platform canopies. The white band that abuts the back of the footbridge is part of the as yet incomplete model of the plate girder road bridge which carries Rosemary Lane across the station at this point. I started my prototype research for the footbridge by taking measurements from this road bridge, which is still there (the footbridge isn't). Height, length etc were measured best as I could guess from its relation to the road judged by old photographs (nothing is left of



the old station, which closed in 1966). The model reached the stage shown in photo 3 in 2001! I then stopped and carried on with my model of Conway Castle, hoping to find more information on the station.

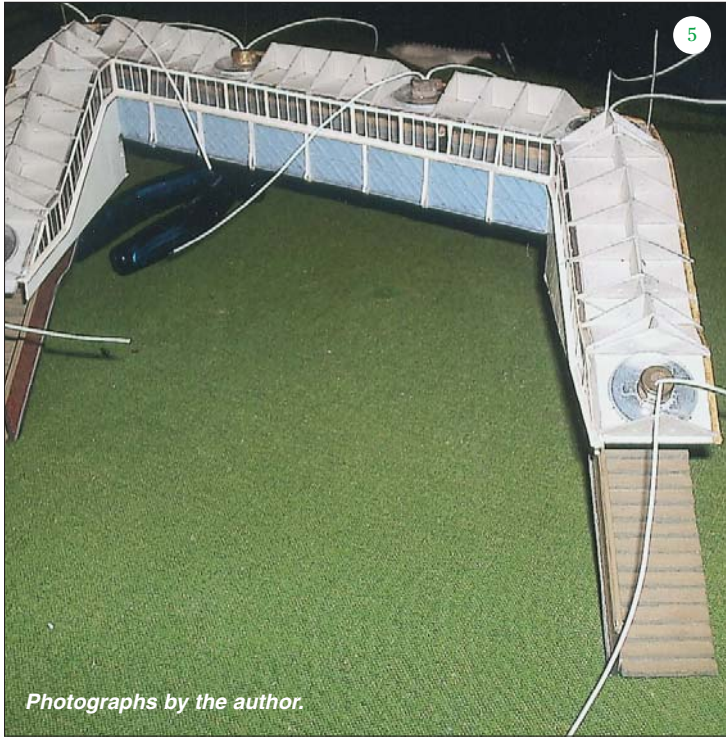
I was very lucky in that the Llandudno & Conwy Valley Railway Society saved some old plans from Bangor Drawing Office, amongst which was a large linen LNWR elevation and

plan showing the footbridge and platform canopies dated 1900. The footbridge main girder with the criss-cross bracing was 48' long and 4' in height. Interestingly it is described on the plan in beautiful copperplate script as '2nd hand girder now lying in Bangor Yard'! These plans are available for inspection in Llandudno Museum Archive. They were an invaluable help in completing my model. I've

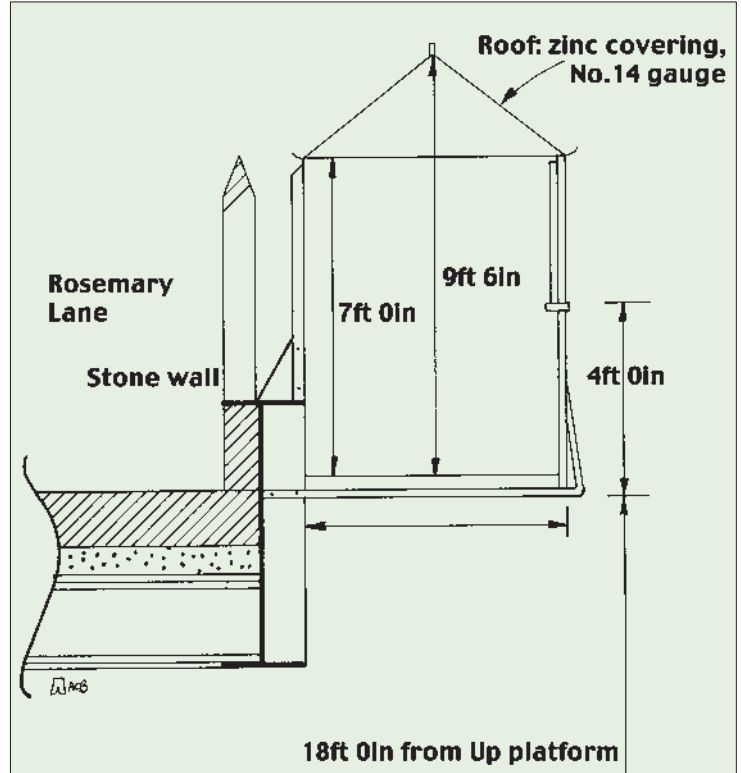
included sketches of some details to help modellers with similar projects.

I am now making the signal box for the station and looking for more information on the Signal & Telegraph yard adjacent to the down platform so if anyone can help or indeed has any unusual view of the old Conway station I would be most grateful.

Contact Martyn via the Editorial office – Ed.

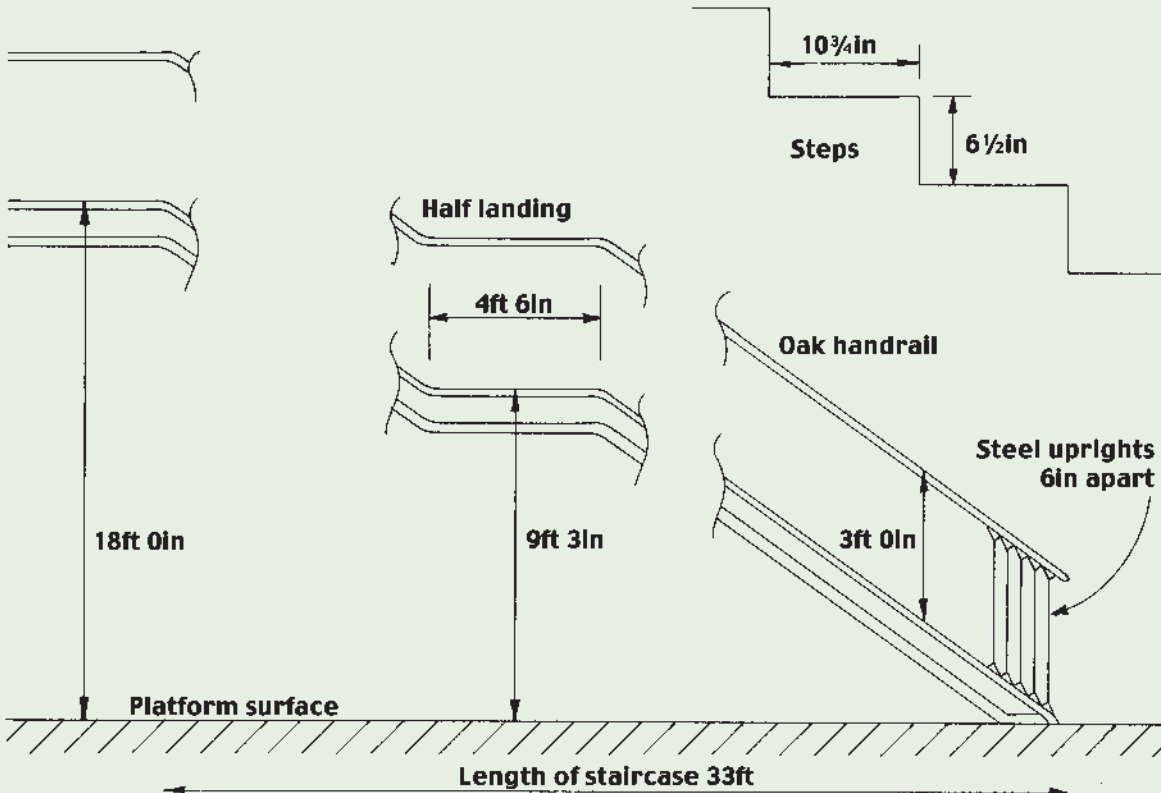


Photographs by the author.



Stairs 6ft wide.
33 steps Up side, 30 steps Down side
due to superelevation of track on curve
through Conway station.

Section of footbridge and road bridge,
taken from LNWR plan dated 31 October 1900



A Tale of Two Southdales

Creating branch stations with proprietary locomotives, stock and building kits

JOHN RODWAY relates the story of how two layouts from the same basis came into being.



This is the story of two models of the same place, to same gauge, by same builder, but set 30 years apart.

There is a saying at the Romiley Club that if a piece of board about 1' x 4' is left lying around for more than ten minutes, then Gerald Wilson will have a fully operational scenic layout on it within a month. He seems to build beautiful dioramas as frequently as other people pause for breath. Needless to say, his railway room is rather full; H0 American, N gauge modern image, 7mm British narrow gauge, etc., some packed-up, but all crammed in. When Gerald came across two pieces of 1' x 4', he felt compelled to build yet another layout – but one that he could have down-stairs! It had to be small enough not to annoy 'The Household Authorities', yet complex enough to provide entertaining operation. *Southdale (LNER)* in 00 gauge was the result.

The village of Southdale is tucked away in a seldom-visited part of the West Riding of Yorkshire. The fictional line up the valley was built to serve the dairy and also to provide a

passenger and freight route to 'The Big City' – this far-off place is reputed amongst the locals to be called 'Leeds'.

Southdale (LNER)

So often modellers start out by laying the track and then find that the trains they wish to run don't quite fit. This leads to awkward operation, excruciating track adjustments, frustrated abandonment, or all three. Gerald conceived the track plan and its traffic together, so that facilities matched the size of the intended locomotives and stock. This makes life easy for operators, as every authorised move will work.

Gerald used tried-and-tested constructional techniques and readily-available kits and

Top: the first, LNER version of *Southdale*. The loop is just long enough for running round two short bogie coaches or five wagons.

Above: the same scene on the BR version of *Southdale*. Not much has changed and folk still meet with their dogs under the gas lamp.

accessories, so there is nothing novel in this department. The two baseboards are of chip-board on wooden frames, held together with toggle fasteners. The low plywood backscene is integral with the baseboards, to which flat and low relief buildings were attached. Buildings are from Metcalfe, Wills, Ratio, etc., greenery is from an equally diverse range of sources. All the details, such as people, animals



and road vehicles, are secured in position with glue. This means that time is not required for 'dressing the scene' during setting up at exhibitions, and although this increases the overall weight, the boards are still small enough to be moved single-handedly.

Track is from Peco, with on-stage points operated by stiff wires that project through the rear frame. Control is by Gaugemaster. The electrics are simple, with a two-pin feed to one baseboard and a two-pin jumper from it to the other. Isolation is carried out using the points. Locomotives and rolling stock are from the major manufacturers. Where Gerald excels is in the way he blends common commercial items into coherent and believable scenes, as is evident in the photographs.

At home, the two baseboards just rested on a central four-legged stand with a further leg support at each end – all held in place by nothing more than friction and gravity. But at its first exhibition, the vulnerability of the end legs to accidental knocking and subsequent catastrophic collapse was recognised and emergency longitudinal-braces were clamped quickly into place. Soon after, stub legs were fitted to each baseboard corner; these now slot into gaps in the tops of the supports. Custom-built bolt-on diagonal braces were also fitted to stop the bottom of the legs from splaying.

Behind the scenes is a separate stock storage board. This is a plank with two 16.5mm grooves cut along its length with a plough plane. These form wooden 'tracks' into which the wheels of the stock fit. It rests on the centre legs and one end support, lower than the baseboard top, and held in place by short dowel pegs.

Southdale (BR)

During discussion with other members of the club, the suggestion emerged that it would be interesting if the time frame was moved forward by thirty years with different locomotives and stock, together with subtle changes to the buildings and scenery. This had already been done successfully on another member's layout. But there were two problems.

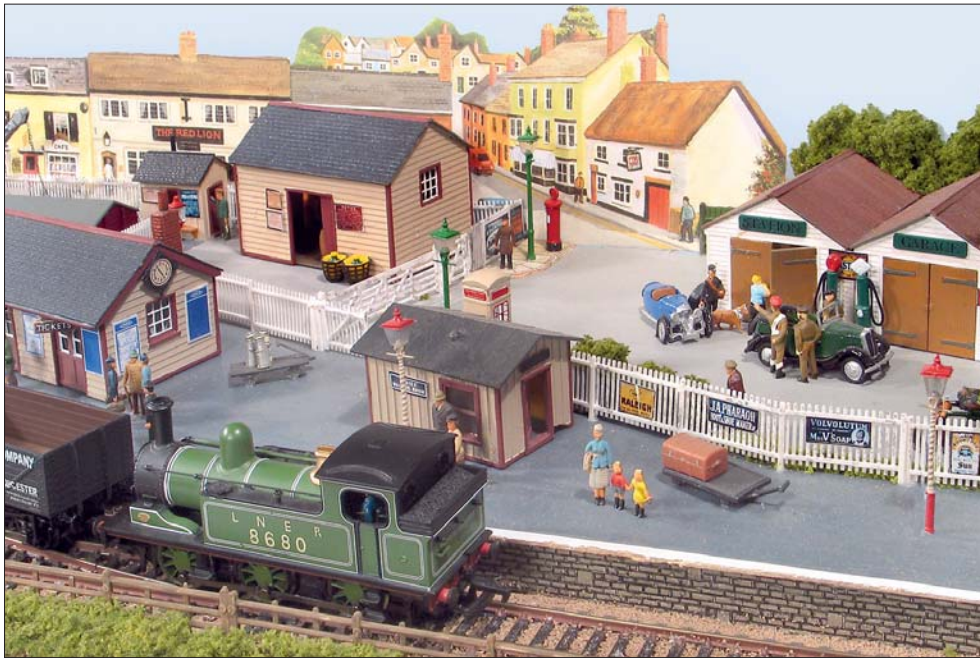
The first was that the buildings were firmly set into the landscape and making them interchangeable would involve major civil engineering work and probably destroy the original structures in the process. The second problem was that though the 8' length of the

original LNER layout is perfectly satisfactory when short tank locos and coaches are used, it is just that little bit too short for locomotives of the early BR period. Rather than splice in new segments of baseboard, relay the track and have to rework the landscape, Gerald decided to create a second *Southdale*. As

Above: the kick-back sidings, which screen the fiddle-yard, serve a dairy that has supposedly been extended over the years. The scene above shows the BR period version.

Below: the smaller dairy complex on the LNER version of *Southdale*. In both cases, Billezi card kits have been used.





the LNER version was actually accepted by The Household Authorities, he pushed his luck and constructed *Southdale (BR)* with the scenic section 9' long. The fiddle-yard extends a further 1' beyond the end of the dairy.

There are a number of differences between the two guises. On the technical side, there are medium instead of small radius points, gentler curves and two isolating switches. On the scenic side there are many subtle changes. The trees have put on thirty years' growth. The wooden station building that was damaged during World War II has been replaced. The dairy and coal yard have both expanded. There have been changes at the garage, but weddings have a timeless monotony...

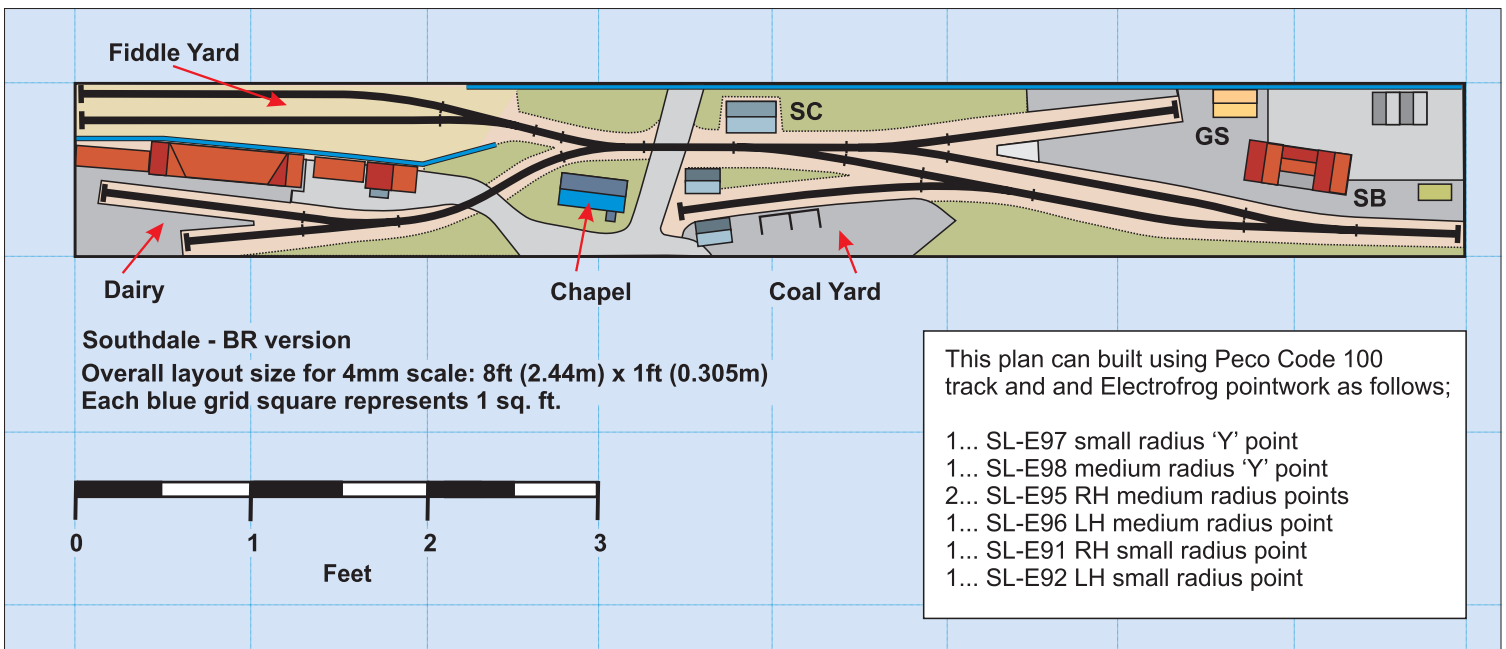
Public reaction

We often provide a commentary on what is happening. On the Saturday morning of the 2001 Dewsbury show, an extended family group watched and listened for about three-quarters of an hour. Their six- and eight-year-old sons really enjoyed the explanations of the various moves. Then they went to look at the rest of the show, but it wasn't long before the younger lad was back. He stayed for a further hour and a half, and was soon able to predict the shunting moves correctly, even though we started to make things difficult by sending in trains with their wagons in the 'wrong' order. And guess what? He and his grandad were first in the queue on the Sunday morning and spent another hour and a half discussing operations and telling us exactly what to do!

Above: the station area on the original version makes extensive use of the building kits from the Wills 00 scale Scenic Series. These kits are simple to construct and enable the builder to create this railway-like scene in just a couple of evenings.

Left: apart from the new brick-built station building, and a lick of paint here and there, not a lot appears to have changed at Southdale by the time of the second version.

Photographs by Steve Flint, Peco Studio.



On another occasion, a middle-aged member of the host club found the commentary on shunting procedures so interesting that he listened to it several times through.

As initially conceived, the line was to be worked on the one-engine-in-steam principle. This is fine in the home setting but at shows people tended to drift away between one train departing and the next arriving, even though this was unprototypically brief. So we started bringing on the next arrival when the current train was ready to depart. (The exhibition sequence has alternating passenger and freight trains so there is no conflict over track occupancy within station limits.) This holds the public's attention as they wonder what is going to happen next. Sometimes it takes several cycles of the sequence before they realise that there are only four basic workings and it's just the stock and locomotives making up the trains that differ.

This arrival-before-departure method of operation also allows us to explain the role of the tablet/staff/token in the safe running of a single-line railway. With the intensity of operation at shows, notionally exchanging the tablet 'on stage' gives the trains a more realistic time to make the journey from/to the junction.

Both layouts were shown at the Hazel Grove Show in October 2003. Is this the first time that two layouts of the same place, built by the same person to the same scale, but set in different time periods, have been presented simultaneously at the same exhibition? While we were setting up, many of the other exhibitors blinked hard as they walked past, some were concerned that they were suffering from double vision, while others thought they had just experienced a sci-fi style time loop. But once the penny had dropped, they were suitably intrigued.

Members of the public were less likely to recognise that the two layouts were of the same place, and even fewer realised that they were working essentially the same sequence of movements. However, when we did point this out, they often spent considerable time going between the two, checking on the similarities and differences. You can do this for yourself, thanks to the photos presented here. Having been involved with exhibiting both layouts I thought I knew them pretty well, but when I looked at Steve Flint's pictures, I realised that there were many details I had still to find.

You can see *Southdale (BR)* at the Romiley Model Railway Show on Saturday 9 September 2006 (see *Societies & Clubs* section for full details).

Top: the little tin chapel, again from the Wills Scenic Series, bears witness to another of those timeless wedding scenes.

Centre: a shunting scene at the dairy on the BR version.

Right: the coal yard seen in BR days. On the main line a Bachmann J39 arrives with a short freight train. The signal box is another item from the Wills range.



L&Y 0-6-0ST

Aspinall six-coupled goods tanks drawn and described

IAN TATTERSALL tells the story of these unsung heroes, one of which has been preserved.

J.A.F. Aspinall became CME of the Lancashire & Yorkshire Railway in 1886. At that time there were 230 0-6-0 tender engines built to the design of his predecessor, W. Barton Wright. Pending the introduction of Aspinall's own design of 0-6-0 tender engine, which emerged in 1889, Aspinall commissioned the construction of a further 50 engines to Barton Wright's design: these were built in 1887, 20 by Vulcan Foundry and the remainder by Beyer Peacock.

Following the introduction of the Aspinall 0-6-0s, the Barton Wright engines became surplus. They were still servicable however, many being less than 20 years old. On the other hand, there was a growing shortage of shunt-

ing engines, created by the withdrawal of earlier shunting types, many of which had been converted by Barton Wright from engines designed by his predecessors, Jenkins and Hirst. Therefore, Aspinall decided to convert the Barton Wright engines to saddle tanks in order to create a class of shunting engines. All the 230 original Barton Wright engines were so converted between 1891 and 1899. The 50 engines built by Aspinall were not rebuilt. The engines were rebuilt in no particular order: they were taken into works as they became due for heavy overhaul.

The 230 engines built by Barton Wright were supplied by five different builders and as a

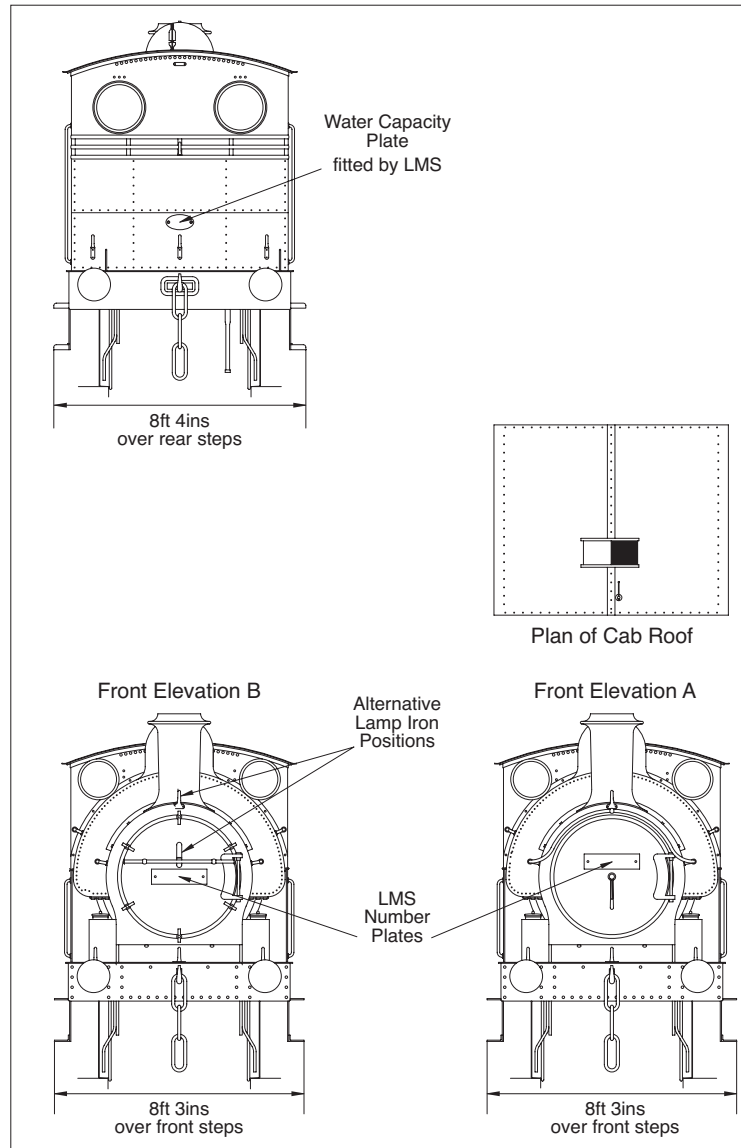
result displayed minor detail differences. The builders were Kitson, Sharp Stewart, the L&Y works at Miles Platting, Beyer Peacock and Vulcan Foundry. Those engines built at Miles Platting, by Beyer Peacock and by Vulcan Foundry did not have any balance weights. In addition, the various builders incorporated differences in the splashers. Kitson engines had slotted splashers, the slots subsequently being filled in from behind. Sharp Stewart-built engines had beaded splashers and the L&Y-built engines, together with those constructed by Beyer Peacock and Vulcan Foundry had plain splashers. These detail differences remained after conversion to saddle tanks.



Above: No.51446 (ex-L&Y No.596, Beyer Peacock 1979 of 1881) stands with water filler lid open at Crewe Works on 28 September 1958.

Below: also seen at Crewe Works is close sister No.51412 (ex-L&Y No.598, Beyer Peacock 1981 of 1881), on the same day.

Opposite page: No.51498 (ex-L&Y No.851, Kitson 2808 of 1895) was captured on Bolton shed on 21 June 1958. Photographs: Frank Hornby.



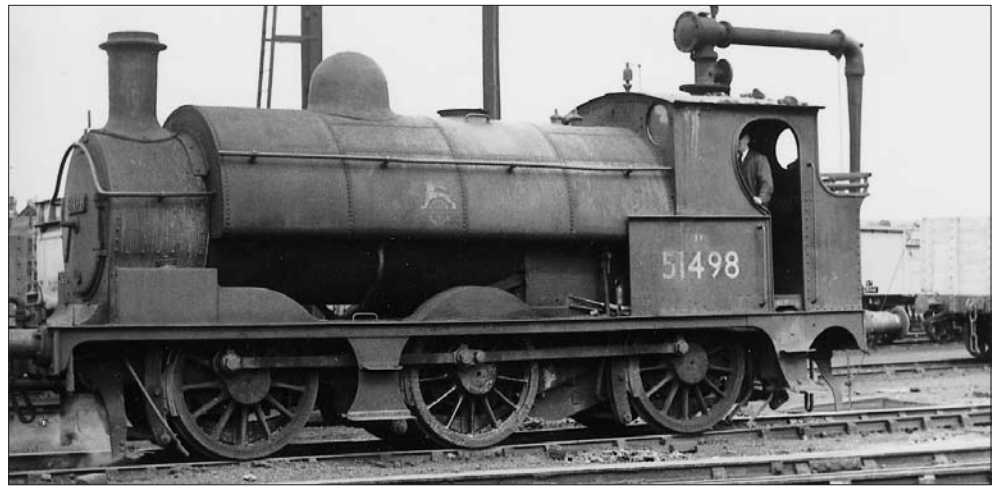
Further differences arose on rebuilding, mainly with the tank. Early conversions up until 1893 had a tank with three lower panels; after that date the tanks had four lower panels. At first the four-panel tanks had a division between upper and lower panels, this being staggered in height. Later tanks had no visible division between upper and lower panels.

A difficulty encountered on fitting the tanks was that as supplied, the engines had boilers of varying lengths depending on the manufacturer. As a result, the tanks were of varying lengths and the cutout for the safety valves was oval in shape to accommodate the varying position of the latter. The engines were later fitted with replacement Type E boilers, the tanks being altered to accommodate them but curiously the oval cutouts were retained.

Few alterations were made to the engines after conversion. There was the usual change from continuous front handrails to the short type, usually but not always accompanied by replacement smokebox doors with the change from centre fastening to six-dog fixing type. Some locos were fitted with replacement heavy-duty buffers, usually during LMS days.

During L&Y days, the numbers carried by the engines were random in accordance with usual L&Y practice.

The LMS renumbered the engines from



11303 to 11532, the numbers being in the order that the engines had been rebuilt.

Withdrawal started in 1926 and Nos.11306/17/24/31/32/33/34/39/40/46/54/57/59/62/74/89/402/14/28/78/501/18 never carried their allotted LMS numbers.

96 0-6-0STs survived to be nationalised, plus five locomotives in departmental service. These latter were never renumbered in the BR number series. The last survivor was 11305, withdrawn in September 1964.

One engine has been preserved as L&Y

No.752 and can be seen on the Keighley & Worth Valley Railway. The engine in question was withdrawn by the LMS in 1937 as No.11456. On withdrawal, it was sold to Coppull Colliery, becoming the property of the National Coal Board after the second world war and passing into preservation in 1968.

Notes on the drawings

There are two side elevations.

Side elevation A features an engine originally built by Kitson and has that builder's splashers which have slots that have been filled in from behind. Additionally it is an early conversion with a tank having three lower panels. It is also in early condition with the original smokebox door and continuous handrail.

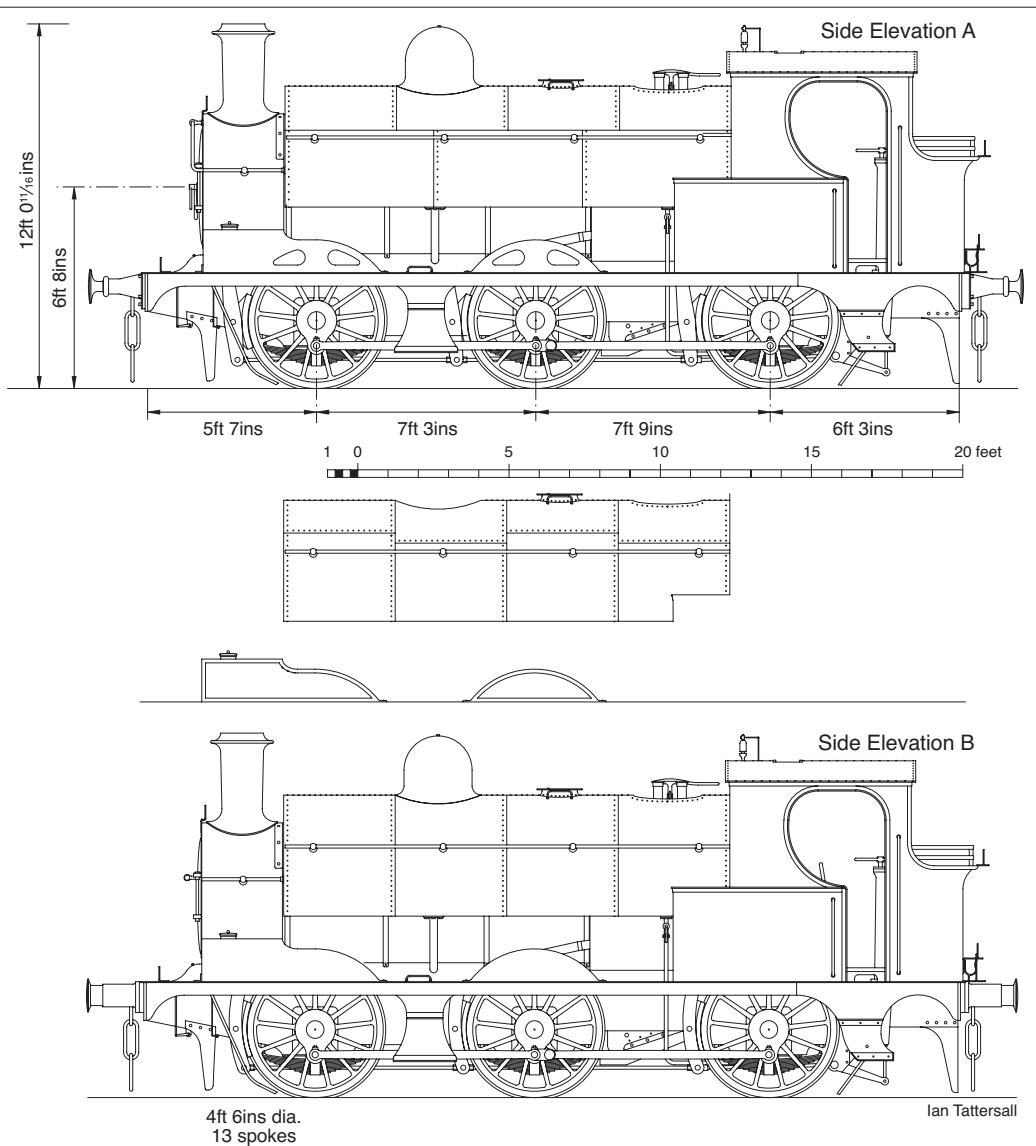
Side elevation B features an engine with plain splashers as fitted to engines built by Miles Platting, Beyer Peacock and Vulcan Foundry. Note plain splashers were also fitted as replacements later to some Kitson and Sharp Stewart engines. The tank is the final version with four panels and no visible joint between upper and lower panels. In addition the engine has received the final type of smokebox door and replacement short handrails. It has also received replacement heavy-duty buffers.

Between the two elevations are part-elevations showing a tank with four panels and staggered visible joints between upper and lower panels, and beaded splashers as found on Sharp Stewart-built engines.

Note that any of the features found in these drawings could be found on any of the engines.

Front elevation A shows an engine in original condition with a dished smokebox door with centre fastening and continuous handrail. Front elevation B shows an engine fitted with a replacement smokebox door fastened by six fixing dogs and with a short handrail. The rear elevation applies to all the engines. Note that some were fitted with vacuum brake hoses for working fitted stock. This is not shown in the drawing.

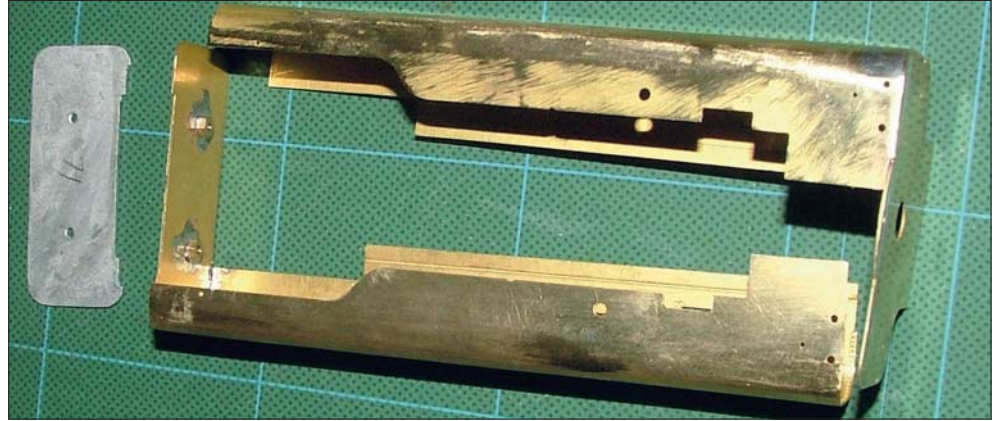
Also not apparent from the drawing is the fact that the windows in the rear spectacle plate opened inwards, being hinged at the top. This was so that the windows could be opened whilst the engines were being coaled, preventing breakages.



8750 Pannier

Assembled from a Scorpio kit in 7mm scale. Part 2

CHRIS GWILLIAM continues his account of the construction of this 'matchbox', from last month.



Tanks and smokebox

This was the moment I had really been dreading. When I bought the kit I asked Pat Ennis of Scorpio how he formed the curves in the pannier tanks, and got the reply 'Oh, I just fold them over a chamfered block of wood'. What I should have done was to have a practice on the spare tank etch for the 9701 condensing tank, and if I wrecked it no great loss, as I don't model London tunnels! But I bit the bullet and went straight for the real thing.

It quickly became apparent that my particular bit of wood was from the wrong sort of tree, as I introduced kinks on the outer surface of the brass. Eventually I found that finger pressure from the front with a length of dowel (a bit less than pencil-sized) as a former at the rear was easiest, with the brass internal former (part 54) used as a template to check that the curve was the correct radius.

The difficulty is caused by the tanks being designed as a hybrid which will suit on one hand the smooth-sided welded 8750 and some 57xxs, and on the other hand the riveted North British 57xxs and most earlier classes. So there are both half-etched areas and full thickness ribs on the rear surface, with witness marks for the rivets, and kinks readily form at these points. A further longitudinal kink is easily induced where the half-etched area meets full-thickness metal. There was no alternative to a great deal of work with files and emery cloth to polish off the various small bumps which manifested themselves on the outer skin. Mind you, weld-lines are often visible on the real thing, so I suppose a minor witness mark or two is authentic!

I filled some minor dents with body putty and sanded smooth when dry. There's a note on the perspective drawing about drilling handrail holes on the tank sides which puzzled me, as the holes for the main handrail are pre-etched. Only when it was too late and I'd rendered the witness marks inaccessible did I

Above left: forming the curves in the pannier tanks was a tricky operation, as the etched ribs and rivet marks on the inner surface tended to form kinks during the bending process, which needed a good deal of filing, filling and fettling.

Above: the tank front has been fitted to the LH tank, and the RH tank has a modified rear plate in place. The brass cross-member with the two nuts is really meant to form a stiffener at the mid-point of the assembly, but it was cropped slightly to conform with the discarded casting shown on the left and used instead at the firebox end for increased strength.

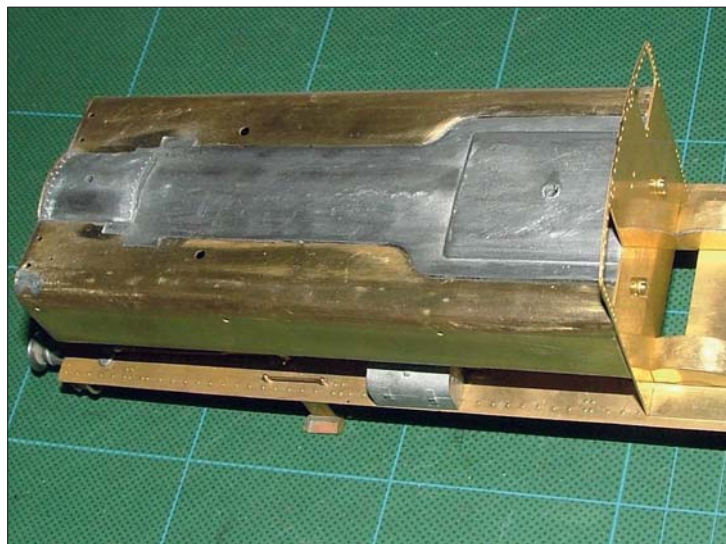
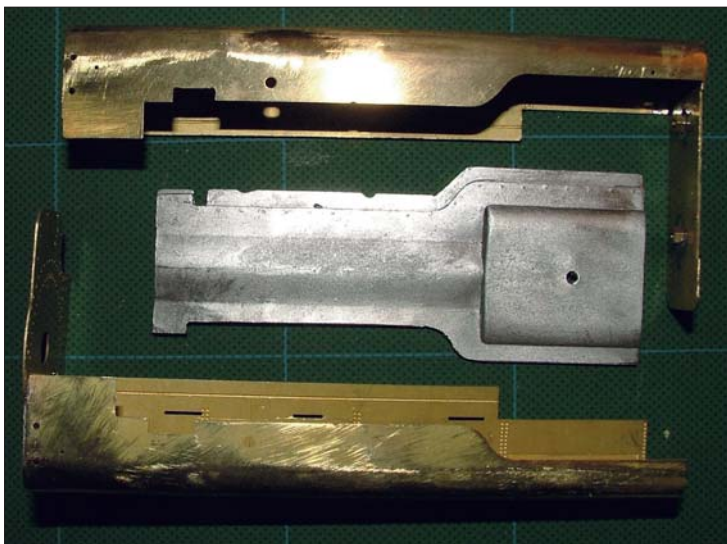
realise that the script refers to the short lower handrail on the tank, so I had to drill from outside. Air blue, off to kitchen in a huff to find a cold beer, after which I cheered up somewhat; after all I did finally have two tanks without major wrinkles.

Having used the brass former (54) as a template for the tank curves, I set it aside rather than soldering it into place as a mid-point stiffening piece as intended: it was clearly going to reintroduce the kinks I had just polished out. However, it was not wasted, as I chopped two little notches out of it so that it was an exact match for the white-metal former (71) which contains two holes for screwing cab and firebox together, and used it instead of the casting – it seemed to me that there would be less risk of the soldered nuts coming undone after they had been trapped inside the smokebox void if I was soldering brass to brass, and that I would achieve a much stronger seam around the tank rear, which was the next job. The adapted template was soldered inside the end of the RH tank.

There are in fact three of the whitmetal formers (71), one for each vertical rib inside the tanks, but I found the tank assembly was stiff enough without them, so they were discarded. Then the pannier tank front (65) was soldered onto the far end of the LH tank, not inside.

Ignore all rivet marks on 65 if you are building a welded 57xx or 8750, but do drill 1mm where the marks for the steps appear on the rear of this component. Some builders apparently add various tank details at this point so they can be soldered from behind before the tank/boiler top/tank assembly is complete as the holes will be inaccessible after, but I decided that small details, and some bigger chunks like dome and chimney, would be added later with superglue or epoxy applied from the front. Both methods have some pros and cons.

There is a note on the drawing which says 'Trim casting 69 (the big piece which forms the boiler top) until a perfect fit is achieved'. The inference is that there might be a bit of minor fettling where there are two notches towards the front end of the casting. In the case of the part in my kit, far more remedial work was needed. Now I am aware that whitmetal casting is an inexact science, as successive casts will be of different dimensions as the mould heats up and expands. But this part was way too wide, and a dry run showed that it forced the tank halves apart so that there was an air-gap of several millimetres. The only solution I could see was to solder the LH tank/front plate and RH tank/rear plate together to form a 'matchbox' of correct dimensions and then give the offending whitmetal a right good seeing-to. This involved hacking away at the casting with tin-snips, a Stanley knife, and a big warding file to remove enough meat, and this sadly but necessarily destroyed the rebate which is meant to assist with attaching the whitmetal to the brass, and a butt joint had to be made instead. It also involved the loss of some rivet detail. If you find you have the same problem, don't rely blindly on my advice, though – your casting may not have expanded/shrunk at the same rate as the one in my kit, so go carefully or you may remove too much metal. Once I had a good fit I tacked the casting to the brass



with low-melt, washed and dried it, then dribbled '5-minute' (ha!) epoxy resin into the joins from beneath so that it flooded any slight imperfections left by my frenzied attack on the whitemetal. Then I left it overnight to harden, and subsequently sanded off any epoxy which stood proud of the joints.

The rebate round the casting for the top of the smokebox also needed trimming to fit. The cab front was temporarily screwed to the rear of the firebox, and the whole 'matchbox' was tried for fit on the footplate, which it did neatly first time. Big sigh of relief. I used shorter 8BA screws for the cab/firebox interface than those supplied, for fear long ones might get in the way of the motor. The underside of the boiler had not yet been fitted at this stage as I still needed access to the interior of the tanks to add ballast. It also needs a curve forming – finger-pressure did the job.

Next I turned my attention to the smokebox front overlay (64) and saddle. Etch 64 has a myriad of rivet marks, but only the row marked 'A' (minus the fourth one in from each edge, to leave a space for the saddle access door hinge) and pairs of rivets also marked 'A' at the 3 o'clock and 9 o'clock position on the outer ring should be punched out for an 8750. You also need to drill a hole in 64 for a lost wax steam lance cock. Check that the curved cut-outs on the saddle sides (19) clear the front splashers. The half-etched lines on 19 and 20 are not fold lines. The saddle access door (22) needs a lengthways curve forming – I used a Swiss file handle as a former. The completed shell was then packed with incredibly heavy printer's metal, a gift from a friend and a relic of the days when Hansard was printed daily with hot metal. So hidden inside my loco is a back-to-front line of type referring to parliamentary bills of 1948, which is the precise year No.9664 was erected!

Cab and bunker

When you clean up the cusp on the edges of the main cab etching (24), don't file off the half-etched upper surface of the bunker, as this is used to locate a narrow piece of trim (28) later in the build sequence. The cab has a multitude of rivets to punch out, not all of which are needed for all versions, but there's a help-

Above left: the boiler-top casting was far too wide, so the two tanks couldn't be joined up at top left and lower right corners. Modification of the casting is in progress, and its lower edge has been attacked with sharp weapons. The upper edge is still as supplied but is about to go under the knife.

Above right: the mutilated cast firebox/boiler top and smokebox top have been soldered and epoxied into place, and a trial fit of the cab front with short 8BA screws enables the whole tank assembly to be checked against the footplate.

ful drawing in the instructions. Drill holes for the fireman's (ie near-side) steps if you are modelling your loco in late GW/early BR condition, and note that there is an associated vertical handrail which curves up onto the roof on this side only, for which 0.7mm holes should also be made. I made the curves in the rear corners of the bunker next, and as with the pannier curves there was some tendency to kinking because of ribs inside. It might have been easier to do the bunker top curve first.

The cab upper rear panel (27) sits inside the cab sides. Now is a good time to fit parts which will become inaccessible later, in particular rear window bars from 0.45mm wire (of which rather more is needed than was supplied) and LH cab steps. The bunker front (33) needs modifying for an 8750, and marks on the rear show where to crop a piece off the lower edge and the upper wings. I also found I needed to tin-snip 1mm from the folded-over top edge to get a flush fit with the door apertures. The bunker top rear corners are whitemetal infill pieces, which need pre-drilling for handrails. After they had been fixed with 70 degree solder I cleaned the whole lot up with files and a glass fibre pencil to smooth in all the joins, which took a while, and I lost a little rivet detail, since the castings were not quite the best quality.

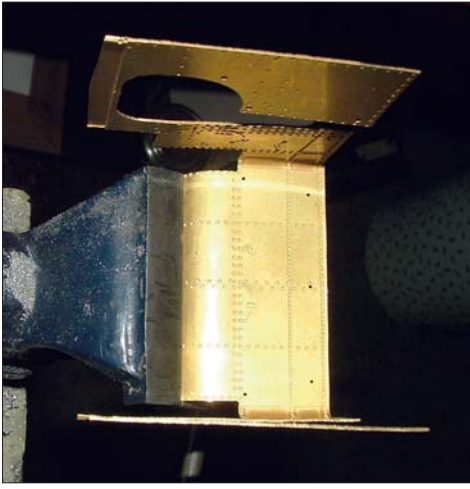
I found it best to tin a layer of solder on the rear of the upper cab doorway beading while it was still flat, then curve it to fit the complex shape of the doorway and sweat it in place. The lower doorway beading (37) is an L-angle iron, but having forgotten to add it until too late in the day, by which time it was inaccessible, I substituted some flat brass. The cab doors

are handed, with the beading at the top and the hinges towards the bunker. They can be modelled open or closed – so I did one of each, with the devil-may-care young fireman leaving his door open to give himself more room to heft his pricker in the cramped confines of the cab. Photos, by the way, show that fire-irons were as often stowed on top of the firebox as on the purpose-built brackets on the bunker rear!

Cab side shutters were fitted to the 8750 Class from new and almost all 57xxs were retro-fitted later. The cab-side knobs for the long handrails will need their spigots cropping to avoid the shutters, and two of the four shutter rails need cropping off each shutter depending on which side of the loco they are fitted.

Of the major panels the cab front goes on last but one, with the roof left off until after the cast backhead with its umpteen fittings has been secured in place and the interior has been painted. However, a dry run revealed that the roof is a tad too narrow, even with half-etched rainstrips (34) in place; the solution is to replace the thin strips with something a bit more meaty – I used a length of 18thou scrap brass strip soldered to the edges of the roof and standing slightly proud, which closed the gap nicely. No provision is made for detaching the completed cab from the footplate for ease of painting, so the cab and smokebox saddle must eventually be fixed permanently to the footplate. Cab exterior detailing is straightforward if you have sufficient photos to hand. The exploded drawing in the kit does not show the position of small parts like lamp irons and fire-iron hooks but fig 451 in Russell's loco book is helpful. Handrails with knobs are from 0.7mm wire, ones without knobs (eg above fireman's steps) are 0.45mm. At this stage I made the final join of cab and footplate assemblies with 188 degree solder, working from inside to avoid visible solder at the seams.

There's a whitemetal casting for the cab floor planking (124) and two for the cab floor steps (125-6) but no drawing to help orientate them – the step with a slot for the reverser rack is on the driver's side (RH facing forward). Assuming it was a case of 'both/and' I tack-soldered the main floor to the splashers inside



Above: bending the curve in the bunker: the base of the bunker was clamped in a small vice at the point where the curve was to start, and the part was bent slightly, moved up in the vice a fraction, bent a little more, and so on.

Above right: the cab assembly takes shape. The area above the door is thin and flaps about until the cab front is in place, so it's vulnerable to handling damage. Note the holes in the LH bunker side for footsteps (locos from late 1930s onwards only).

the cab, and then attempted to fit the steps on top, but it was evident that the doors would not close and the whole shebang was sitting far too high, so I think it's actually 'either/or', and I removed the main floor (which I now think must be for an early version of the GWR pannier family) and added just the two steps, which seemed to look right. Some trimming of the whitmetal cab floor steps was needed to enable them to fit between the splashers and the cab side-sheets, and the lower level in the middle had a strip of Slater's plastic planking inserted. My inspection of a preserved 57xx showed the release clip on the reverser lever is towards the bunker, and the base of the lever slotted into a toothed and curved frame (104). The works photo in the David & Charles *GWR Engines...* reprint shows the toolbox (99) on the shelf behind the driver. Fold-down cab seats are small flat castings with a hinge on the lower edge, fitted to the side sheets. And don't confuse them with the fire-hole doors as I did. The doors have small central holes in them for their lost wax levers.

There are coil springs for the rear axle which intrude into the cab. Two types are supplied; I used the smaller ones as the tall ones got in the way of the regulator once the backhead was fitted. The GA drawing in *GWR* No.8 reveals that the springs are mounted inboard of the splashers, but I discovered the hard way that it's best to insert the backhead first, and anyway the backhead also has to be deferred until cab and tank assemblies are finally screwed together. More on that a bit later.

Final footplate and tank details

Back to the footplate to add the items omitted earlier. There are two cast tank support brackets and associated packing pieces to the rear of the middle splashers, and complex castings for two injectors, one each side on the foot-

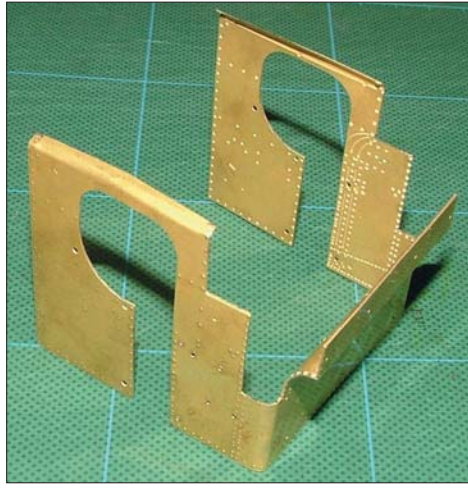
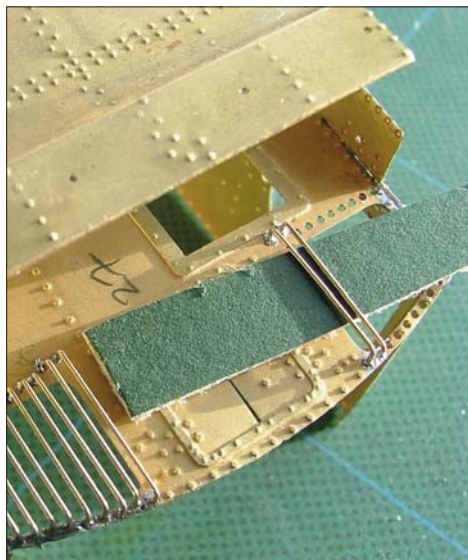


plate just forward of the cab front. An additional pipe should be added to each injector from 0.9mm wire; this attaches to the cab front. A second pipe drops from each injector to a position behind the cab steps via a series of bends. The pattern of this pipe is variable – on some locos it is inserted in a hole in the footplate, on my example it descends through a U-shaped notch which needs filing in the footplate edge. Top-feed fitted examples also have an exhaust pipe on the fireman's side, above and left of the injector, fitted to the underside of the tank.

There are three front lamp irons to fit into holes above the buffer beam; as ever the GWR was different from everyone else and the irons are mounted sideways so that they form a reversed 'L' when viewed from the front. The bunker irons are of yet another shape, so remove the castings from the sprues and make separate piles. On No.9664 there are three more 'L' type irons for spare lamps on the fireman's side just rearward of the toolbox. It's impossible to drill for these as they are mounted directly above the valance, so the spigots need filing off and the brackets are surface-soldered. Note that they are orientated at 90 degrees to the front ones so lamp lenses are invisible from front or rear. Check photos, as some locos only have two, and positions vary – further forward on 57xx for example – though they are always on the nearside of the



loco. The nickel silver reversing lever (110) is slotted into the off-side firebox front with excess length cropped off to avoid the motor/gearing, and its crank (111) sitting on a half-etched mark beneath the footplate. These two parts are on the chassis etch, but listed with the body parts, and are not shown in the exploded drawing, so it took a while to find them and figure out where to fit them.

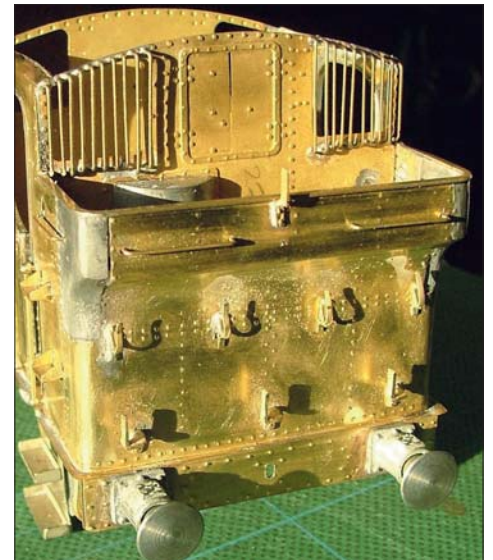
The late examples have a different pattern of etched steps on the smokebox front, and a plain dished door, so pick out the variant components with care. The drawing at Fig 463 in Russell's book is wrong; there is only one handrail knob on the smokebox front, not three. It's at the apex of the arc. The remaining lamp iron is on top of the smokebox, off-set left of centre as you face the smokebox door, so the lamp with its side-on slot is on the centre line. There's no mark to tell you where to place the dome because its position varies on the early locos – according to the 4mm drawing of an 8750 in Russell, and extrapolating to 7mm, it needs to be 70mm from the front edge of the smokebox – and 'crosshairs' were drawn at the centre point of the boiler top to give a positive location for fitting the dome.

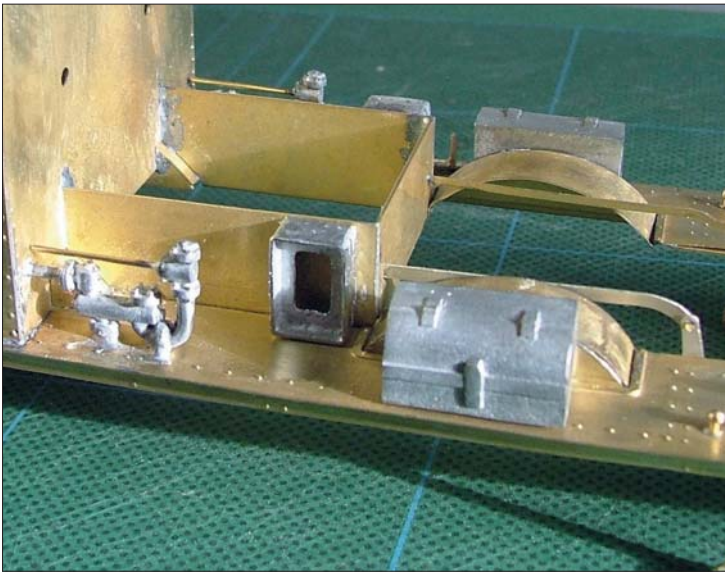
I opted for the whitmetal safety valve bonnet, since it will be painted black, and put the alternative brass casting to one side for the putative early engine to be built from leftovers. Some 57xx and earlier classes, but I think not 8750s, had little bangers (10) for the filler-lids;

Below left: a thin piece of scrap card is inserted between the window bars and the cab rear during soldering to ensure that all bars have the same amount of stand-off. The rear needs filing afterwards to ensure a tidy finish, as it can be seen through the cab door apertures. There are a couple of rivets missing, later corrected.

Below: the hooks for the fire-irons and bunker lamp irons are pegged into holes in the panning; some are pre-etched and some have to be drilled out. The lower lamp irons are not the same pattern as the front footplate irons, having a crank to the left, and the single iron at the bunker top is to a third and unique pattern.

Right: prototype hooks and fire iron.

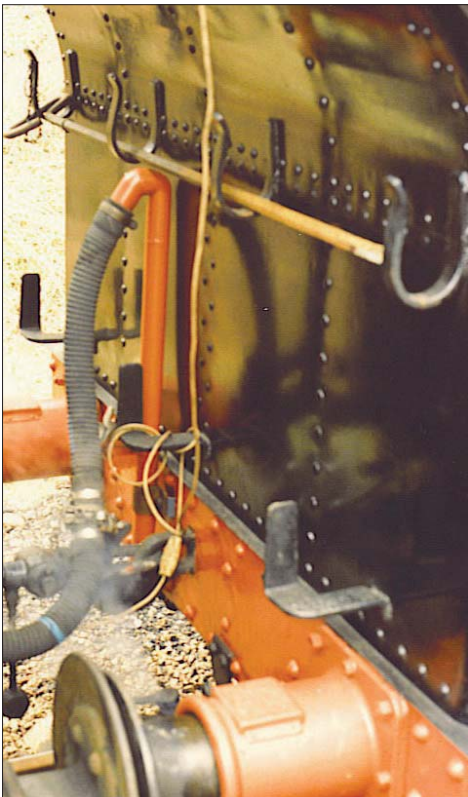




look for castings of a squat circular frame with a 'wooden' insert. For 57xx onwards use the round tank fillers, not the oval type fitted to some early engines.

The triangular castings for the front tank supports are not quite correct. The lower edge should be slightly angled to follow the line of rivets on the smokebox saddle, so a few file strokes are needed: the face with six rivets faces sideways, the face with two rivets is inverted beneath the tank. Again there should be a packing piece, which I forgot entirely. The oil pipe cover casting also needed a little filing so it would fit alongside the chimney on the offside.

There are two different sets of lost wax whistles; I needed variant 19a which has a little base plate and two pipes to the rear, which feed through the tall shield and into the cab front, so the assembly is best left until after tank and cab are finally joined.



Above left: on the offside you can make out the elusive nickel-silver reversing lever and crank behind the centre splasher. The pipe beneath the injector has yet to be fitted.

Above right: the top of the boiler nearing completion, showing the major castings for chimney, dome and safety valve bonnet with valve springs tucked inside. The lifting rings are lovely two-part lost wax brass castings. The vents are of the tall non-ribbed type, and there are no bangers for the tank filler lids on this particular loco.

Below: details of the tank side of No.9681, pictured taking water at Norchard.

Three different patterns of tank vent are provided – mine takes the tall plain variety. The lifting rings and associated hooks and mounts are exquisite lost wax castings, and fit in the pre-etched holes on the tank top, the rings being free to move. I believe the lost wax lubricators (68) were only visible on the 57xx. Top-feed piping and long tank-handrails are best left until the tank and cab are finally joined, which is the next big job. Check the placing of the pre-etched tank-side holes for the handrail knobs. It might be my lack of precision in assembly, but on the driver's side the holes were 2mm higher, not much but it shows, and I had some tweaking to do.

Five-minute epoxy was spread inside the front and sides of the smokebox saddle, and once it was seated on the witness mark on the footplate, a seam of solder was also run along the rear of the saddle to join it to the footplate, and the two screws were inserted into the holes in the cab front and tightened up to pull firebox and cab together – quite tricky as there's precious little room for fingers in the cab. Once the glue had set, the pipes for the top-feed were soldered on. There are etched rivet strips (71/72) for the joint between firebox and cab, but I can't make them out in any 8750 photos and I think they were only fitted to 57xx riveted locos. I found that I had small air-gaps between the top of the firebox and the base of the tanks, so I inserted slivers of scrap brass to fill the void.

A couple of modifications. The cast whitmetal top-feed piping for the tank-side

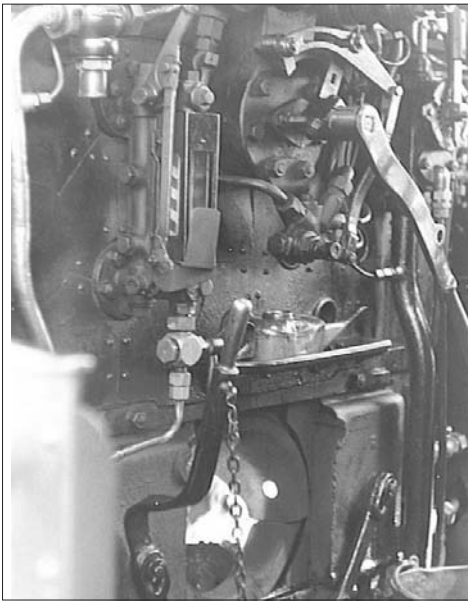
looked vulnerable to handling damage, so I substituted copper wire salvaged from some old mains cable.

The whitmetal steam-heating pipes didn't last five minutes after installation; after repairing them twice I gave up and simply omitted them, leaving only their valves and levers attached to the buffer beams.

Finally a small hook made from 0.7mm wire was soldered to the front buffer beam near the LH buffers to hold the coupling when not in use. One assumes this practice was to avoid contact with ATC apparatus.

The type of coupling used has a hanging-down tommy bar, not a right-angled one, presumably also for ATC reasons. I used a set of Premiers, with the tommy bars bent to suit. The front coupling shank had to be shortened to no more than a stump to make space for the ATC shoe, therefore it could not be sprung and was soldered solid.





Above: cab interior of No.6412.

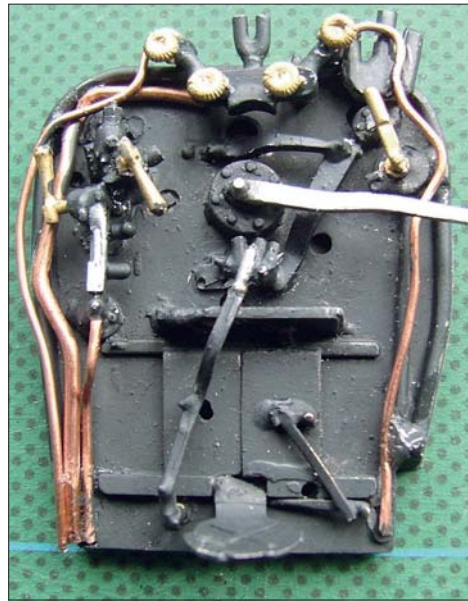
Above right: the backhead, cruelly enlarged. Not all the detail is there, pipe runs in particular being much simplified, but starting clockwise from the top we have the steam manifold with four control handles, vacuum brake assembly bodged up from scrap as the proper casting is hiding in the carpet pile, vac brake handle, regulator with lubrication control below its central boss, shelf, fire-door linkage, fire-doors, fire-hole flap, fire-door handle, assorted pipe-work, water glass with handle, steam heating valve with handle. Various other controls are fitted to the front panel of the cab. The ensemble is all, quite frankly, just an artist's impression!

Photographs by the author.

Backhead

You'll have a much easier job than I did as your kit will now contain a decent drawing. Mine had just a sooty photostat of two different model backheads, early and late, and a line drawing which did not seem to be to be for this class of loco as it showed a screw reverser and all the photos I could find show a lever reverser. I had a picture I took many years ago (above) of the backhead of preserved 6412, a loco from the smaller-wheeled pannier family, which I hope is similar to an 8750 because I used it as the basis for my model. Even so there were several bits which, not being a footplateman, I omitted as I could not positively identify them. I think I've given a reasonable impression of the major controls – there's a regulator and brake so it will go and stop, a fire door lever so the fireman can stoke the firebox, some dials so the driver knows what pressure he's got, some assorted copper pipework and a water glass so it won't blow up – and anyway in the gloom of the cab it will be hard to spot what's missing.

The backhead has two recesses to the rear to make room for the screw-heads which join cab front to firebox, but it's still a wise precaution to do a dry run with the casting before you fit all the delicate bits, and again afterwards. I had to trim the copper piping somewhat at the bottom edge to allow the casting to slot into place.



Painting and weathering

After my travails in unfamiliar territory it was a relief to be back on home ground with my tried and trusted painting techniques. Once the body was clean and dry it was undercoated with two thin applications of Simoniz satin-black cellulose aerosol. Again after a drying period, the area of tank-side with the body-putty repair was sanded with very fine wet and dry paper, then given another thin coat of paint and the process was repeated several times to get a smooth surface.

The next coat is airbrushed Comet cellulose 'loco dirty black', well thinned, which dries satin and is in fact just off-black rather than a real grime colour, and needs a varnish coat to protect it after application of transfers.

Whilst the prototype photo shows no evidence of an emblem I added a pair of lion and unicycle transfers anyway (HMRS Pressfix) on the assumption that 9664 was out-shopped and decorated properly between the 1953 photo date and my chosen 1957. The yellow route-availability disc and 'C' is from the equivalent HMRS GWR sheet. Note that pre-1950 these locos were blue-disc 'C', not yellow.

Buffer beams were brush painted a vermilion shade produced from equal amounts of Railmatch 241 Royal Mail red and 204 rail red. The number-plates duly arrived by post and



were super-glued on. By the way, the lovely (and expensive) Severn Mill plates are beautifully etched but they do need painting off-black first, and the paint can be removed from the raised numerals with very fine wet and dry paper once it's dried hard.

Next I used thinned and air-brushed Wilkinson's matt varnish with a few drops of Humbrol 98 matt chocolate and black 85 to discolour it slightly; a similar but un-thinned mix was also brushed onto the unpainted whitmetal inside motion parts and the nickel silver connecting rods to give an impression of oily steel.

The 'wood' on the cab floor was grained using the technique for 'unpainted' wagons which I've described before in these pages. The crew were brush painted with matt Humbrol enamels, and glued to the footplate with medium 'Zap a Gap'. The somewhat corpulent driver is in fact taking it easy on the fireman's side, and the young stripling of a fireman is at the regulator having an impromptu driving lesson from his indulgent gaffer.

The lamps are actually left-overs from a 4mm Ratio Toad, overscale for their original purpose but just right for my 7mm loco. A second airbrush coat of grubby matt varnish pulled everything together, and a little light dry-brushed enamel and powder weathering gave the whole loco a lived-in look. I added glazing from 20 thou acrylic rather than the 10 thou plasticard supplied, but after some consideration removed the glazing from the rear windows as the edges of the acrylic show up badly through the doorway and are more unsightly than lack of glazing. The lack is in fact barely apparent as the window space is almost hidden behind the protection bars. A layer of thick card was painted black and coated with PVA glue and real coal, then wedged into the bunker.

The roof was added with superglue. The photo of the prototype 9664 shows some coal on the roof where the coaling stage staff mis-aimed, so that was glued on too. My uncle Sid Gwilliam was a fitter at Ebbw Jcn shed, and I recall him showing me the loco road below the coaling stage which was always ankle-deep in scattered coal and black dust. Coaling locos was not one of the more glamorous jobs in the rail industry.

I dismantled the wheelsets and laid them out in a shallow box in the same order in which they had originally been placed in the frames so that they would go back into the same place. That was not too clever, as muddle quickly ensued anyway – I should have numbered the actual wheels. The crank pins were locked in place in the recesses behind the wheels with a tiny touch of superglue.

The nylon sleeves for the plunger pick-ups were also superglued into position in the holes I'd drilled in the frames. The frames were brush-painted off-black while the wheels were out, except for the inside frames where visible in the motion area, which were done in matt red (Humbrol 60). Then the whole lot was air-brushed with a thin mist of home-brewed 'grime'.

To be concluded.



...an exchange of railway modelling ideas for beginners of all ages

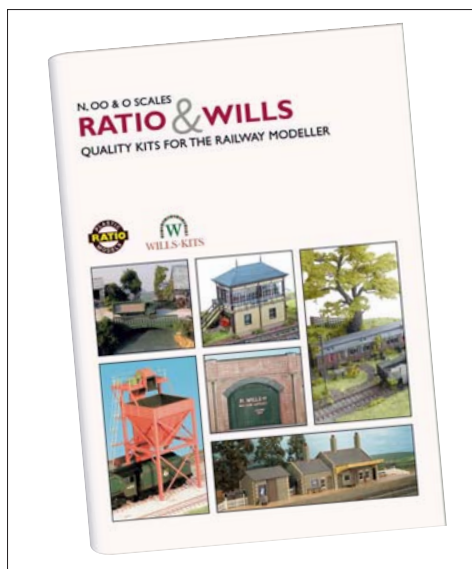
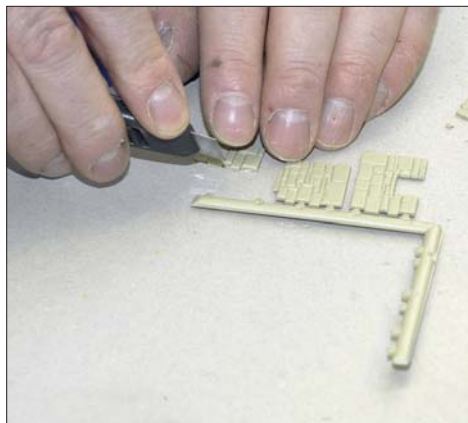
Westbridge-on-Sea

Part 3 – kitbuilding close up; techniques and tips

ROBERT ILES looks at traditional kitbuilding methods used on the new Peco exhibition layout.

The choice of geographical area, railway region and era depicted have a great bearing on the type of lineside and scenic kits to bring to the layout. The new Peco layout, set at a fictitious coastal location, has the flavour of Dawlish in Devon with influences of Southern and Western Regions, set in the 1960s. It does not accurately depict an actual place, but the features combine to make a pleasant south coast seaside scene.

The kits were selected from the Ratio & Wills kit catalogue. The non-specific nature of the layout provided some free choice regarding buildings.



The station building was from the Wills Craftsman series which is preferred by more experienced modellers. The use of some sheet materials allows a degree of bespoke model-

ling in favour of construction from all moulded parts. Several kits from this series were used; the Wills Scenic and Ratio series provided the rest.

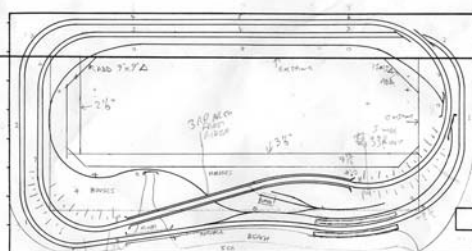
The kit parts were cut from the sprue with a craft knife and the moulding flash removed with a needle file.

The kits were glued together using liquid solvent plastic cement. This is easier to use than the thicker, stringy glue in tubes. As construction progressed, the parts to join were assembled dry to check that the fit was satisfactory. The liquid cement was then applied with a fine brush to the non-visible inside corners of the joint. The cement finds its way along the joint by capillary action and welds the parts to form a solid joint.

Similar care is necessary when putting in the more delicate items such as windows.

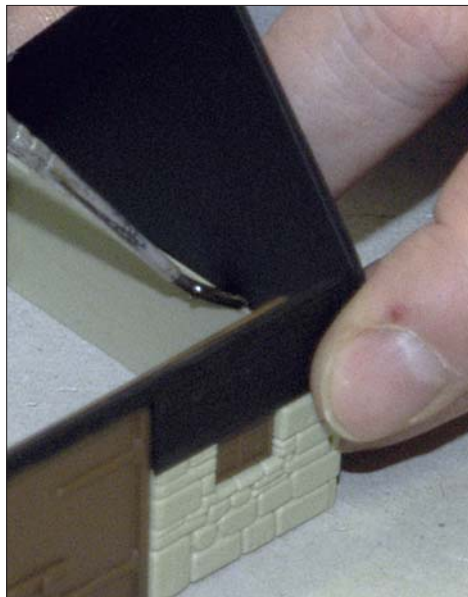
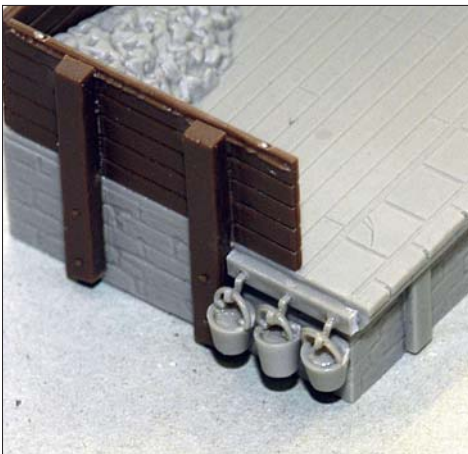
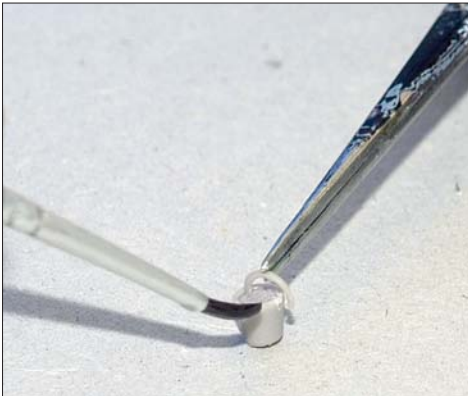


Below: a reminder of the track plan reprinted from parts 1 and 2 in this series (May and July 2006 respectively).



These sometimes require trimming to fit and no glue must find its way onto the glazing plastic.

Some kits have very small components which would be difficult to handle with the fingers. A case in point is shown by the buckets to go with a coaling stage. The handles



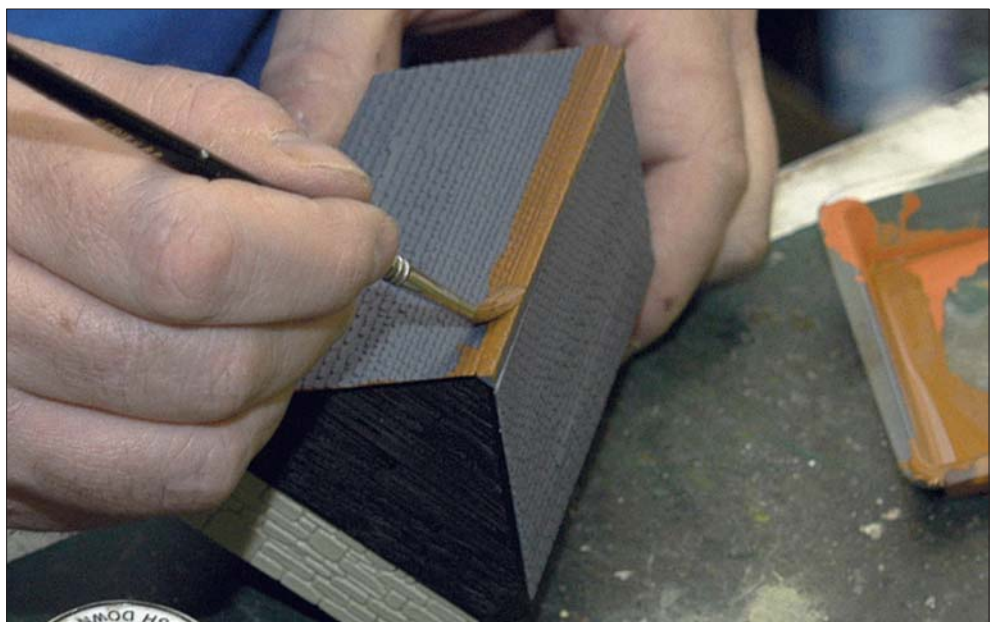
have to be attached to the buckets; each part is small so this is where a pair of fine tweezers is invaluable. The cementing technique is similar to that used for larger parts but a very fine brush is used to apply a single drop of liquid cement.

To hold small components steady during the kit construction process, a proprietary 'assembly aid' might help. These devices consist of two or three 'crocodile' type clips on flexible arms and a magnifying glass, all mounted in a convenient configuration on a small table-top stand. They are available from model shops and are not expensive. It would easily pay for itself in saved time and unspoilt kits.

The platforms required a different approach. Owing to the specific curved

shapes required for the station, Peco platform edging was used with a plasticard top to construct the platforms from scratch. Any neces-

sary platform contour could be created. A platform width gauge was made from a piece of scrap wood to ensure a smooth contour.



The plasticard top surface was finished with a fine gravel effect. The top surface was roughened with some sandpaper to make a key and a thin layer of PVA glue was applied. The gravel was silver sand which is available from pet supply shops to use in aquariums. When the glue was dry, the surface was brushed and vacuumed to remove the excess sand.

All the buildings are made in appropriately self-coloured plastic, but any modeller who wants a fully realistic effect would paint the model. These exhibition models are standard kits painted and then weathered to appear as realistic as possible.

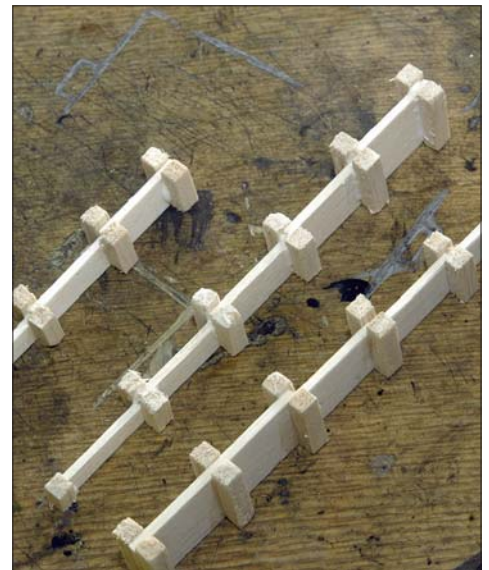
The plastic kits were first sprayed with matt car enamel from an aerosol. Use grey, black or red oxide, whichever is the nearest to the final colour. If in doubt, use grey. Only a thin coat is necessary to provide a key for the finishing coat.

The paintwork is all done using matt enamel paint. In the top of each tin of paint, the user will find a layer of oily liquid. It is best to drain this from the tin before stirring the contents. The alternative is to scoop out a small quantity of paint and put it on a palette or piece of scrap plastic. The purpose of this is to obtain a truly matt finish. Using the paint straight from the tin, stirred in with the oily liquid, will result in a semi-matt finish which can look a little artificial and slightly too shiny.

Weathering was done to all the buildings by flooding their outer surface with a very dilute mix of acrylic paint and water. Paradoxically, it is better to use a light grey or brown on darker buildings and a darker mix on lighter buildings. After a minute or so, the building is lightly wiped to leave some paint in the crevices and mortar runs. Particular features were brought out using the dry brush method. This is when a flat-tipped brush is loaded with an appropriate colour paint and wiped almost dry. It is then used in areas where a highlight is necessary, for instance where a stain is seen below a chimney or a flue, or at the edge of a window sill where the rain runs down. When the paint is dry, a light rub with sandpaper can bring out the brickwork beneath to give a realistic patchy effect.

The topic of kit making merges with that of doing landscape work. For instance, at the entrance to a tunnel, a tunnel mouth kit can be incorporated into the scene. These kits are very simple to make because they consist of just a few parts or are available as a one-piece assembly in single- or double-track format. Plastic kits are used throughout *Westbridge-on-Sea*, but a modeller inspired by this layout could also investigate the superb selection of very realistic cardboard kits that are on the market. Some of the small scenic models used in the layout are ready-made items cast in resin or plaster, all commonly available from model shops.

Readers of previous articles in this series will be aware of the huge viaduct that is the centrepiece of the new exhibition layout. This consists of a basic viaduct kit comprising three stone/brick arches, two stone piers and the deck which can be single- or double-track; added to this are several arch-and-pier exten-



sion kits that make up the total of eighteen arches.

The viaduct presents great opportunities for further kit building. Under the arches, where small storage huts lurk, a local electricity supply transformer, some grounded railway vans and a wartime defence pillbox help to establish the era and atmosphere of the setting.

The Wills range has many sundry items that help to add the essential fine details. For instance, against a printed backdrop near the station are some buildings which have a pavement around them. This is modelled from Wills Period York Paving. Around the bottom edges of the building walls, a little scatter material helps to set them into the ground avoiding the appearance of perching unnaturally on top.

Wills Garden Shed kits were shortened to make the beach huts, then painted in cheerful colours. These were mounted on a scratch-built platform next to the sea wall.

Adjacent to the huts on the beach are some breakwaters. These were not plastic kits, but constructed from balsa wood. A central stepped wall was cut and supporting posts cut from square balsa strip. They were then painted brown to resemble creosote.

The last article in this series will show how the kits combine with the layout's scenic work

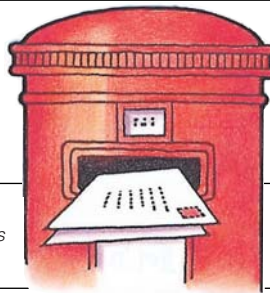


using plaster and finishing materials. We will also compare the final track plan with the original sketch to see how and where the layout developed during construction.

Photographs by Jolyon Sargent

To be continued.

READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the letter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

MATTERS NORTH BRITISH

I thought, though I may be wrong, that a J37 was a D34 on an 0-6-0 chassis. If that is so then Ian Futers (August p.501) could probably have built his D34 much more easily by buying a J37 kit without wheels or motor and using the tender, cab and boiler with his D32 chassis and tender wheels.

BRIAN PEARCE

Thank you for publishing Ian Futers' comments on my kits in his article on the NBR 'Glen'. I now have kits available for a D29, D30 and D34, full details of which are on my website www.nbmodels.com

Readers may also be interested to know that a C16, as mentioned by Ian, is about to go to the etchers, and I hope to have the test etches on display at the Gauge 0 Guild Convention in Telford. An NBR Atlantic will be following early next year.

Ian also commented that NBR coaches would be useful. Work is also progressing on the Reid 58'4" corridor and non-corridor stock. Again I hope to have test etches at Telford.

NORMAN J.S. BLACKBURN,
NB Models, 4 Earlston Way,
Cramlington, Northumberland
NE23 3HP.

Ian Futers' article on the 'Glen' 4-4-0 (RM Aug) brought back happy memories as a 'Glen' was the first mechanised vehicle I ever drove!

I was brought up in Anstruther, East Fife, on the erstwhile Fife Coast line from Thornton to Leuchars via St. Andrews. The principal trains (including the *Fife Coast Express*) were hauled by B1 or B12 4-6-0s but locals,

both passenger and freight, were in the charge of 'Glens' sub-shedded at Anstruther (sub to Thornton 62A), normally Nos.62467 *Glenfinnan* and/or 62469 *Glen Douglas*, now preserved of course.

One summer evening in about 1956 or 57 I was watching over the bridge by the signal box when *Glen Douglas* approached, having finished the day's duties in the yard. The driver invited me down for a footplate ride to Pittenweem, the next village (1 mile) where we reversed and headed back, tender first, whereupon he invited me to take the regulator and back *Glen Douglas* into the yard.

Given that I was 12 or 13 years old, would that happen today – I doubt it very much!

DAVID CROSSLAND

PERIOD ROAD TRACKS, AND CRIANLARICH

I may be only slightly interested in prototype railways and moderately interested in model railways, but – and it is a very big but – I never cease to marvel at the tremendous skill and craftsmanship you show. This is the reason why I'm more interested in the modelling scene than the prototype!

I have enormous admiration, not least to the lengths to which modellers go to create realism in townscapes and landscapes. To me it is an art, well worthy of that description.

Truly excellent though your efforts are, a very high proportion of you modelling the pre-1950s rural scene make one slight error (sorry folks!). Farm tracks should have three ruts – two for cart and implement wheels and one for horses' hoofs. (I was there – that dates

me! Perhaps you are too young to remember that little detail!)

I'm prompted to write having been given a few back copies of RM, including that for November 2005. I was delighted to see Crianlarich, a spot I've known for many years. It has always struck me as an excellent location for modelling – not only the Upper station, but the Lower too, although I accept that this would mean an awkward-shaped layout needing a lot of space (it would be shaped like a cross, or at least a letter T).

A layout including both stations would cater for NBR and CR or LNER and LMS depending on the period. Those of you modelling seascapes or ports manage to have seagulls flying overhead, so to anyone modelling Crianlarich don't forget to model West Highland midges!

To include my principal interest you would need to add a MacBraynes bus or Alexanders 'Bluebird' coach! There – I've let the cat out of the bag. That confession accounts for my interest in prototype railways being only slight. It doesn't lessen my admiration for all your efforts!

And, mentioning cats, if you are modelling Crianlarich and are tempted to put cats in cottage gardens, beware – the prototypes are feral, and dangerous, having been cross-bred with wild cats!

NEIL POLLARD

HORNBY DUBLO AND TRIANG ON MODERN TRACK

With reference to Mr Martin (May) and Paul S. Hyder (July) in running the above on modern track it is no problem as you can fit Romford wheels and axles. We can do this job and it takes a bit of time to sort out.

Once the locos are converted they will run on any track. It means the locos will last nearly forever: even if the motor gives up you can get those repaired. If anybody is interested in the above, please get in touch.

CHRIS STANILAND,
Northumbria Models, 41 Doddington
Drive, Hall Close Dale, Cramlington,
Northumberland NE23 6DF.

LOCOMOTIVE HEADLAMPS

I read with interest the article on locomotive headcodes by Andrew Sharples (July). His plea at the end of it for some means of moving the lamps around on an engine, to suit the train being hauled, made me think of my two ways of doing this.

Left: no sooner had we written the editorial comment on coal trains, when a photo of the one on Chiltern Green by The Model Railway Club (RM April 1980) that so impressed us back then, turned up – just like that!

Photograph: Brian Monaghan.

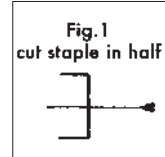


Fig.1
cut staple in half

First method. For BR era trains, I use the circular discs that you get from hole-punches, for ring-binder folders. My lamp irons are mini

Bambi staples cut in half (Fig.1). A very fine plastic sleeve, from fine pipette tubing, is glued to the back of the disc. It slides over the cut staple relatively easily. The smokebox door lamp iron is telephone wire shaped as per Fig.2. The door is drilled using a pin vice and a 1 thou drill, and the wire is inserted and superglued in place.

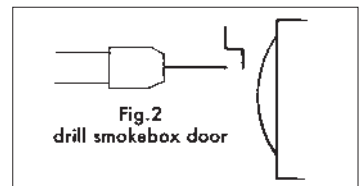


Fig.2
drill smokebox door

Second method, for LMS engines. Using the Springside lamps, I drill a hole (1.5 thou drill) very carefully using a minidrill in the whitmetal lamp (Fig.3). Then the drilled lamp is slid onto the cut mini staple. Now you have moveable headcode lamps.

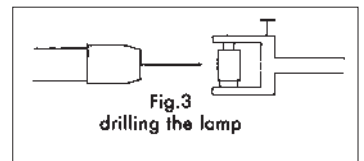
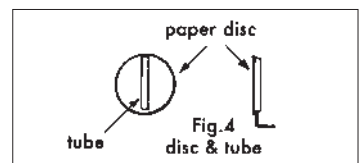


Fig.3
drilling the lamp

Sometimes the lamps' jewels fall out, so if I find them I put a dab of clear varnish in the jewel's socket and replace it. Don't use superglue as it dries opaque and frosts the jewel!

The discs are shown in Fig.4.



paper disc
tube
Fig.4
disc & tube

Two other tips: to give proprietary coaches a bit of extra weight, use painted Preiser 3.5mm scale seated passengers inside the coaches. Not only do they add this weight but trains have passengers. (At exhibitions I see peopled stations and streets but empty trains!) Also, the old Airfix and Matchbox 4mm scale military vehicle kits can provide a host of civilian vehicles for the post-war era, e.g. RAF emergency and refuelling sets, RAF Bloodhound rocket set for Series I and II Land Rovers.

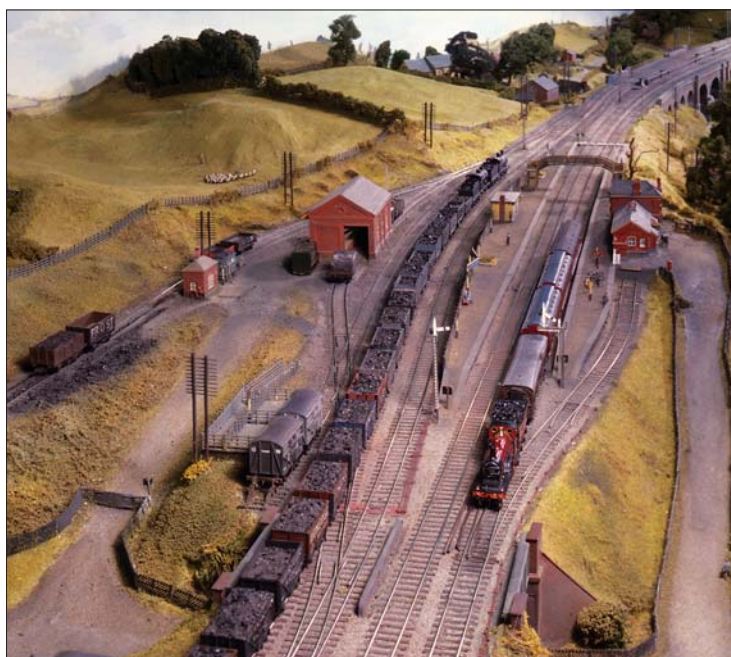
H.V. ASTIN

MINITRIX 'BRITANNIA' WOES

I own a number of British outline Minitrix N gauge locomotives. Recently the BR 'Britannia' Class decided to shed its traction tyres.

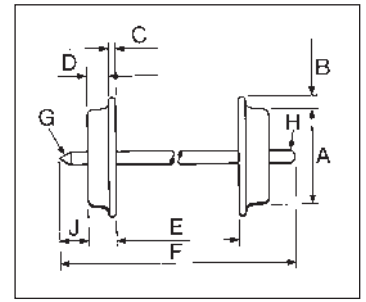
Could anyone tell me if these traction tyres – and the bulbs for the lights – are available from any British supplier? Any help would be greatly appreciated.

CLIVE SAUNDERS,
23 Hurn Way, Christchurch, Dorset
BH23 2NU.



LATEST REVIEWS

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Three new Class 31s and an NSE 50 in 00 from Hornby



Three new varieties of the Brush Type 2 from Hornby have been released: the models are fully up to the high standard of the initial release, No.31 110 (April 2005). The models reflect some of the variations seen within the class, and also the 31s' long lives, very neatly too.

Earliest in the 'timeline' is D5640 (ref.R2572, £95.00) in green livery with small yellow warning panel. It features

full bodyside steps with inset handrails, which on the real things were used to gain access to the boiler water filler – in itself a fine moulding. The characteristic lined metal 'cummerbund' of the real things is represented on the model by painted striping, which is acceptable given their shallow nature.

The 'ghost' of the cummerbund is present on headcode box-less 'skin-

head' 31 111 (ref.R2571, £95.00). This also carries subtle and effective weathering on flanks and roof, and the 'wiped clean' areas of windscreen are highlights. No depot code is given below the data panel: the machine was a York resident c.1980.

The last of the Brush trio is Fragonset-liveried 31 452 *Minotaur* (ref.R2573, £95.00). The paint scheme – one of the smarter private designs, in our eyes – has been applied very well, with no overspray on our sample. The crests and FR logo are similarly well treated.

The English Electric Class 50 is now available as 50 027 *Lion* (ref.R2575, £95.00) in Network SouthEast livery, as revised from July 1987 – no upswept

striping at the ends – but prior to the change to the darker shade of blue in August 1989, which *Lion* received in November 1990, a scant eight months before the locomotive's withdrawal and purchase for preservation.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES
In text

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

BR 21T hopper kit in 4mm scale

New to the Parkside Dundas range of high-quality injection-moulded wagon kits in 4mm scale is the BR 21-ton hopper, to Dia. 1/146.

A phenomenal 16,800 of these wagons were built in the 1950s by Shildon and outside firms. They were the first with all-welded superstructures, and were employed on the north east coal circuit, transporting the mines' output for domestic and industrial use, and also for export. Many were still active into the 1980s.

The kit features the crisp mouldings, clear and concise instructions, and rock-solid fit of parts for which this

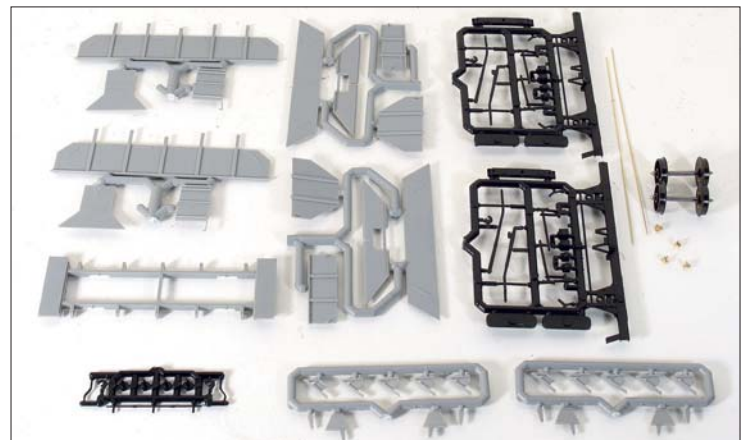
manufacturer is justly famed. Romford metal wheels and brass bearings are included, as is usual.

In short, a fine kit for an unsung prototype, and one which will be an ideal trailing load for two of the Hornby Class 31s seen above!

For 4mm scale

MANUFACTURED BY
Parkside Dundas, Millie Street,
Kirkcaldy, Fife KY1 2NL

PRICE
ref.PC77, £6.75.



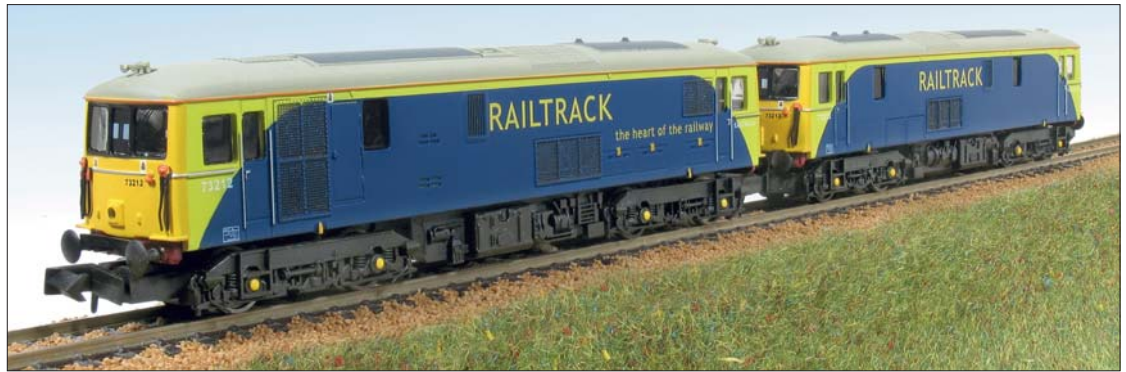
Special-run Dapol Class 73s in N from Nsprays

Nsprays has commissioned two special runs of Dapol Class 73s in N, both of which are to be limited to batches of 100 units. We illustrate the approval '3D proofs', which have minor differences (as noted below) from the final production models.

The first is a pairing of Railtrack-liveried Nos.73 212 and 73 213, to be sold as a combination price £179.95. The former is powered, the latter dummy. It is anticipated that these models will be available for sale at the N Gauge Show at the Warwickshire Exhibition Centre on 9 and 10 September.

The other 73 represents an early BR scheme, blue with a grey lower body stripe, as E6007 (£89.95). The blue is the turquoise shade applied by Eastleigh to some of the class. (On the production models the stripe will be extended fully to the yellow warning panels on the ends.)

All models will be supplied with certificate in non-standard (i.e. specially-marked) Nsprays boxes, and will only be available directly from Nsprays and not its usual outlets.



For N

SAMPLES SUPPLIED BY
Nsprays, Chapel Place, High Road,
Guyhirn, Cambs. PE13 4ED.

PRICES
In text.

WHEEL DATA
B. 0.5mm, C. 0.7mm, D. 1.3mm,
E. 7.4mm.



Rebranded Class 158 and new TTA tanks in 00 from Bachmann

A not uncommon sight on the chameleonic present-day railway is the hurriedly-rebranded locomotives and rolling stock, either by the rehiring by one train operator of replaced vehicles in another company's livery, or the taking-over of a franchise.

A case in point is captured to perfection by Bachmann on its Class 158 Express Sprinter 2-car DMU. It matches the hybrid livery of 158 768, which has had a partial relivery by the application of waist-high First TransPennine Express vinyls on top of the old Northern Spirit maroon. The model (ref.31-510, £75.50) is otherwise fully up to the high standards of its predecessors.

Three new liveries have been applied to the 45-ton tank wagon (TTA under TOPS).

The oldest livery is that of the sample in Fina silver (ref.37-582), as it lacks TOPS codes and associated data panels. The grey Total-branded version (ref.37-580) represents the 1980s, with its Petroleum Sector flash along the lower right bodyside. The drab black unbranded example (ref.37-581) is the most up-to-date, as it bears a rash of modern-type overhead live wires warning flashes at its laddered end.

The printing on such often-overlooked models is first rate. All the relevant inscriptions, 'repairs advise' addresses, hazmat symbols, and even



the maintenance schedule panels are legible or nearly so.

SAMPLES SUPPLIED BY
Bachmann Europe PLC,
Moat Way, Barwell,
Leicestershire LE9 8EY

PRICES in text



New SR Q1 in 00 from Hornby

Anticipating the imminent flood of things Southern from Hornby (the promised rebuilt Bulleid Light Pacifics, Urie/Maunsell 'Arthurs' and Drummond M7s cannot be far away now) is a new identity for a Southern Region machine already on the Hornby roster.

The locomotive in question is a Bulleid 'Charlie' - Class Q1 0-6-0 - which has regulation plain black finish but with late BR crest, as No.33023 (ref.R2537, £79.99).

It is well finished, and is ready for DCC should the purchaser desire: it has a NEM652 eight-pole dual inline

socket. In all other respects it is every bit as good as earlier Q1s.

For 00

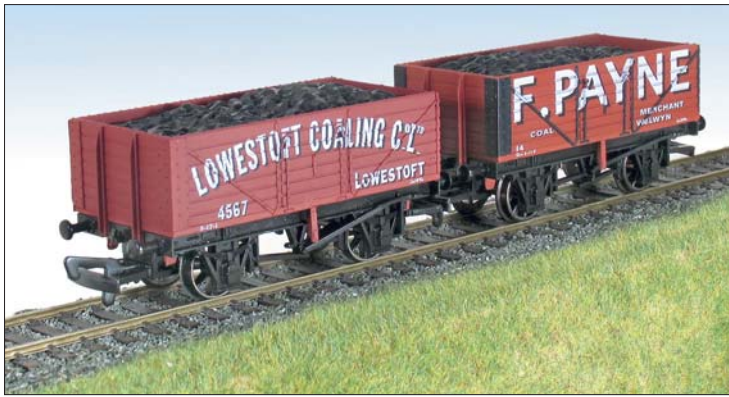
SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE
In text

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Latest Dapol private owner wagon commissions in 00 and N



1E Promotionals has continued its collection of commissions with the addition of Hertfordshire-based F. Payne of Welwyn and Suffolk-based Lowestoft Coaling Co.

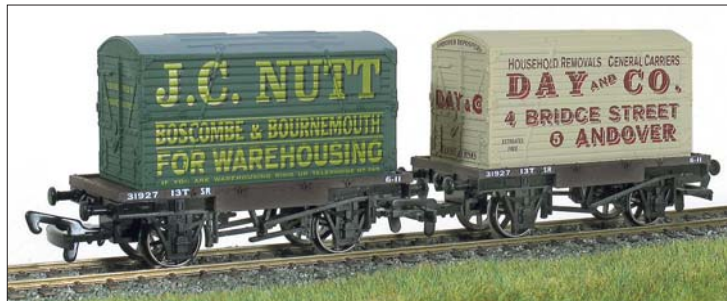
250 certified examples are available, price £7.50 each plus £1.00 postage from the joint distributors, KRS Model Railways of Leighton Buzzard, and GE Models of Sheringham. *KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds LU7 0BA. G.E. Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.*

Wessex Wagons has four more commissions to its fleet: conflat (with the same fleet number but with containers J.C. Nutt of Bournemouth (280 run, £12.00) and Day & Co. of Andover (280 run, £12.00). Also new are Mortimore of Chippenham (187 run) and John Snow of Glastonbury (200 run) with new timber load

Prices are £8.00 each unless noted plus £1.00 P&P for a single wagon and an additional 50p per wagon thereafter.

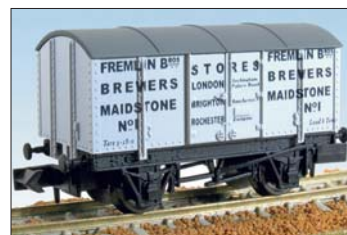
Wessex Wagons, Narnia, Flaxpool, Crowcombe, Taunton, Som. TA4 4AW.

Ballard's newest commission with a local theme is the Medway Coal Co. of Tonbridge, the wagons of which worked the Gravesend-Charlton-Hoo area. Price is £8.50. Also new in N is Fremlins brewers of Maidstone (£8.00), which is on the Dapol GPV in lieu of a



vent van. P&P £1.00 per order. *Ballard's, 54 Grosvenor Road, Tunbridge Wells, Kent TN1 2AS.*

The West Wales Wagon Works is commissioning an increasing number of POs for model railway shows. Cases



in point are two for the Loddon Vale MRC show in May, where purchasers could choose between Fear Bros. of Staines in N (84 run, £8.00) or G.W. Talbot of Reading (141 run, £8.20). Also, for the Penmorfa show the WWW commissioned 117 models from Dapol lettered for Eifionydd Farmer's Association, Pwllheli. Prices quoted include P&P.

The WWW now packages its 00 Dapol commissions in its own card outers to an attractive design. *The West Wales Wagon Works, Valentine House, Brynderi Close, Adpar, Newcastle Emlyn, Ceredigion SA38 9NP.*



The Middy Trading Company is the fund-raising arm of the Mid-Suffolk Light Railway Museum. It has commissioned 200 POs lettered for Christie & Son, Ipswich.

Price £7.75 from the museum or the sales stand at local exhibitions. By post £8.50 (please make cheques payable to 'Middy Trading Company'). For two wagons please add £1.00 for postage, and for three add £1.20. *D.C. Chappell, 21 Leggatt Drive, Bramford, Ipswich, Suffolk IP8 4EU.*

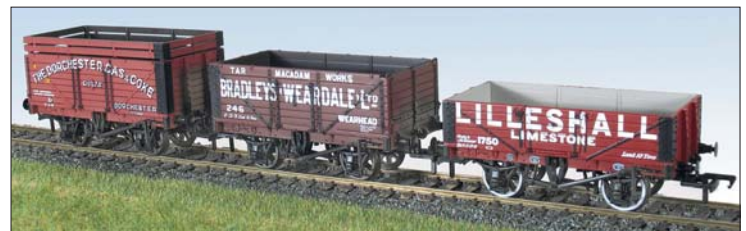
New Bachmann PO wagons in 00

Several new private owner wagons have been added to the Bachmann fleet. In 'ascending order' they include:

- a 5-plank fixed end side doors steel floor type in the livery of the Lilleshall Co. (ref.37-031, £6.35);
- a 7-plank side, end and bottom door wagon in the livery of Tarmac firm Bradley's of Weardale, based at Weardale (ref.37-083, £6.55);
- an 8-plank side door fixed end wagon in the attractive green finish of Osborne & Son of West Ham, east London (ref.37-156, £6.65);
- a 7-plank side, end and bottom door type with coke extension boards in the colour scheme of The Dorchester Gas & Coke Co. (ref.37-183, £6.75);
- an 8-plank side, end and bottom

door type with coke extension boards liveried for the Reading Gas Company (ref.37-206, £6.90).

These Blue Ribband-specification wagons are all attractively painted and finished, with good, legible printing even to the 'empty to' lettering.



For 00

SAMPLES SUPPLIED BY Bachmann Europe PLC, Moat Way, Barwell, Leicestershire LE9 8EY

PRICES in text

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Hornby Gresley coaching stock in 00 now available in lined maroon

Hornby has outshopped its fleet of corridor Gresley 61'6" stock in BR lined maroon, to follow the teak-effect and BR carmine & cream of earlier releases. Initially two fleet numbers are available in each of the five body designs, as under:

coach type	number	ref.
brake composite	E10101E	R4260A
brake composite	E10080E	R4260B
first	SC11026E	R4261A
first	E11025E	R4261B
third	E12699E	R4262A
third	E12704E	R4262B
buffet	E9127E	R4263A
buffet	E9132E	R4263B
sleeper first	E1235E	R4264A
sleeper first	E1237E	R4264B

As usual, the coaches have been finished very well, and the straw/black/straw lining is crisp. Door grab handles have been fixed on after the lining has been applied – a tricky task, but accomplished well.



SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES each version – £29.99

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

EE Class 40 nameplates new from Precision Labels

For its Precision Decals series, Precision Labels has embarked on the task of recreating the nameplates once carried by a selection of Class 40s in the 1960s. All 27 names have been produced, including the cast but never-affixed plate *Media* and the post-preservation Falklands commemoration *Atlantic Conveyor*.

The plates are available in three scales: the N scale ones are available exclusively from **Heritage-N** (196 Derby Road, Spondon, Derby, DE21 7LU), but the 4mm and 7mm varieties are available from the regular Precision Labels outlets such as Frizinghall Models & Railways of Bradford and the Alton Model Centre. The plates themselves are excellently-printed water-slide transfers, and to give the necessary relief the 4mm and 7mm scale plates are supplied with 14 thou shaped metal spacers, two for each 7mm plate.



The pack codes are D40, plus -2, -4 or -7 depending on scale, then a suffix letter/symbol (A-Z then #, for *Media*) for each 'namer' in numerical order. Thus first-numbered D210 *Empress of Britain* is suffix A, D225

Lusitania is suffix P etc. Suffix Z is D306 *Atlantic Conveyor*. Prices are £5.99 per name for N, £7.99 for 4mm, and £9.99 for 7mm.

To accompany the plates are sheets of Precision Decals numbers,

designed to be placed over the existing factory-printed numbers. Green and blue-liveried locos can be treated, and alternatives are offered as plain numbers (i.e. not on a colour-matched background) if a resprayed or kit-built 40 is to be worked on. The three scales are covered, and as with the plates the N gauge versions are only available through Heritage-N. Pack codes are D41-2, -4, and -7 in scale order, then suffix A for individual characters for green-liveried locos; suffix B for individual characters, blue-liveried locos; suffix C for numbers on green backing; suffix D for numbers on blue backing; suffix E for clear-backed numbers in green style and suffix F for blue style. Prices are £1.00 per pack for N, £2.00 for 4mm and £3.00 for 7mm.

For 7/4/2mm scales

AVAILABLE FROM/PRICES in text.

Three-arch viaduct and single-span canal bridge kits in N from Ratio

In the February issue we reviewed the new 4mm scale double-track three-arch viaduct and canal bridge kits from Wills. Here under the banner of its associated company Ratio are the N gauge versions. (Note incidentally the attractive new packaging, soon to spread across the Ratio range.)

The viaduct's arch mouldings are

72mm wide, and like the 4mm ones are very well detailed. Piers are 85mm to the base of the capstones from which the arches spring. The sides of the piers have a groove in the moulding to enable a single-track width structure to be produced. The undersides of the arches are, again following the 4mm ones, formed from rectangles of red-

brick plasticard, here of 10 thou thickness.

The viaduct is capable of much extension: a kit is available which comprises an arch and one pier, and another kit containing two piers is also offered. This once more echoes the Wills 4mm version.

The canal bridge is a single-arch

pierless structure which provides 21mm headroom at the keystone. Wing walls extend up to 28mm tall.

These versatile kits will be sure to delight civil engineers working in 1:148 scale.

Trade enquiries and orders for both the Wills and Ratio ranges are handled by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.

For N

SAMPLES SUPPLIED BY
Ratio Plastic Models, Ratio House,
Mardle Way, Buckfastleigh, Devon
TQ11 0NR

PRICES
Three-arch viaduct (ref.251) – £15.50
Extra arch and pier (ref.252) – £6.50
Two stone piers (ref.254) – £7.50
River/canal bridge (ref.253) – £6.50.



Shedloads Models new wagon loads for 00 and N

Shedloads Models has an expanding range of wagon loads for 00 and N, which can also be used in and around goods yards etc., and on lorries.

A particular advantage of several is that they are magnetized, which makes removal easy. Any magnet of suitable strength can be used, but Shedloads offers the Loadlifter magnet as part of its range: it is roughly the size of an AA battery and coloured in vivid orange or yellow-coloured plastic, so is not easily mislaid!

The loads are cast in a special plaster then hand-finished to a high standard. They are offered either singly or in sets, ensuring some variety of load within a train of similar goods. Our samples are, from left to right in our photo, the following:

- ✳ a coal load, one of eight types of mineral load, each of which has five variations, to fit a Hornby 6-plank wagon. Ref.H601/2, price £2.20ea or five for £10.00;
- ✳ a 4mm limestone ballast load for a



Hornby 5-plank wagon, another of the eight types of mineral load. Ref.H503/5, price £2.20ea or five for £10.00;

- ✳ an N gauge wood load, one of two types of wood load each of which has three variations, price £1.20ea or three for £3.30;
- ✳ a 4mm wood load to suit a Hornby 6-plank wagon, two types of load

each of which has three variations. Ref.H0620/1, price £2.50ea or three for £6.50;

- ✳ an N gauge load of 6" steel pipes to fit a Graham Farish 10' wheel-base wagon one of two types each with three variations. Ref.10F10/1, price £1.10ea or three for £3.00;
- ✳ an N gauge mineral load, one of eight types, each of which has five

variations. Ref.10F07/4, price £1.10ea or five for £5.00.

- ✳ an N scale crate measuring 42mm x 10mm x 8mm deep, one of five price £3.00 or £2.00 for the three largest ones;
- ✳ a wooden crate in 4mm scale measuring 32mm x 20mm x 12mm deep, one of five price £4.00 or £3.00 for the three largest ones;
- ✳ two small N gauge crates, price as for the large N crate above;

The loads are quite shallow in depth, enabling a near-empty wagon to be modelled: spacers are available to allow the load to sit higher in the wagon body.

For 4mm and N

SAMPLES SUPPLIED BY
Shedloads Models, 37 Chaplin Drive,
Headcorn, Ashford, Kent TN27 9TN.

PRICES
In text.

Precut signs in N, 00 and O

Stephan Anderson has released a range of station signage, in three scales, to suit the BR-period modeller. They are pre-cut signs in the six regional colours, needing just a dab of glue to fix to the structure or each other for a hanging sign. The signs are plastic-coated to give the impression of a newly-enamelled real sign.

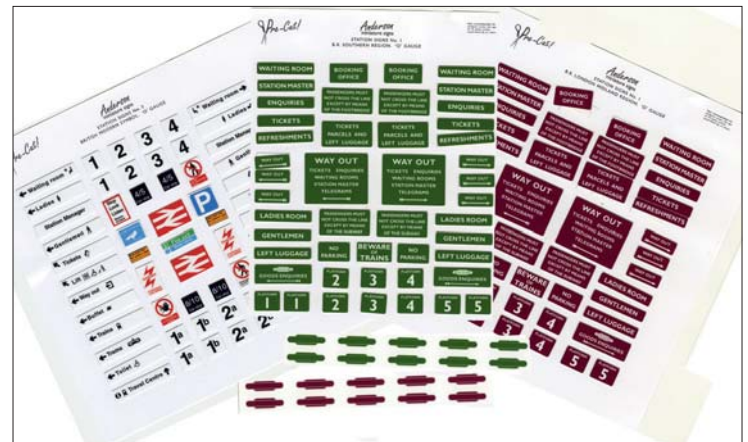
Modern BR signs, in the upper/lower case lettering on white ground style, are also offered. They include the large-size overhead live wires warning panel commonly found in depots, to remind staff and visitors that the OHLE is nearby.

The packs are available from Tag Models of Doncaster and Norwood Junction Models in south London: trade and retail enquiries are welcome at the address below.

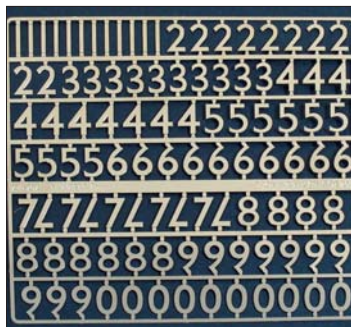
For N/00/0

AVAILABLE FROM
Anderson Miniature Signs, P.O.Box
467, Rotherham, South Yorkshire
S63 7ZN

PRICES
N & 00 – £3.99 per pack
0 – £6.99 per pack.



Etched letters and numbers



For many scales

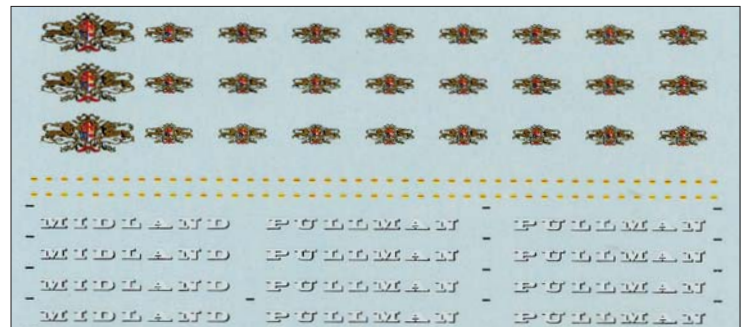
AVAILABLE FROM
John Lythgoe, 12 Oak Tree Close,
Bedale, North Yorkshire DL8 1UG

PRICES
8mm alphabets (ref.230-201) £14.75
8mm numbers (ref.230-202) £13.75
12mm alphabets (ref.230-205) £20.75
12mm numbers (ref.230-206) £18.95
P&P 65p per order.

New to the John Lythgoe range of etched accessories are alphabets and numbers, initially offered in 8mm tall style, with 12mm tall letters and numbers to follow. The cleanly-etched parts will be suitable for station and goods depot names, owners' names on warehouses, lettering on factory chimneys and suchlike. The typeface is close to the Gill Sans adopted by the LNER and subsequently BR.

Send a 9" x 6" Stamped Self-Addressed Envelope to the address alongside for the current price list for larger scale items.

New transfers from CCT



Cambridge Custom Transfers has increased its range with a sheet to suit Cartic-4 models (sheet BL61, 4mm scale, £5.50), intended for the Inter-City Models kit, or the old Triang-Hornby RTR model or K's plastic kit. CCT will consider requests for sheets to suit other scales.

CCT has also covered the Blue Pullman sets in 4mm and 7mm scales, for the Kitmaster and Just Like The Real Thing kits respectively. Sheet BL62, a part of which is shown here, includes even the tiniest markings. It will be accompanied soon by sheet

BL63, which will enable a full eight-car *Western Pullman* to be produced. Prices £8.25 per sheet for 4mm scale, £24.75 per sheet for 7mm scale.

For general enquiries about the CCT range, please enclose an SAE to the address below.

For 4mm and 7mm scales

SAMPLE SUPPLIED BY
Cambridge Custom Transfers,
206 Nuns Way, Cambridge CB4 2NS

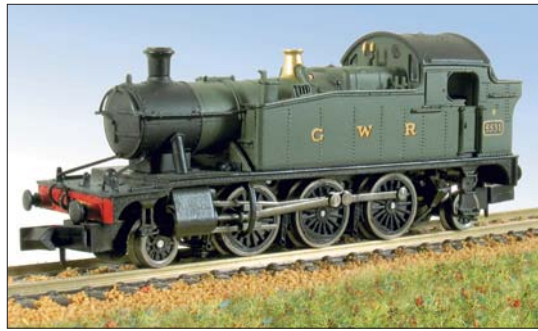
PRICES in text.

New GWR Class 4575 prairie tank in N from Dapol

In our September 2005 edition we reviewed the attractive new Great Western Churchward 45xx 2-6-2T in N from Dapol. Newly released is the Collett 4575 Class variant.

Introduced from 1927, the 4575 locos' chief difference over the 45xx predecessors was the enlarged side tanks, which increased the water capacity from 1000 to 1300 gallons. There were 100 in all, numbered 4575-4599 and 5500-5574. The last examples of the class were taken out of service in 1963, but happily 11 of this series have been preserved.

The model is to be produced in 500 units of any one identity: first sample to hand is No.5531 in GWR green with company initials, matching to a T the fine broadside view of the real thing on p.144 of *Great Western Engines volume 2* by J.H. Russell. Other liveries will doubtless follow, in the manner of the 45xx models.



The newcomer has all the hallmarks of previous steamers from this stable: there is excellent rivetwork and fine detail, and the printing – down to the yellow route restriction dot – is good. The three-letter GW shed allocation code – PDN, TYS etc – can be excused its absence in so small a scale: the loco was a St. Blazey resi-

dent in the immediate post-nationalization years.

The wheels, solid-backed as before are perhaps the part of the model that is a bit too 'old school', but these, like the couplers, can be 'seen through' in the mind's eye. If the model is to be converted to DCC, there is space for a decoder in the cab and bunker.

SAMPLE SUPPLIED BY
Dapol Ltd., Gledrid Industrial Park,
Chirk, Wrexham LL14 5DG

PRICE £64.95

WHEEL DATA
B. 0.5mm, C. 0.7mm, D. 1.3mm,
E. 7.4mm.

Graham Farish 27T iron ore and chalk tippers in N

Graham Farish has expanded its range of BR-built wagons in N with the doorless tippers, rated at 27 tons capacity, for iron ore (unweathered, ref.377-275, weathered ref.377-277) and chalk (ref.377-276).

The weathered 'rusty' sides of the tippler so treated are quite effective, and the interiors are coloured in shades (brown and off-white) appropriate to the loads being carried.

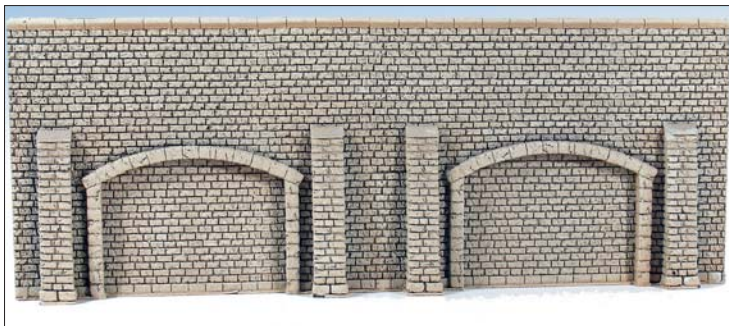


SAMPLES SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICES
all versions – £4.75

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.

Noch arcade walling sheets



Noted German scenic accessory supplier Noch has released a new selection of sandstone walling.

The base material is high quality hard foam, light but rigid, which can be cut with a modelling knife or sawn, sanded and filed, and even bent to shape if gently warmed with a hair-dryer. The deeply textured finish is hand painted.

As well as the most elaborate version, the arcade wall (ref.58078, illustrated), which has arched recesses and abutments, there is also a retaining wall (with abutments) and plain walling.

These wall sections are available for 00/H0, TT, or N scales, sized accordingly. In 00/H0 they are 125mm tall, in TT 97mm, and in N 74mm. In each scale they are offered in two lengths – 335mm and 670mm in 00/H0, 259mm

and 518mm in TT, and 198mm and 396mm in N.

In 00/H0, the wall is 18mm thick over the capping stones; at the base of the abutments it is 28mm.

To match this walling, there are also similarly styled single and double track tunnel portals.

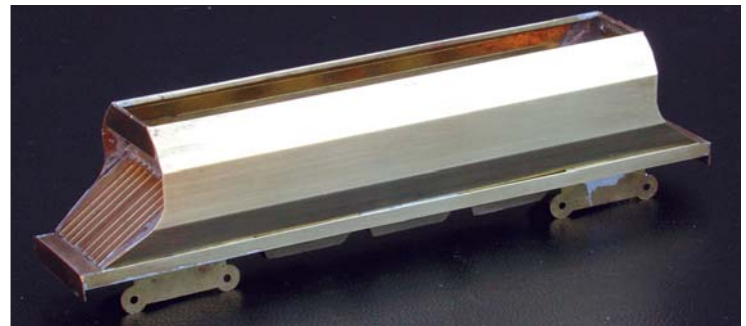
Both are supposed to be suitable for use on catenary-equipped lines. At the sides they match the height of the walling; the parapet is stepped up in the centre.

For various scales

DISTRIBUTED BY
Gaugemaster Controls, Gaugemaster
House, Ford Road, Arundel,
West Sussex, BN18 0BN.

PRICES T.B.A.

Worsley Works JHA for N & 3mm



Worsley Works has recently produced, in response to a particular commission, a 'scratch aid' body kit in N for the JHA low track force bogie hopper.

The kit provides for a full interior, with slope sheets and bottom discharge chutes, as well as the end covers and frame detail.

As usual with Worsley's body kits, reference to pictures of the prototype and a scale drawing will greatly assist assembly. Also as usual, the parts are accurately drawn and neatly etched, with half-etched fold lines and surface detail. The angular construction of these modern vehicles seems to lend itself to reproduction in this manner, the sheet metal techniques appropriately replicating the prototype, and the thickness of the material permitting a faithful representation which would be much more difficult in plastic.

Note that the bogie frames shown in our illustration are not included in the body kit, which is also available for 3mm scale. (It must be said that the resulting wagon is a very good match in terms of loading gauge for motive power such as the former South African Funkey B-B diesel, as now used by the Welsh Highland Railway – for which Worsley already offers a 4mm scale body kit – for those attracted to large 'modern image' or colonial narrow gauge. Just a thought!)

MANUFACTURED BY
Allen Doherty, Worsley Works,
19 Douglas Road, Worsley, M28 2SR.

PRICES N gauge – £11.00, 3mm
scale – £18.00. P&P £1.00 per order.
(Please make cheques payable to
A.Doherty.)

Book Reviews

Railways around Clapham Junction

A Colour Portfolio

Kevin McCormack
Ian Allan Publishing,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.
184mm x 240mm 80pp
Hardback £14.99
ISBN 0711031347

Your reviewer remembers the Junction as a hostile environment for young loco spotters in the 1950s, quite unlike Waterloo which usually seemed welcoming and where, on a memorable day, one's first loco (an H16) was cabbied at the platform end.

Kevin McCormack has given us a grand selection of colour images by some noted railway photographers. The period is that between the mid-1950s and the end of main line steam on the SR in 1967, and the area is at or within 20 miles of CJ itself.

The pictures transport us immediately to a world as it should be, with 'Lord Nelsons', 'King Arthurs', Bulleids rebuilt and not, 'Schools', W tanks, M7s, H16s, even a 700 'Black Motor'. Forming the background are the 4-SUBs, 2-HALS, 4-CORs, 6-PULs and the *Brighton Belle*, familiar EMUs from homely to posh.

As with all albums of this sort, it is not only the trains which provide the nostalgia and sense of location. The Southern signals with the corrugated arms, platform lamps with the twisted 'barleysugar' posts, lineside allotments with runner beans, telegraph poles, all once everyday sights. Then there's the subtle satisfaction of noting the things that *haven't* disappeared; the *art deco* station at Surbiton, the Granada's fly-tower looming above the Junction, large portions of the stations at Waterloo and CJ itself and, yes, Arding & Hobbs!

As a present for an ex-pat South Londoner over fifty, you could not beat this Portfolio.

Waterford, Limerick & Western Railway

Ernie Shepherd
Ian Allan Publishing,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.
285mm x 210mm 160pp
Hardback £19.99
ISBN 0711031479

This exhaustively researched work tells the story of a railway which lost its identity (to the Great Southern & Western) in 1901. At this time its trains were working over 350 route miles, about half of which were over other minor companies' lines.

The author describes in great detail the complex history of the WL&W and its constituents, and devotes separate chapters to locomotives, rolling stock, the route of the line, train services, personnel and accidents.



Above: Bulleid/Raworth Co-Co electric No.20002 hums its way south through Wandsworth Common with a Victoria-Newhaven boat train on 20 September 1964, four years before retirement. The three SR electric locos were regulars on this duty.

Photograph: Frank Hornby.

The text is supported by an excellent selection of captioned archive photographs, maps, timetables and trackplans of Limerick and Waterford stations.

A fascinating insight into the peripheral businesses of even a small railway company is given in a chapter on catering, bookstalls and steamer services.

Appendices give the statistics of stations, junctions and sidings, locomotives, carriage stock, wagon stock, chairmen and principal officers, and the main accidents. A comprehensive index completes the work.

This book will undoubtedly fill a significant gap in Irish railway history.

Dorset & Somerset Narrow Gauge

Vic Mitchell and Keith Smith
Middleton Press, Easebourne Lane, Midhurst, West Sussex,
GU29 9AZ.

240mm x 170mm 96pp
Hardback £14.95
ISBN 1904474764

The latest offering in the *Narrow Gauge Branch Lines* series from Middleton Press is bit of a misnomer but takes us on a fascinating ramble round sites of narrow gauge interest in Dorset and Somerset. These areas may not immediately seem like fertile narrow gauge territory, but remember they include such notables as 'Sylvasprings' water-cress and the Purbeck clay tramways. Add to these gasworks, brick and tile plants, quarries, pier tramways, collieries, and even a brewery.

The collection is presented in five sections – industrial and pleasure lines in each county, and a military installation (the Royal Naval Cordite Factory at Holton Heath) in Dorset. Industries in Dorset account for over half the images.

Most of the locations feature relatively short lines, but there are some longer runs, and one or two of the industries had quite extensive net-

works. The pleasure lines are mostly modest affairs, often using material salvaged from industry, so there are examples of machines being seen more than once, at work and at play, so to speak.

Motive power is diverse, from such steam oddities as Pike Bros.' archaic *Secundus* to relatively modern Ruston and Lister diesels, from pristine locos in maker's portraits to decrepit hulks.

While the tour is wide-ranging and varied, the introduction lists another twenty or so concerns known to have used narrow gauge railways for which no illustrations could be sourced. Hardly surprising, given that most of these lines were well out of public view most of the time.

The book follows the familiar Middleton album style, with 130 well-reproduced black & white photos briefly but informatively captioned and set in context by a good selection of maps, diagrams, and track plans. These range from rough sketches to extracts from highly detailed Ordnance Survey maps.

The pictures display a wide variety of subjects, and range from the historic to the almost contemporary. We may have become accustomed to the idea of narrow gauge lines as industrial plant, used on one site or in one arrangement only as long as there was a job to be done, but it is interesting to note how transient some of the recent 'pleasure' lines have been, while others, like the Gartell Railway, seem to go from strength to strength.

This book should interest all those who delight in minor railways, and we have little doubt that it will inspire narrow gauge modellers.

Carl Arendt's small layout scrapbook

Edited by Carl Arendt
280mm x 215mm 64pp
Softback £14.50
ISBN 0974493139

Following his two previous collections of micro layout suggestions, Carl Arendt has distilled a further selection of 100 ideas and plans from his Micro Layout Design Gallery website, <http://www.carendt.us>

This book is sub-titled 'model railroading in very small spaces' and in general the plans presented here are not as small as the micro layouts that

have until now been the main focus. The smallest described here is 13" x 5", the largest 70" x 36" – almost a normal size! While many are designed for N or OO/HO, quite a number are for O and even G scale. Many are narrow gauge, where tight curves are common, naturally following prototypes that face the same constraints, but there are also standard gauge schemes.

The book is in three sections – designing, building, and operating. Designing is by far the largest aspect, well over half the book, while for building it is stressed that no new techniques are required, but the editor helpfully takes us through the construction of two of his small layouts.

Operating could be regarded as an extension of the design process, with several ideas for switching/shunting puzzles. Operation of micro layouts is often built around one idea, and that can be perfectly satisfying, but other plans have greater potential.

The prototypes that have inspired these plans are international. Many modellers have contributed to the collection, including several known to RM/CM readers (e.g. Chris Krupa, Helmut Heinert, Herbert Fackeldey, and Bernard Junk); in addition, there are a lot of the editor's own efforts, often refining a submitted suggestion.

One aspect worthy of note is that there are several sequences of designs, as different people have adapted and improved earlier suggestions – only feasible thanks to the internet origins.

Some of the plans do seem reduced to an absurd degree and make you wonder 'Why?', but many will get you thinking 'Why not?'

A small layout could be a (relatively) quick diversion from a larger longer-term project – something completely different in setting, scale, and gauge, to get an idea out of your system, or to keep interest in the hobby fresh.

As before, most of the layouts shown are ideas or suggestions, though some are under construction, and a few are finished: the illustrations thus range from sketches and diagrams, manual or computer-generated, to photos. The style and quality of the graphics and images is not consistent, having come from such disparate sources, but all are adequate for the purpose, and the overall standard (of originals and reproduction) is an improvement on the earlier books. The layout is simple and clear; there is some use of sidebars and tint panels, but always to clarify a point.

The layouts are indexed by gauge and scale.

Like the layouts it promotes, this book packs a lot into a small space. A sense of fun pervades the text, making for an entertaining as well as an interesting read.

The book is sold in the USA and internationally by its editor. It is available in the UK at the price quoted above (which includes postage & packing) from The Titfield Thunderbolt, The Old Railway Station, Limply Stoke, Bath, BA2 7JG. Telephone: 01225 470079.

e-mail: simon@titfield.co.uk
website: www.titfield.co.uk

Trade enquiries are also welcomed. Our thanks to Simon Castens for bringing it to our attention and supplying the review copy.

News from the Bachmann Trade Open Days 2006 includes ready-to-run SR EMU

At its annual Trade Days, held this year on 16 and 17 July, Bachmann Europe PLC announced that it will be producing ready-to-run Southern Electric stock, in the shape of the 4CEP, later designated Class 411. The prototypes dated from 1959, and were introduced to work the newly-electrified Kent Coast lines.

Specifically, the models will represent the units in pre-refurbished condition, allowing Bachmann to use its Mk.I CK and SK coaches as centre vehicles. (The CEPs, and buffet-fitted BEPs, were re-arranged internally quite significantly on refurbishment.) It will also feature authentic bogies, lit indicator boxes and a new roof. Delivery date is as yet unspecified, but many will be watching this project with interest.

Bachmann also will produce models of the new generation of environmentally-friendly Class 66 locomotive in its Branchline 00 range. These Canadian-built locomotives are now being delivered to British and European rail freight operators. The model will feature working lights and be DCC compatible. It will have a new body shell, showing



the different grille layouts of these machines in comparison to earlier Class 66s, and also feature the smaller fuel tank. The models will come with the option to switch off the rear lights when running.

Development work was also evident on two wagons, to be added to the 00 range. The OCA-coded steel dropside open and YGB Seacow (ex-Sealion) ballast hopper were both represented by unpainted near-complete models.



The OCA is slated to receive Civil Engineers' 'Dutch', BR Railfreight red and EWS liveries; the Seacow will carry 'Dutch' and EWS finishes.

In Gauge 1, Bachmann Brassworks has announced a 3F Class 0-6-0T Jinty. It is the 'keyhole' version and features the protection plate on the bunker rails. They will be available in August in brass finish at £539.45 or painted in black at £599.95.

Bachmann is also venturing into the ready-finished buildings field in 4mm scale, with a range entitled Scenecraft. As an example, a gasholder of the small-town gas plant type was seen. Railway and 'civilian' structures will be produced, and there is to be a parallel range in N. Full reviews later.

Warley Show 2006 warm-up

Although December seems distant, preparations for the the Warley National Model Railway Exhibition are well advanced.

A weekend package has been arranged with Paramount Hotels for those who may wish to go to the

Birmingham area for an extended period to include a visit to the show. The Hinckley Island Hotel is about thirty minutes from the NEC, adjacent to Junction 1 of the M69.

There will be a dinner with speakers on the Friday evening before the exhi-

bition for those taking up the offer. The package includes coach transport from hotel to show on the Saturday.

Centrepiece locomotive this year will be Standard 4MT 2-6-4T No.80079.

The show is open to the public on December 2 from 10.00 until 18.00, and on Sunday December 3 from 10.00 until 17.00. The club's 39th show

will be held in Hall 1 of the NEC and will be opened by Radio WM DJ Les Ross, a lifelong railway enthusiast.

At least seventy-five working layouts will appear including many that are new or extended.

More details about features and tickets will appear in these columns as the show approaches.

London Road Models LBSC B4

The latest 4mm etched kit from London Road Models sees a move south of the Thames with the introduction of the LBSC B4 4-4-0.

Thirty-three B4s were built between December 1899 and September 1902, of which thirty-one passed to the Southern Railway at the Grouping. The other two were rebuilt to Class B4X. At Nationalisation, seven B4s passed into BR ownership, although none received BR livery or numbers.

The kit can be built as an original B4

with either three- or two-ring boiler and short or extended smokebox. The frames for the locomotive and tender are etched nickel silver and the body etched brass. The majority of the fittings are lost wax cast brass. Comprehensive instructions provide full details of the various alterations and prototypes.

The kit is £92.50 complete with tender and available at exhibitions or mail order from **London Road Models, PO Box 643, Watford WD2 5ZJ.**

Langley Models new releases

New kits in 4mm scale have been issued by Langley Models.

A Foden FC20 lorry-mounted crane is available with a lattice boom at £71.50, lattice boom with extension fly jib at £76.20 or with a face shovel at £68.75. The lattice boom kits contain a set of Ruston Bucyrus waterslide transfers. Also recently released is the 110RB Ruston Bucyrus 4.5 cubic yard face shovel at £75.95 including 110RB

waterslide transfers.

The largest new kit is the 67' Clyde Puffer in 0 scale. It is 470mm long, cast in resin with cast white metal detail parts including a highly detailed steam winch. The kit is £129.75 for a waterline version.

Contact: **Langley Models, 166 Three Bridges Road, Crawley, Sussex RH10 1LE. Telephone 0870 0660 416.**

Redditch MRC exhibition

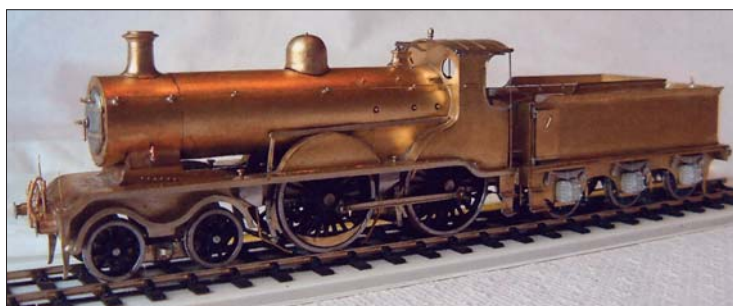
The second Birmingham Model Railway Exhibition will be presented by the Redditch Model Railway Club on September 2 and 3. The venue is the Cocks Moors Woods Leisure Centre, Alcester Road South, Kings Heath, South Birmingham B14 6ER. It is only fifteen minutes from Junction 3 on M42. On site, there is ample parking. The opening times are 10.00-17.00 Saturday and 10.00-16.30 Sunday.

Nineteen well-known layouts will

attend including *Chilcompton* (see this issue), *Wellington* in 4mm, and 7mm layouts *East Dean* and *Laura Bridge*. All this is supported by twenty-five trade stands.

The show is held in a single 16,500 sq.ft. hall which is easily accessible by all. Admission is: adults £4.00, children and senior citizens £3.00, family (2+2) £12.00.

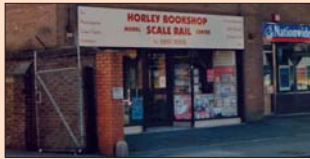
Full details can be found in *Societies & Clubs*.



SHOP NEWS

Scale Rail Model Centre, Horley

OPEN



As part of the Horley Bookshop business in Surrey, the Scale Rail Model Centre has moved to: **117 Victoria Road, Horley, Surrey RH6 7QS. Telephone 01293 783558.** All the best to Raj Vithlani for the future in the new premises.

Modelmaniacs, Calne

From their small shop in the centre of Calne, Mark and Amanda Bristow have moved Modelmaniacs to the Calne Industrial Estate. It is only five minutes away and has the benefit of free parking outside the door.

Much of their business is by mail order, but the new showroom offers visiting customers a light and airy display area.

In addition to a comprehensive stock of model train products, those keen on radio-controlled planes and trucks will find plenty to enjoy.

It is always good to see expansion in the model railway trade.



Contact: **Modelmaniacs, Unit 9, Harris Road, Calne, Wiltshire SN11 9PT. Telephone 01249 817731.**

Gee Dee Models, Nottingham

It is not often that we can report sixty years of trading for a model shop, but congratulations are in order in September for Gee Dee Models.

The Grain family has owned the business continuously since 1946.

The firm has been in the current location since 1975 and stocks model railway goods from N to G, including narrow gauge.

Contact: **Gee Dee Models, 19-21 Heathcote Street, Nottingham NG1 3AF. Telephone 0115 941 2211.**

Broad Gauge Society show

The biannual exhibition of the Broad Gauge Society will take place at St. Nicholas's Church Hall, Newbury on Saturday September 4.

There will be three layouts, one of which has never been exhibited before. They comprise Bob Harper's *Coldrennick Road* in 7mm, and in 4mm scale Kay Butler's *Cheltenham* and a new layout from Roger White. In addition, there will be static displays and a demonstration by Laurie Griffin.

Other stands will include the Firefly Trust, IKB Models, Kevin Robertson and CPL Products. Martin Finney will also be there to launch his 7mm scale kit for the Broad Gauge *Rover*.

The exhibition will be open from 11.00 until 16.30 and admission is £2.00 which will be refunded if you join the BGS on the day. The hall is just off the main shopping street adjacent to the Kennet and Avon Canal and only a short walk from the railway station.

Scaleforum 2006

After a very successful Scaleforum last year, the Scalefour Society will hold this year's show at The Leisure Centre, Guildford Road, Leatherhead, Surrey on Saturday and Sunday, September 23-24. The opening hours are 10.30-18.00 and 10.00-16.30 respectively (full details in *Societies & Clubs*).

The focus this year is 'Getting Started in P4'. There will be twelve demonstrators, fifteen layouts and fifty traders together with lectures, displays, bring-and-buy and other attractions. There will also be further layouts, resulting from the 18.83 Layout Challenge, that were unable to attend at Scaleforum 2005.

Although this is principally a 4mm scale event, there will be a guest appearance by the Three Millimetre Society which will show one of its Challenge layouts.

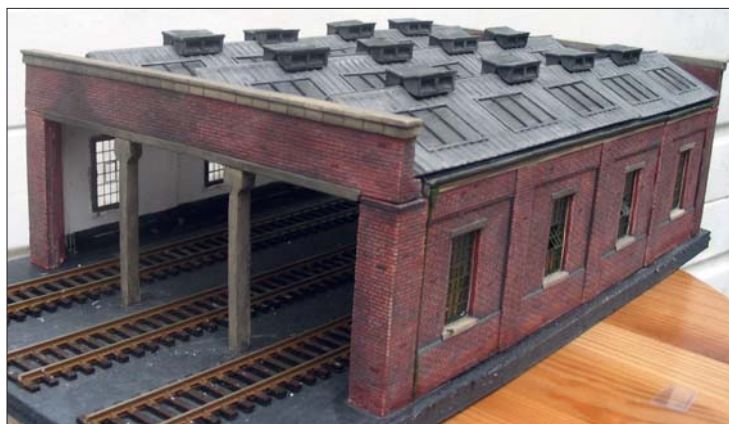
Full facilities are available for maximum enjoyment and wheelchair users are very welcome.

A 32-page A4 guide is available at the door or by post from:

Mike Peascod, 104 Durley Avenue, Pinner, Middlesex HA5 1JH. Send an A4 stamped addressed envelope with a cheque for £1.30 made out to The Scalefour Society.

The guide will be posted at the beginning of September.

Townstreet engine shed



The latest 4mm scale, three-road engine shed will be released in September. It depicts a red brick structure and features a louvred roof. The shed is priced at £69.50 plus £4.60

postage and packing.

Contact: **Townstreet, Greenhead Tower, Greenhead Gill, Grasmere, Cumbria LA22 9RW. Telephone 015394 35465.**

Gainsborough MRS Diamond Jubilee

This year on June 17, the Gainsborough Model Railway Society celebrated its Diamond Jubilee with a dinner attended by members and guests. Among the guest speakers were Sir William McAlpine, Carole Cuneo, Allen Levy, Nick Pigott, Tony Rundstrom and Bert Banks. Alan Pegler was presented with an ACE

Trains A3 named *Diamond Jubilee*.

The Society has one of the largest 0 gauge model railways in the country. It represents the East Coast main line from London, King's Cross to Leeds Central. The layout covers 250 square metres and has over 130 locomotives, 100 coaches and 250 vans and wagons, all hand-built by members.

Tower Models railcars

The recently announced Tower Brass 'razor edge' railcars in both passenger and parcels versions will shortly be made available in fully-finished form.

Originally available in unpainted brass, both types of car will now be offered fully finished in a choice of liveries. The passenger railcar (numbers 19 to 33) will be available in BR crimson and cream (either early or late) and in BR green with 'speed whiskers' as well as the original GWR chocolate and cream livery. The railcars will include seats, glazing, lettering and lining. There is even a choice of roof colour and an option of weathering.

Parcels railcar No.34 will be offered in GWR chocolate and cream or in BR maroon liveries. The railcars fully

assembled in unpainted brass cost £450.00; alternatively a fully finished painted parcels railcar costs £650.00 and a fully finished passenger railcar costs £675.00.

A number of fully finished models will be available off the shelf but with so many possible options most will be completed to order. This normally takes around three months. Weathering on these items costs an extra £25.00. For customers wishing to complete their own railcars suitable transfers are now available directly from Fox Transfers.

Contact: **Tower Models & Co., 44 Cookson Street, Blackpool, Lancs FY1 3ED. Telephone 01253 623797 or 623799.**

N Gauge Show 2006

Following the successful launch event in 2004 the N Gauge Show organisers have joined forces with Meridienne Exhibitions to ensure the continued success of this specialist show, which is sponsored by Graham Farish, M.G.Sharp Models and Dapol. The exhibition will be held at the Warwickshire Exhibition Centre, Nr Leamington Spa (on the junction of the

A425/B4455) on Saturday 9 and Sunday 10 September 2006.

Over thirty layouts have been confirmed coming from as far afield as Germany and France and include layouts in American and continental outline. In addition, over 28 specialist suppliers will be present.

Full details will be found in *Societies & Clubs*.

Western MRS 70th anniversary show

To celebrate the founding of the Western Model Railway Society in 1936, there will be an exhibition at Queensmead Sports Centre, Victoria Road, South Ruislip, Middlesex HA4 0JE; this is a new venue.

The show will take place on

Saturday September 30 between 10.30 and 17.00 and Sunday October 1 between 10.00 and 16.30.

Sixteen layouts, across the scales, are booked to attend.

See the *Societies and Clubs* pages for full details.

Barclay body kits, and Tasmanian Beyer-Garratt loco kits from GRS

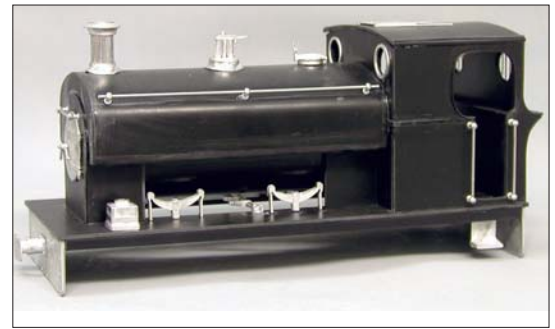
Garden Railway Specialists has added two Andrew Barclay saddle tank body kits to its range. The kits are available for 0-4-0 and 0-6-0 versions of the locomotives.

The kits are provided as plastic parts with white metal details. The 0-4-0 will require a LGB™ chassis, but the 0-6-0 can be powered by either the GRS G125 outside valve gear chassis or the G126 inside valve gear chassis. Both chassis are for 45mm gauge. Full instructions are included, but customers will need adhesive and paint to complete the project.

0-4-0 saddle tank body kit £75.00
 0-6-0 saddle tank body kit £95.00
 0-6-0 inside cylinder chassis £165.00
 0-6-0 outside cylinder chassis £185.00

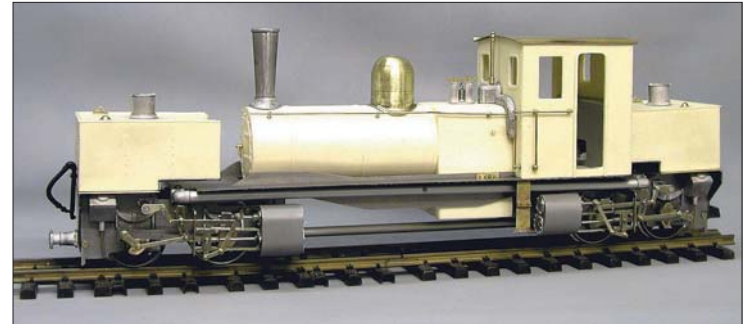
Also new to the range of G scale narrow gauge locomotives is the Tasmanian Beyer-Garratt 0-4-0+0-4-0 K1. The kit is suitable for a beginner with simple hand tools. It can mostly be screwed and glued, but there is a small amount of soldering to do. It is available in 32mm or 45mm gauge.

The tanks, boiler and firebox are resin with a brass etch for the rest of



the bodywork. The chassis is laser-cut steel with brass spacers and coupling rods, plus a steel footplate. Valve gear is nickel silver with detailing parts in white metal and brass. Slater's stainless steel wheels are included as are two GRS motor/gearboxes. Full instructions and waterslide transfers are provided, but adhesives, solder and paint are not. The kit is £750.00.

Contact: **Garden Railway Specialists, Station Studio, 6 Summerleys Road, Princes Risborough, Bucks HP27 9DT. Telephone 01844 345158.**



Changes at Model Masters

This European model railway specialist in Weston-super-Mare is making a few changes. The exhibition will close at the end of August. The firm has also decided that it is uneconomical to stock books and magazines.

But from the beginning of the same month, the firm will have new stocks of all the leading brands of British outline models as well as the European railway products that have made it a

familiar name. Other tempting stock includes cars, buildings and road items.

At the same time, the business will change its name to Model Railway Specialists.

Contact: **Model Railway Specialists, International House, Clifton Road, Weston-super-Mare, Somerset BS23 1BW. Telephone 01934 629717.**

Woking show

There will be a model railway show at Woking, Surrey on September 16 and 17. The combined efforts of the Railway Enthusiasts' Club and the Woking Miniature Railway Society can be seen at the Woking Leisure Centre, Woking Park, Woking, Surrey GU22 9BA.

Approximately thirty high quality layouts will appear in all major scales and gauges. A comprehensive selection of

demonstrators and traders will be present with several that are new to the exhibition.

See *Societies & Clubs* for full details.

Below: Moorcock Junction, built by the late Andy Calvert, is booked to appear at Woking on September 9 and 10. See the November 2004 RM.

Photograph: Steve Flint, Peco Studio.



NRM acquires 'Missing Link'

The National Railway Museum has acquired possibly one of the oldest steam locomotive models in the world; the true origins of the model, however, are a mystery.

The working model, known as *Sans Pareil* (Without Equal) was bought for £92,000 with the support of the Heritage Lottery Fund and the Friends of the National Railway Museum. The model dates from the early part of the nineteenth century.

It was believed to be the work of Timothy Hackworth, one of the competitors in the Rainhill Trials of 1829. There is now evidence that it might have been designed by Richard

Trevithick who had experimented with a double-cylinder boiler for the first time. It could, arguably, be thought of as the forerunner to modern engines and perhaps the 'missing link' to power units for cars and some aircraft.

Engineers will examine the model's design and manufacture, and analyse the metal and machinery marks to establish its origins. Water deposits will also be tested for origin. The model will be on display at the Museum until September after which it will go to laboratories for further analysis.

The results will be presented at the 2008 Early Railways Conference in London.

More kids can go free on the GC!

The Great Central Railway, Leicestershire's award-winning family attraction has changed its ticket arrangements.

During normal operating days, all children under five will go free. One

ticket allows you to ride all day. This change to the child fare arrangement does not apply during steam or diesel gala events and 'Days out with Thomas' events.

Contact: **01509 230726.**

LMS Society award for NEC exhibits

The LMS Society, founded in 1963 to promote interest and research activity in the London, Midland & Scottish Railway Company 1923-1947, has presented a silver trophy to The Warley Model Railway Club. It will be competed for annually at the Warley National Model Railway Exhibition at the NEC each December.

The trophy will be awarded to the best representation in model form of any aspect of the LMS. It could be a layout or a model of a prototype item.

An entry form is not required. All LMS items will be considered by the LMS Society members; details of the winner will be advised to the Exhibition Manager by 15.00 on the Saturday.

Woodland Scenics Premium Trees

A new range of Premium Trees has been introduced by Woodland Scenics and will be distributed to the model trade by Bachmann Europe PLC.

The range has already generated interest and is highly regarded. Each tree is hand-made and decorated ensuring that every tree is unique.

The tree packs retail between £5.25 and £18.70 depending on the size of tree and the quantity in the pack.

Premium Trees can be obtained from Bachmann dealers; look out for the attractive blister packaging.

Contact: **Bachmann Europe PLC, Moat Way, Barwell, Leics. LE9 8EY.**

Autumn courses

Four courses about railways have been organised by Martin Bloxsum for the autumn in the Midlands area.

At Warwick University, there are two courses. *When the Great Central came to town, 1898-1922* runs for ten weeks on Wednesday evenings from September 10. The other is *Rails to Shakespeareland - The Stratford-upon-Avon & Midland Junction Railway 1863-2006*. This on Tuesday afternoons for ten weeks, from October 3.

At Kettering for ten weeks, *20th century UK steam locomotive development 1900-1960* is on Tuesday evenings from October 3.

Finally, *Railway accidents, safety and signalling 1830-2006* is also ten weeks on Thursday afternoons from September 21. This course is at Nottingham.

Full details of all these courses are available from the tutor on **01455 553332**.

A course at Suffolk College, aimed at model makers in general, will include work with plastics, metal, card and wood so should be interesting for railway modellers.

Contact: **Suffolk College, Ipswich IP4 1LT. Telephone 01473 255885.**

Bachmann Collectors' Club

The latest N gauge locomotive from the Bachmann Collectors' Club is a Class 33 in Direct Rail Services (DRS) livery with Minimodal branding as carried by No.33 025.

Limited to 504 pieces, the locomotive is only available to Bachmann Collectors' Club members and is sold on a first come, first served basis. Each loco comes with an illustrated certificate, individually numbered and costs £62.95, post-free in the UK.

For details of the Club, contact **Bachmann Collectors' Club, PO Box 7829, 13 Moat Way, Barwell, Leicestershire LE9 8EY.**

Tiverton Museum

Tiverton Museum of Mid Devon Life is offering railway enthusiasts 50% discount on group rates to see the newly reopened Authers (*sic*) Gallery and related transport exhibits.

It is home to the GWR locomotive No.1442 known as the 'Tivvy Bumper' which is now completely refurbished. The gallery has displays and artefacts from life on the canals, roads and railways of mid Devon plus a nationally important collection of local farm wagons. The special rates for organised groups are as follows:
weekdays - adults £1.50 (minimum charge £15.00), children 50p (minimum charge £15.00),
evenings - all £1.50 (minimum charge £21.00),
Sundays - all £1.50 (minimum charge £50.00).

Tea and biscuits are 50p per person.
Nearby is the Grand Western Canal Country Park, horse-drawn barge trips and the 12th century Tiverton castle.
Tiverton Museum of Mid Devon Life, Beck's Square, Tiverton, Devon EX16 6PJ. Telephone 01884 256295.

Peterborough to York, First Class

First Class Simulations has released Part 2 of the *East Coast Express* add-on to the 2004 Microsoft Train Simulator. This one continues the journey north starting at Peterborough and features many stations on the 112mile

journey to York including Doncaster, Retford, Newark and Grantham.

The rolling stock includes A4 *Mallard* with a railtour plus the Class 89 locomotive which is unique to this product's developer, Europeanbahn.

Andrew Elliott 1950-2006

It was with great sadness that I learnt of the untimely passing of Andrew Elliott on July 10th, one of the best known and most respected proponents of railway modelling in Scotland.

A lifelong rail enthusiast beginning with the usual childhood introduction, he returned to serious modelling in the early 1980s, a period in which the standard and range of RTR diesel and electric models was limited. With his dynamic involvement in Livingston MRC and its *Seafield* layout, he soon formed a reputation for the highest quality detailing and repainting of proprietary models as well as launching himself into the daunting world of kit building multiple units. In a comment typical of Andy, he described MTK kits of the time as 'an aid to scratchbuilding', although few would disagree that the results he obtained when producing his esoteric fleet of DMU and departmental stock were outstanding.

These skills were recognized by the modelling press and in 1986 Andy started contributing groundbreaking articles on locomotive detailing and kit building. Indeed, his extensive fleet of DMUs and EMUs were used to great effect on his *Inverclyde* layout, which was a regular exhibition favourite in the 1990s.

A highlight in his published work

was an April Fool mock-up in 1990 of 47808 in a 'new' parcels livery. Subsequently, Hornby actually produced a model of the loco whilst the Parcels sector adopted a slightly modified version of the scheme for its class 47 fleet!

It was, however, through his new product reviews that he was invited to produce mock-ups of new models for Lima, via their UK distributor, Riko International. Despite the high-profile nature of this link, Andy was never one to highlight the fact, preferring instead quietly to survey the market as regards which locos modellers wished to have, prior to suggesting them for inclusion in the prolific Lima range.

It was through his connections in the industry and press that Andy was asked to produce many presentation models for loco namings and special events, resulting in his work being presented to at least one Prime Minister and the Prince of Wales and his family. With his early retirement from West Lothian District Council four years ago, Andy embarked on a new career, as a part-time assistant at Harburn Hobbies shop in Edinburgh, building on his long-term connections with the shop. A witty and charming person full of character and a great colleague to work with either in the shop or on the exhibi-

Also featured are GNER locos and coaches, and freight. It is available on CD for PC in the shops at £24.99.

Contact: **First Class Simulations, PO Box 137, Bicester, Oxfordshire OX27 7JS. Telephone 01869 345928.**

tion circuit, he was willing to deploy his extensive knowledge of both modelling and the overall railway scene, assisting beginners and experts alike.

I first met Andy back in 1985 at Hawick model railway show. Since that time he has undoubtedly been my mentor and guru as regards modelling and my own closest friend for more than 20 years. He was responsible for involving me in the modelling press and with Lima, instilling a desire always to improve skills and knowledge in our common hobby.

Our modelling partnership has been prolific during the years, Andy being mainly the builder and detailer, leaving the painting and finishing to me. That the current project, now on my work bench, will be the last is as poignant as it is saddening. Aside from modelling, we have shared countless journeys by rail, mostly involving Class 37s on the Highland lines, an affinity held by us both with most trips resulting in yet more modelling inspiration.

His passing is a great and tragic loss to his wife Sue, daughters Katy and Lizzie, as well as his close group of friends. The depth of our loss is a mark of the high esteem in which he was held by all who knew him well.
We are grateful to Andrew Donnelly for this obituary - Ed.

DONEGAL-2
The second part of Alan Gee's article on this 00n3 layout

CAER FABAN
Another North Wales-set essay in N by John Parkinson

RAMSEY
The northern terminus of the Isle of Man Railway, in 4mm by Alan Catlow

Coming next month

- **FREE BOOKLET INSIDE!** *Making a start in 00 gauge*
- **ALDEBURGH** *The Suffolk terminus in Z, modelled to scale by Brian Yallop*
- **BLACKMILL** *Mick Bryan describes a contemporary 4mm DCC layout*

plus all the regular features

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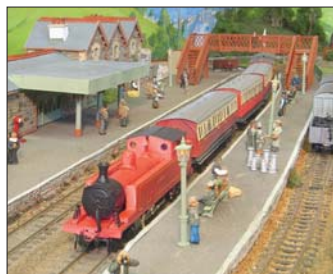
BLACKMILL

OO Modern-day DCC Layout



CAER FABAN

North Wales N Gauge Layout



DONEGAL - 2

Irish Narrow Gauge in OO n3



A RARE BEAST

7mm LNWR Prize Cattle Van





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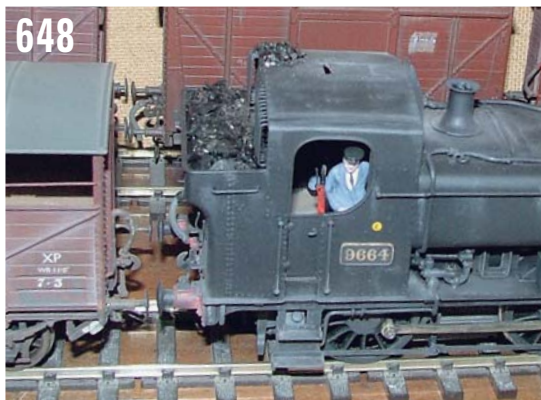
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 Published on the second Thursday of the preceding month.

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RAILWAY MODELLER

Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

General & Advertisement Manager JOHN KING

Advertisement Assistant SUE DAVIS

Classified Advertisements NICOLE CHARLTON

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Chips with everything

*This month we review a milestone:
a loco with a DCC decoder aboard.*

The locomotive in question is a Bachmann 3F 0-6-0T, and is the first UK-outline model with a factory-fitted digital command control decoder, at least on 'general release'. For some time now the 'majors' have included sockets for decoders – should the purchaser desire to fit one – and this is the next logical step along the road. The newly-arrived DCC 56xx will be reviewed next month.

Recent correspondence has highlighted firm views on the topic of digital command control, both in favour and not. Our position is quite clear: it is entirely up to the modeller's own preference, just as it is with subject matter. We would not dismiss quality material on subject matter alone, and we would not do the same merely if a layout was – or was not – controlled digitally. As examples, one layout (by the Blackburn & East Lancs MRS) in this issue represents contemporary practice, and is digitally controlled: others showcase the steam or 'blue diesel' days, and run on 12v DC. We like to imagine that the majority of our readership gains insight and inspiration from everything we publish, whether or not they are interested in the same scale, gauge, prototype, timespan or method of control.

The hobby, like the cars we may or may not have to use in our daily lives, will continue to evolve. Consider the items that are quite frequently standard even on 'budget' vehicles: CD player, electric windows, central locking, airbags, etc. They were absent, or 'luxury' options not so long ago. So it is with locomotives with decoders, finely detailed coaches and wagons, structure kits and 'ready-to-plant' items, and so on. Back copies of this magazine will tell quite a story, and one does not have to go back too far to find it.

The analogy with the motor car echoes our position, outlined above: a CD player may have taken the place of an eight-track, but the choice of music – classical or modern – is down to the individual.

00n3 – new readers start here!

It occurs to us that some may be unfamiliar with the particular flavour of narrow gauge modelling entitled 00n3. Briefly, it dates to the introduction of TT – 3mm scale, 12mm gauge track – in the late 1950s. Modellers working in 4mm scale quickly exploited this new scale/gauge combination to represent 3' gauge lines in their favoured scale. 00n3, although eclipsed a bit by 009, continues to be popular, especially for those interested in the two main areas of 3' gauge in these islands, Ireland and the Isle of Man. (Not to overlook the Southwold, the Rye & Camber and the industrial scene, of course...)

By co-incidence, we have two layouts, both of which are 4mm scale and 12mm gauge, that cover these main areas. Dr Gee concludes his article on *Donegal*, which began last month, and Alan Catlow begins the tale of his impressive long-term project to model a sizeable portion of the Isle of Man Railways. The first stage, the former Manx Northern terminus at Ramsey, is seen overleaf, and is booked to be at the Manchester show.

Milk and livestock in transit

These days, when every third HGV on the road seems to carry the name of a supermarket, are ever-harder times in which to picture the once-common railway cargoes milk and livestock. The former lasted well into the 'blue diesel' era in traditional form – we remember 'Westerns' climbing the Glynn Valley with six-wheelers in tow. Indeed many city-dwellers across the land owed their daily 'pinta' to rail. Likewise livestock, often in specialised vehicles such as the one modelled by D.T. Dowling (again...see p.634 for the explanation!).

Two tank articles feature in this issue: a 'classic' Great Western six-wheeler is built from a 4mm kit by Eric Lobb, and Richard Kirkby has assembled a rake from different sources in 7mm scale with which to transport Isle of Wight-based dairy products to London.

Cover: Nos.12 Hutchinson and 16 Mannin are entering Ramsey with a mixture of coaches. Double headed trains were quite rare over the northern line, but are a more common sight on the model, described overleaf.

Photograph: Steve Flint, Peco Studio.

Ramsey

Isle of Man Railway in 4mm Scale – part 1

ALAN CATLOW describes this 00n3 recreation of one of the Manx town's termini.

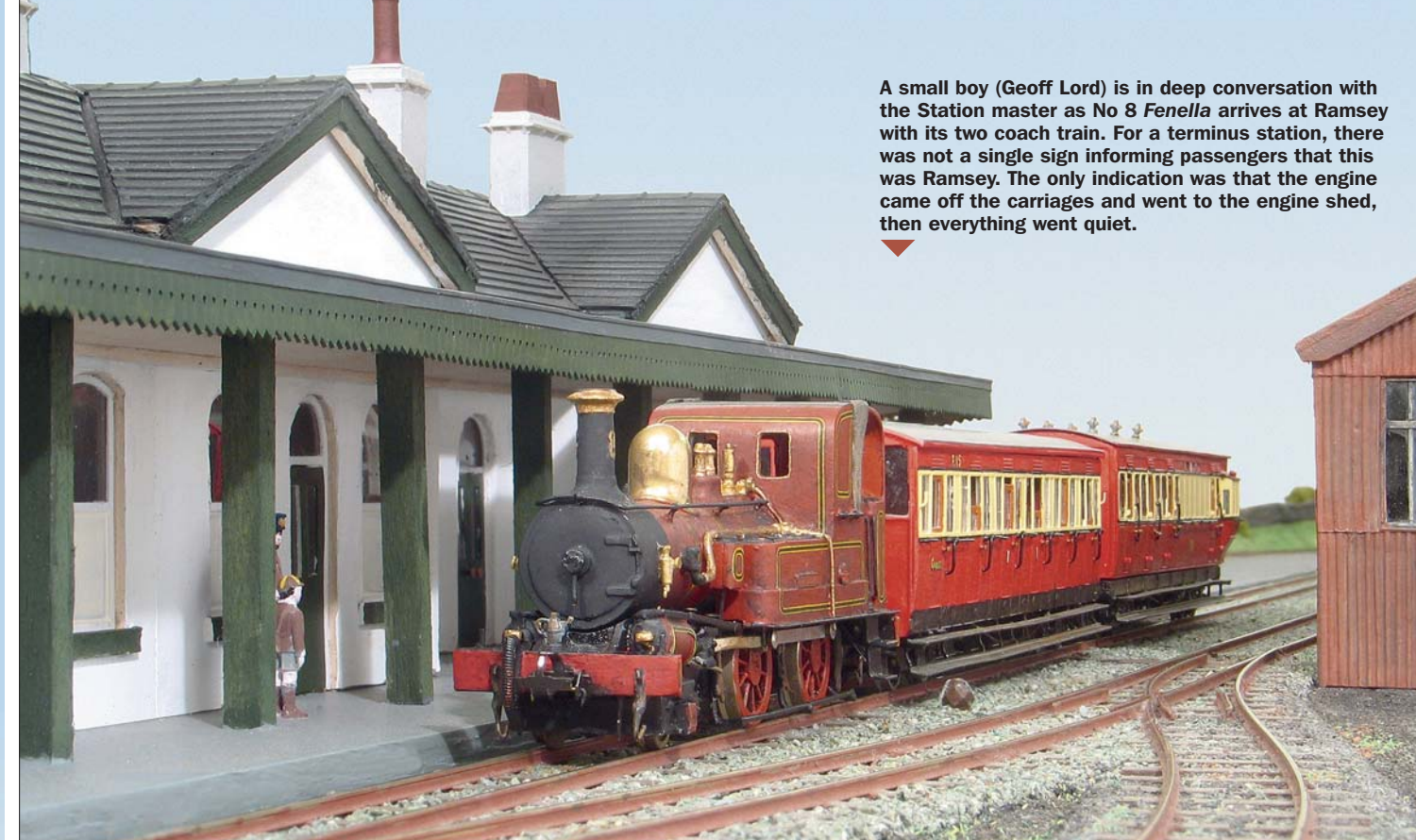
I am certainly not the first modeller to have been caught up in the thoroughly magical experience of narrow gauge railways. Like a great many people 009 was my first introduction to narrow gauge. I dabbled with the various Welsh locomotives and layouts, mostly unfinished, they came and went. A change of residence ten years ago brought about a change in direction for my modelling which had become something very stagnant.

I must point out at this stage one thing that has remained constant in every single layout that I have ever built. They are always constructed to recreate a prototype location. I have never believed in freelance modelling; it just does not appeal to me at all. The way I look at it is that with a real location you know before you start what the finished model should look like.

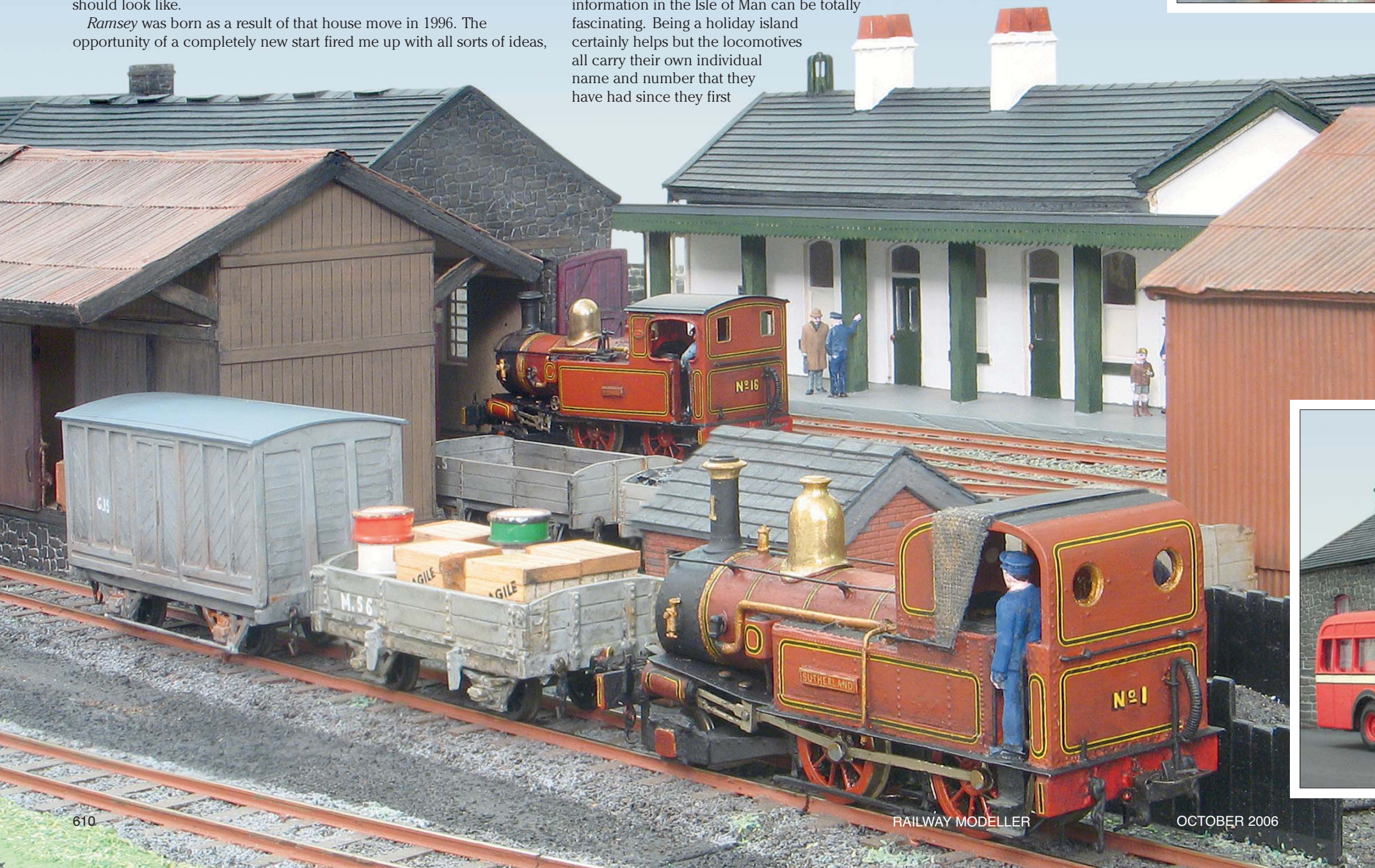
Ramsey was born as a result of that house move in 1996. The opportunity of a completely new start fired me up with all sorts of ideas,

some practical and many that were certainly not. We must have all gone through the process of drawing plan after plan that inevitably all ended up in the waste bin, but then one plan shines out above all others and in my case it proved to be the Isle of Man Railway.

I suppose some people could ask 'Why model the Isle of Man Railway? What is unique about it?' For me there is something very special about the railway and its surroundings. In its heyday there were 46 miles of track covering most of the island and I first witnessed this as a teenager in the 1950s. Sadly in 1968 the two northern lines closed leaving only the southern portion of the railway from Douglas to Port Erin open and operational, but thankfully that is still with us to this day. As with all railways, the gathering of information in the Isle of Man can be totally fascinating. Being a holiday island certainly helps but the locomotives all carry their own individual name and number that they have had since they first



A small boy (Geoff Lord) is in deep conversation with the Station master as No 8 Fenella arrives at Ramsey with its two coach train. For a terminus station, there was not a single sign informing passengers that this was Ramsey. The only indication was that the engine came off the carriages and went to the engine shed, then everything went quiet.



arrived on the island in some cases well over 100 ago. You feel you have known these engines all your life, they are part of your family. It is true, some projects do get into your blood and non more so than with this particular railway.

Before I could even start on this grand scheme I had to find a suitable room in the bungalow to build this layout. I had previously used the loft space in our original house so where better to start looking once more.

I could visualise a space for a layout of 21' x 7'6" in this loft space with a large proportion of the most northern parts of the chosen railway in there. The first thing then was to tackle the loft conversion, something that I was getting quite good at by now.

Even so, I must have spent around two years constructing, fitting out and making habitable the loft room before even the first baseboard could be made. But the day did eventually come in 1999 when what had appeared to be something of a building site, took on a totally new role.

This then was to become the room for my railway and the finished project (if a layout is ever finished) was intended to be the layout of all layouts, for me anyway. In model form, layouts representing the Isle

At the Bowring Road end of the ore shed, the Ramsey harbour branch appears through an open gate. A large amount of coal arrived on the island via the Irish Sea and was transported overland thanks to the steam railway. In those days this little branch would have been heavily used. A Leyland Tiger PS1 number 34 from the Isle of Man Road Services fleet is about to cross the harbour branch on a Ramsey local service.



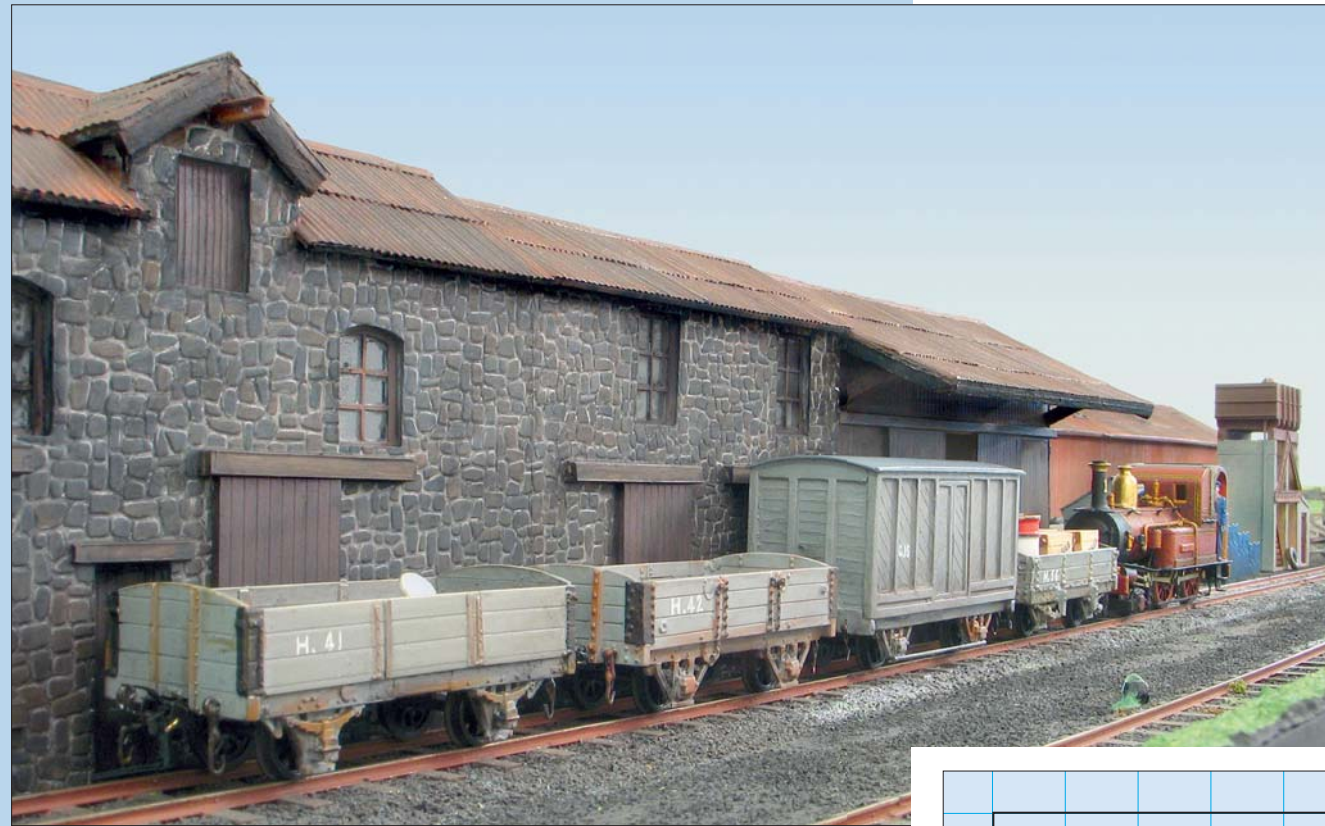
of Man Railways have been rather neglected and as a result are thin on the ground. You can visit many an exhibition and never see a single Manx item on display.

Welsh slate layouts are on the other hand very well covered and you would imagine that with the reintroduction of certain Manx kits in the early-to mid-1990s many more layouts depicting those lines would have appeared. This to some degree has not been the case. From the commencement of my project I also decided that I would make it in my way to contact other modellers who I knew were also building Isle of Man layouts. By meeting other like minded modellers, we have struck up a great friendly relationship with each other and we certainly hope to encourage more people to model something that until recently has been rarely modelled.

Armed with all the information to get going, it was now time to go back to the layout and the planning of just which sections would be most suitable in what I felt was a fairly generous space. With all that space available I felt that apart from being able to enjoy watching trains operating in their chosen stations, Manx scenery should play a vital part in the overall picture. That said, I finally decided on covering sections of what had originally been the line belonging to the Manx Northern Railway from St. John's to Ramsey via Peel Road and the Isle of Man Railway branch also from St. John's to Peel. By building the Ramsey section first it has enabled me to fit the 75' high Glen Moaar viaduct into the design.

Although the full project is intended to take many years to complete, all the stations to be modelled are to be portable and detachable from the main layout, so enabling a variety of individual small layouts to be seen at local exhibitions. This should be far easier than trying to build an enormous layout in a given time resulting in an unsatisfactory creation.

Having given you an introduction to my project, I will aim to keep you up to date with progress so far. When the final plan emerged in 1999 it covered as much as I felt was practically possible in the given space without being too cramped but



▲ Ramsey station building from the Station Road side. The main entrance is the single door under the canopy. This once ornate station building had become rather run down by this time.

◀ A scene rarely photographed on the real railway was the far side of the ore shed. This was the left hand side of the building with the goods shed being at the far end by the open loaded wagon. Notice the different heights and variations in roof styles denoting that this building could have been built at different times.

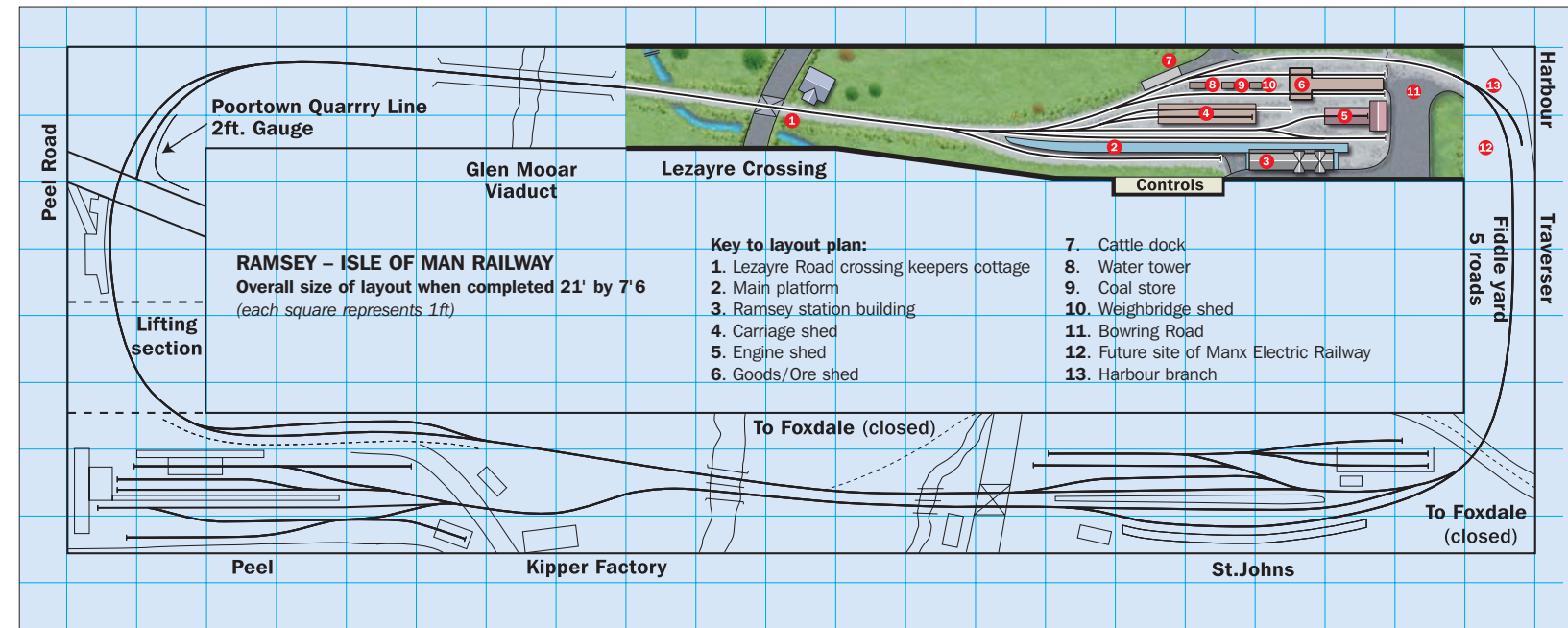
Lezayre Tiger PS1 No. 34 crosses the rails at Lezayre on a Ramsey local service. ▶



allowing prototypical Manx train operation to take place. I refer here mainly to St. John's as two or three times per day there was certainly a great deal of train movements with trains coming from all directions. There was the splitting of trains that had come from Douglas, some of these being double-headed, locomotives running round various coaches and then putting the locomotives onto the correct coaches so as to allow the engines all to finish their working day back in their own shed. Unusually for such a small railway, all operational engines were allocated to a shed. For example for many years the Ramsey line engine was always No. 8 *Fenella* while Peel had No. 6 *Peveiril*. Douglas on the other hand kept the majority of engines as that location had both the northern and southern lines to supply. For my purposes, Douglas is beyond the fiddle-yard (traverser) that leads to the rest of the railway on the other parts of the island.

When the great day came to start building the layout, Ramsey seemed the most suitable place to start. As Ramsey station no longer exists then I had to find another source for the information I needed. We are lucky today in having so many books and videos on the Isle of Man Railways to which we can refer for that vital information.

Ironically, I bought my first really serious railway book in 1962. It was the first edition of *The Isle of Man Railways* by James Boyd and I paid 42 shillings for it. Since that first edition



there have been many more editions as additional information has been discovered, but I still refer to that treasured copy and it has proved invaluable. The book has provided me with the all important track plans, in fact it includes track plans for all the stations on the island.

I chose to build the layout to a set time in history, that being 1964, and as track formations changed over the years it was vital to refer constantly to the available books to be as accurate as possible. 1964 was one of the last full years that the locomotives ran in Indian red livery and the full network apart from the Foxdale Branch was in operation. I

◀ Great activity at Ramsey with no fewer than three locos in steam. No 12 *Hutchinson* is about to depart with its train for Douglas, No 4 *Lo ch* is taking water by the tower and number 8 *Fenella*, the local engine, is receiving attention on shed.

did not visit the railway that year but I had done the previous year and that is how I remember seeing it then. In 1966 it never opened at all and it did look as though that would have been the end of the Isle of Man railway for ever. But the saviour came in Lord Ailsa and in June 1967 the north and south lines opened once more. Locomotives were repainted in a cheerful Apple Green livery and stations tidied up. All looked well and the future seemed secure but it was not to be, for the last trains ran for ever from Douglas to Peel and Ramsey in September 1968. Today, there are places where there is no trace of the railway ever having been there at all.

Track

That is why I chose 1964 to model the northern lines. There is far more history involved than I have covered here but it possibly explains why I have found recreating

this part of the railway so compelling. Once the information had been gathered in, it should have been relatively straightforward to build the first station. Unfortunately as people who know me will tell you, I am a perfectionist and I don't make life easy for myself. Most people would be more than happy to use the new Peco 12mm track but not me. Oh no, I have measured the track on the island for correct sleeper sizes and spacing, and sad to say Peco is not the same. So I make all my own track using copper-clad sleepers made from EM components and bundles of code 75 flat bottom rail. My sleepers are all a scale 2' apart and they look right as of course do the hand-built points.

All this hand building of track and points does without doubt take up a lot of time but modelling should not be a race. All we try to aim for is to create the best we can within our own capabilities. To finish off and create



Loco No. 5 *Mona* shunting goods vehicles from the rear of a passenger train in the main platform. A spare set of coaches is waiting in the corrugated iron carriage shed.



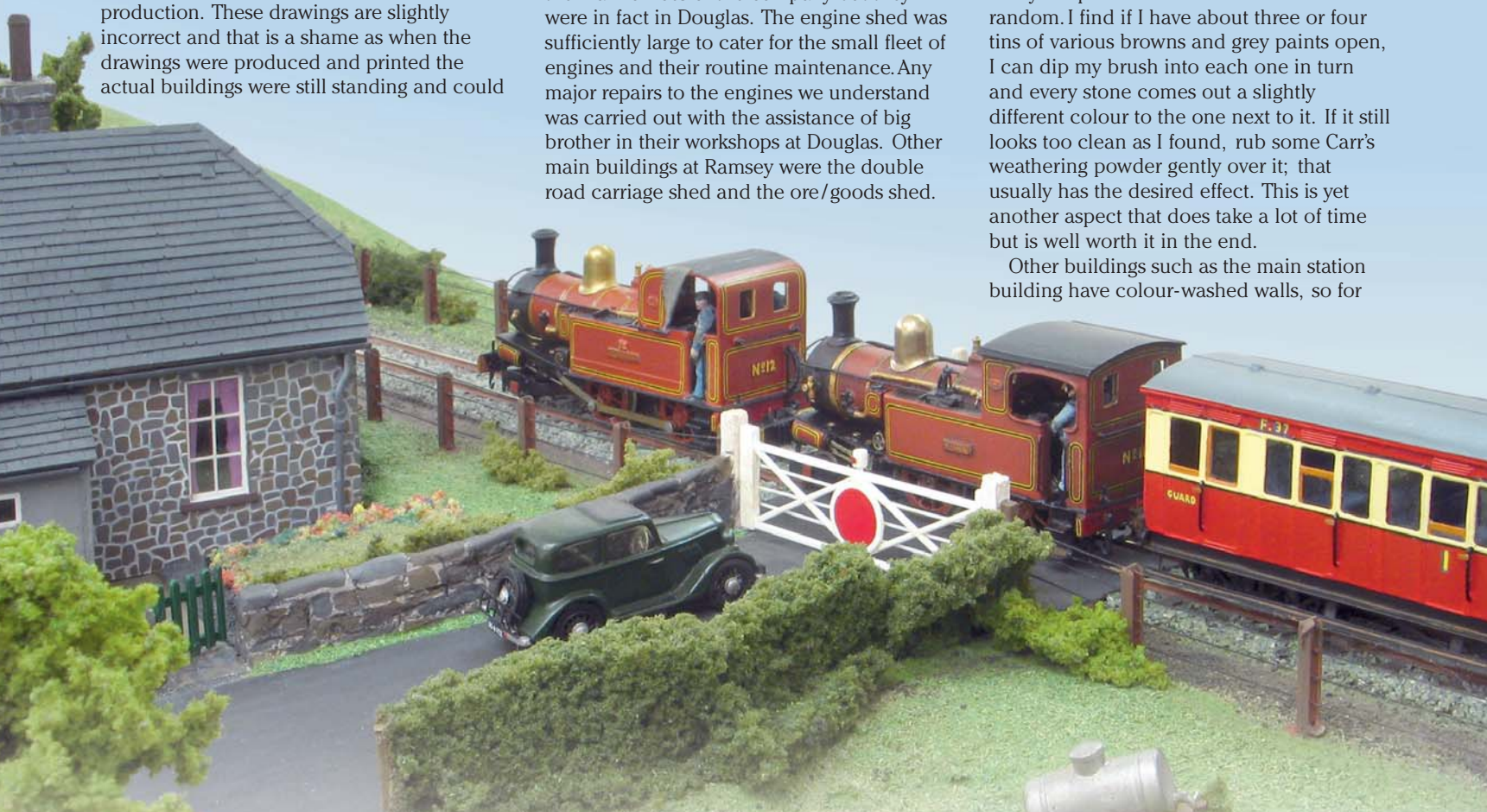
that run-down and almost life-expired trackwork does take on something else of a challenge. If you make it too rough and untidy people will say what a mess you have made of it but if it turns out to be too neat and tidy you have not achieved your objective. With this in mind I have tried to finish the main running lines with some grey ballast sprinkled with various shades of flock and grass powders. The sidings are more grass and dark dust, almost covering the sleepers. In reality the sleepers were rarely seen in some places with the rails appearing to be sitting on mud.

Drawings for Ramsey station buildings have appeared from time to time in a certain model railway magazine now no longer in production. These drawings are slightly incorrect and that is a shame as when the drawings were produced and printed the actual buildings were still standing and could

buildings as constructed should have had a very important part to play. The station building was large enough to have housed the main offices of the company but they were in fact in Douglas. The engine shed was sufficiently large to cater for the small fleet of engines and their routine maintenance. Any major repairs to the engines we understand was carried out with the assistance of big brother in their workshops at Douglas. Other main buildings at Ramsey were the double road carriage shed and the ore/goods shed.

Other details are added such as hand made windows, doors, guttering and down spouts. Then it is time for painting all those oddly-shaped stones to make it look random. I find if I have about three or four tins of various browns and grey paints open, I can dip my brush into each one in turn and every stone comes out a slightly different colour to the one next to it. If it still looks too clean as I found, rub some Carr's weathering powder gently over it; that usually has the desired effect. This is yet another aspect that does take a lot of time but is well worth it in the end.

Other buildings such as the main station building have colour-washed walls, so for



have been seen at any time and correct dimensions taken and recorded. It has taken some considerable time to make up accurate drawings from which to make the models but now they are finished I feel pleased with the end results.

Photos have proved invaluable in my quest for accuracy in this project. Certain angles and views of buildings seem never to attract photographers but the sight of a train draws the camera towards it. It is sometimes these views of a train that contain that vital missing link in the background, taken in all innocence by the photographer.

With Ramsey being the northern terminus of the Manx Northern Railway, all the

Buildings

I have made all the buildings from 2mm card that has been strengthened inside and on all corners with 1/16" balsa wood. When satisfied with the basic shape I have then covered the balsa wood on the inside with a second layer of 2mm card. This makes for a very strong structure on which to add the cosmetic front cover and roof tiles. As with detailing engines, this part of the building process brings the basic box to life. In the case of the engine shed I have used Slater's embossed stone Plastikard sheet to cover the outside and for the roof I have made individual strips of sometimes broken slate (again Plastikard) overlapping each other.

▲ Heavy train double-headed by Nos 12 Hutchinson and 16 Mannin pass over the road crossing at Lezayre on their way to Ramsey.

▲ Ground level shot of a double-headed train arriving at the terminus. The locos here are Nos 12 Hutchinson and 16 Mannin along with four coaches of different types and styles. Locomotive No. 12 is very distinctive in having raised brass numbers on its side tanks and the welded patch on its near side only. The only other engine to carry its number on a side tank was No. 5 and even that was only on its near side.

those I simply paint directly over the card with emulsion paint. This building does have a great deal of detail, but some of this has been lost with the passage of time so that is why certain features are missing on the model. The carriage shed is in reality a simple box with replica corrugated iron sheets again made from Plastikard fastened on. At the real Ramsey, this carriage shed would have been used for storing stock used as extras or when heavy loadings were expected. Inevitably this would have been formed of the most elderly carriages.

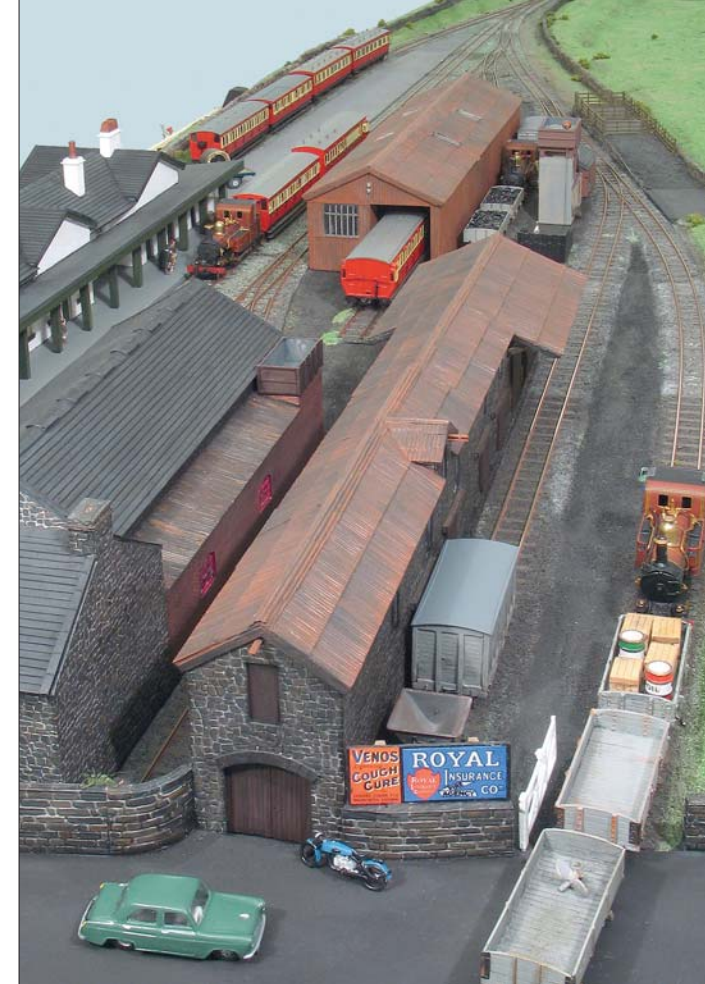
The ore/goods shed is one building that has been camera-shy over the years. It is possibly the most difficult to model due to that, but drawings from that original James Boyd book have enabled me to make a realistic representation. The split stone effect finish and the corrugated roof at different levels led me to believe it was built over a lengthy period in different sections. I found out recently that part of that building was used as a cycle repair shop prior to its demolition.

There are other smaller structures scattered around to complete the scene such as the brick-built weighbridge building and the concrete water tower next to the coal store for the engines. One building that people expect to see and was not present was a signal box. There were only ever two on the island, the one at Douglas and the other at St. John's. Ramsey never had a signal box.

As the train leaves Ramsey, the line crosses over a secondary road. I call this Lezayre crossing and at this location I have built a typical Manx Northern crossing keeper's house set aside of the road. There are many crossing houses to this design all over this part of the island. Today the remaining ones are privately owned and look to be in superb condition. Upon leaving Lezayre crossing, the track disappears into the exhibition traverser. This then completes the first completed portion. As each new section is completed the traverser will move round in turn.

From the accompanying plan – which saves a thousand words as they say – you can see that I have designed the layout to fit onto seventeen baseboards. Yes I could have made the boards larger and fewer in number, but that makes for greater weight and more difficulty in handling them into and out of the loft. It also makes life a lot easier when fitting all the relevant sections into the car for transporting them to exhibitions. I decided from the start to make all the baseboards at once so they are all in place now. The only ones that have been finished are the four Ramsey ones, the remaining other boards are only up to the track laying stage so it will be a while before they emerge. As time and enthusiasm permits I keep laying that extra section but this is proving rather slow at times.

Building something like the Isle of Man Railway is totally different to building a conventional 00 layout. You cannot go into your local model shop and buy items off the shelf; every single item of rolling stock has got to be either hand-built or constructed from the limited number of excellent kits on the market. There is absolutely nothing available ready to run, so that aspect of building everything takes a vast amount of time. The 4mm Manx modeller does have the advantage today of the support



▲ Ariel shot of the Ramsey station complex. There is quite a bit of activity on this day with wagons being shunted onto the harbour branch across Bowring Road and in doing so holding up the traffic. A second engine has just brought its train into the main platform while a third shunts coal wagons behind the carriage shed.

of three manufacturers who do have kits specially for that railway. I purposely have not included the original GEM coach or wagon kits, as I tend not to use them due to their extreme weight and lack of clear detail. In their day they were good and without them possibly Isle of Man modelling would never have got off the ground, so we must thank George Mellor for that, but things have moved on apace since those pioneering days. The GEM locomotives on the other hand are a totally different story.
To be continued.

Ramsey is booked to appear at the Manchester Model Railway Society exhibition on September 29 and October 1.





Blackmill

present-day north west England in OO

MICK BRYAN describes a DCC-operated layout presented by Blackburn & East Lancs MRS.

It was while test-running a Bachmann 'Voyager' unit on the B&ELMRS *Oxenholme* layout, that a chance remark led to the construction of *Blackmill*. The brightly-liveried 'Voyager' looked totally out of place in 1950s surroundings and our Honorary Treasurer suggested that it would look smarter in a more appropriate setting. This was the impetus that our little group of 'modern era' modellers needed to go away and design a layout! It was quickly decided that the layout would be based in the north west of England, if only for the fact that we could go and research the prototype easily!

A bigger problem was the space available in the clubrooms. This dictated that the new construction had to fit in a space approximately 30' x 2'. It is hoped that the layout will eventually be extended into a continuous-run format as space allows in the future and, with this in mind, a central through station with storage yards at either end was the basic building block for the track plan. We wanted to have operating and viewing interest, so a station with a modern freight handling facility and junction nearby was high on the requirements when it was suggested that our local station at

Blackburn might fulfil some of the requirements. A signal diagram was obtained and it was promptly realised that with a few adjustments, the western end of Blackburn would satisfy our operating requirements within the space available.

The major changes to the prototype track plan are the shortening of the goods loop as it feeds into the up main and the connection from the loop to Fogarty's warehouse, which has also been reduced in length. At present, only a 'half-station' has been modelled, in order to maximise the space available for other operations.

Rolling stock

In the present day of the privatised railway system, there is a wide choice of operators and liveries from which to choose, made even wider by the constant changes to franchise operators and, consequently, liveries and details. Although the track plan is based upon Blackburn, we have used modeller's licence and taken a slightly wider geographical area of north west England, to represent the prototype and allow a wider variety of models to be run.

One major disadvantage of modelling the present day is the seemingly endless variety of liveries as the passenger franchises and operators are constantly changing. With this in mind, we have allowed leeway in the time period to cover the last four years or so. The real Blackburn has three main passenger routes, utilising units from the former First North Western and Arriva Trains, which have recently changed to Northern Trains and First Trans-Pennine. Apart from the Class 150, we have representations of the units normally to be found at Blackburn in all the recent liveries. We hope that, with the imminent arrival of the Bachmann Class 150, that gap will soon be filled. There have been recent closures of the West Coast Main Line for upgrading and this has meant regular weekend diversionary services in the hands of Virgin 'Voyagers' or Class

Left: the colourful Metrotrain-liveried 158 905 contrasts sharply with the plain blue of 156 455. The blue livery was introduced as an interim measure when it was announced that the First Group would not be obtaining the franchise for Northern Trains.

Above: Direct Rail Services Class 20s 20 304 and 20 301 whistle through Blackmill with empty nuclear flask carriers bound for Bridgwater Power Station.

Photographs by Steve Flint, Peco Studio.

57 'Thunderbird'-hauled Pendolinos. At present, the layout cannot accommodate a full 9-car 'Pendo', so that's one for the future!

Freight services are typical of those found within the north west, with EWS Class 66-hauled coal, steel and engineer's trains. Freightliner 66s are also used on block cement and intermodal trains. The route through Blackburn also sees regular crew training trips with Direct Rail Services locomotives. Traffic to the warehouse sidings is either steel on bogie wagons or paper in vans for use within local industry. Steam and heritage diesel traction is also often to be seen at Blackburn on rail-tours, thus enabling more variety. We have acquired a couple of Britannia Models Plasser 07-16 tamper kits which will take their place on the 'tamper siding', as they do at the real Blackburn. Operationally, most trains pass

through the station, although there are DMUs using the bay platform on Manchester services and the coal empties from Clitheroe cement works that run round in the station area en-route to Healey Mills.

Construction

The baseboards are 'simple' structures made from 10mm thick plywood. Each board measures 4' x 2'. Side members are 4" deep except for the two central boards, where an extra 2" are required to accommodate the roadway system below the main rail level. A visit to our local friendly timber merchant with a cutting list ensured that all the main sections were all cut square!

All corner joints are screwed and glued and reinforced with 1" square softwood batten. 2" deep plywood crossmembers were added at approximately one third and two thirds distances, their exact positions being determined by the track layout and associated point motors. Extra cross-bracing was added where the main top board was cut away to create the lower roadway. The lower road is also constructed from plywood, suspended from the main baseboard top by softwood spacers. When the layout is moved between the clubrooms and exhibitions, each baseboard is fitted with a 'transport frame' consisting of plywood end pieces, hinged to an upper frame

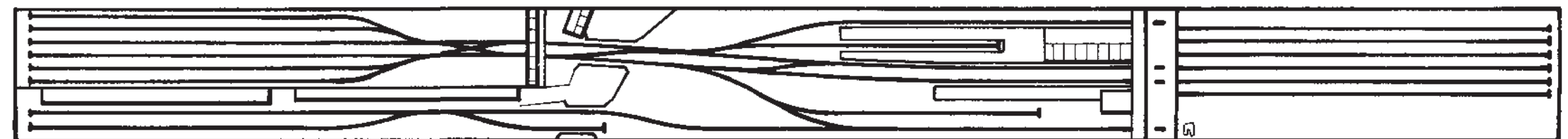
made from 2" x 1" softwood battens, which allows us to stack the boards on top of each other for transport.

Operation, control and hardware

For the majority of team members, this was their first real experience of DCC. We had seen the benefits of DCC whilst operating a conventional DC-controlled layout next to Nick Gurney's *Dyserth Road* diesel depot layout. This had most of his locomotive fleet fitted with fully working lights and the overall effect was impressive. As we were attempting to model the contemporary era where high intensity headlights are the norm on full size stock, we had to have them on the models. In our collective view, we didn't want them dimming or switching off when the train stopped. This was the single most important factor in deciding to use a DCC system.

A further recent development has been the introduction of sound systems to a small number of the locomotive fleet. To hear a Class 37 opening up onto full throttle is strangely addictive! DCC also allows full flexibility in operating the trains, as you are not limited to isolating sections determining exactly where you stop. With DCC you drive the trains and not the track.

However, the decision was taken to retain point and signal control via a conventional





Left: *Katherine* shuffles into the warehouse siding to shunt a few wagons around. This is a Judith Edge Kits 50 tonne Hunslet industrial shunter. Meanwhile, 45 112 *Royal Army Ordnance Corps* hurries by on the main line with an inspection saloon.

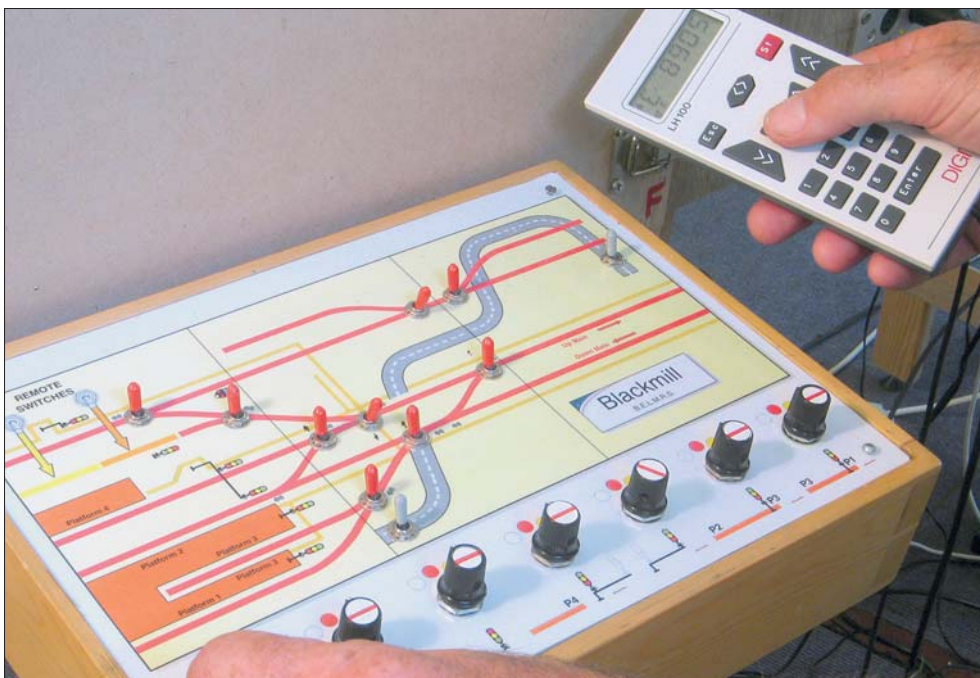
Below: a view of the central control panel. The track plan is based upon the western end of Blackburn. The red switches control the points, whilst the grey switches can remotely stop the truck on the Faller Car System. The rotary switches at the bottom of the panel are for the colour lights. A Lenz LH100 keypad controller can be seen to the right.

mimic panel with switches and pushbuttons, as it was felt that the full jump to complete DCC operation of these may lead to the layout becoming difficult to operate, especially in the end-to-end format, where trains would be moving through the layout at frequent intervals and require prompt changes to the signal and point settings. It is hoped that a future upgrade to full DCC operation of the layout may happen, but the points and signals will still be controlled via a mimic diagram, but this time on a personal computer, where the operator will simply move the mouse cursor over the relevant point or signal and just click.

The DCC feed to the track is a simple 2-wire connection to all parts of the track, taking care to use isolating joiners where there may be a short between the two running rails, for example at a crossover. The power feed along the layout is carried across baseboard joints by a 10 Amp rated 2-pin plug and socket. There are two separate power supplies wired through the baseboards via 4-pin connectors. These carry 'accessory' supplies of 3 volts and 12 volts DC to power the various lighting circuits along the layout.

Virtually all the points and signals are on the central two baseboards and these are connected to the control panel with two multi-core cable and multi-pin connectors. All the pointwork on the visible section of the layout is powered via Tortoise slow-acting point machines with DPDT switches. The points in the hidden sidings are operated with Peco solenoids clipped directly to the underside of the point. These are controlled with pushbuttons via a simple diode matrix and capacitor discharge unit for the extra boost when needed to switch up to four solenoids in one go.

All the trackwork is Peco finescale, with Electrofrog points. This was chosen to allow for minor variations in wheel standards that are inevitable when stock for a layout is provided by a number of people, via a number of model manufacturers. Because most of the stock is detailed ready-to-run, produced in the last few years, wheel standards are less variable between manufacturers and the only minor problems have been the older items such as a Hornby Class 142 which has required a minor adjustment to the back-to-back dimension of the wheelsets. All the points have had the crossing wired via auxiliary switches, to ensure reliable electrical continuity, rather than relying on the contact between the blade and stock rail to provide power to the frog.



Right: 156 427 emerges into the daylight from Blackmill West Tunnel, underneath the former 'Foster, Yates and Thoms' factory.

Below: note the exhibition sign, which is a copy of those used by Blackburn & East Lancs MRS for its exhibition in October!

For the first 'demonstration' appearance of part of *Blackmill* in October 2004, we used a borrowed Lenz LZV100 base unit with two LH90 hand-held controllers. At this first show we were joined by the above-mentioned Nick Gurney and his compatriot John Humphries with their LH100 keypad hand units. We soon discovered that the keypad-based addressing routine and function operation was far quicker and easier to use and this prompted the decision to purchase a Lenz Set 100 (LZV100 and LH100) with an additional LH100 controller.

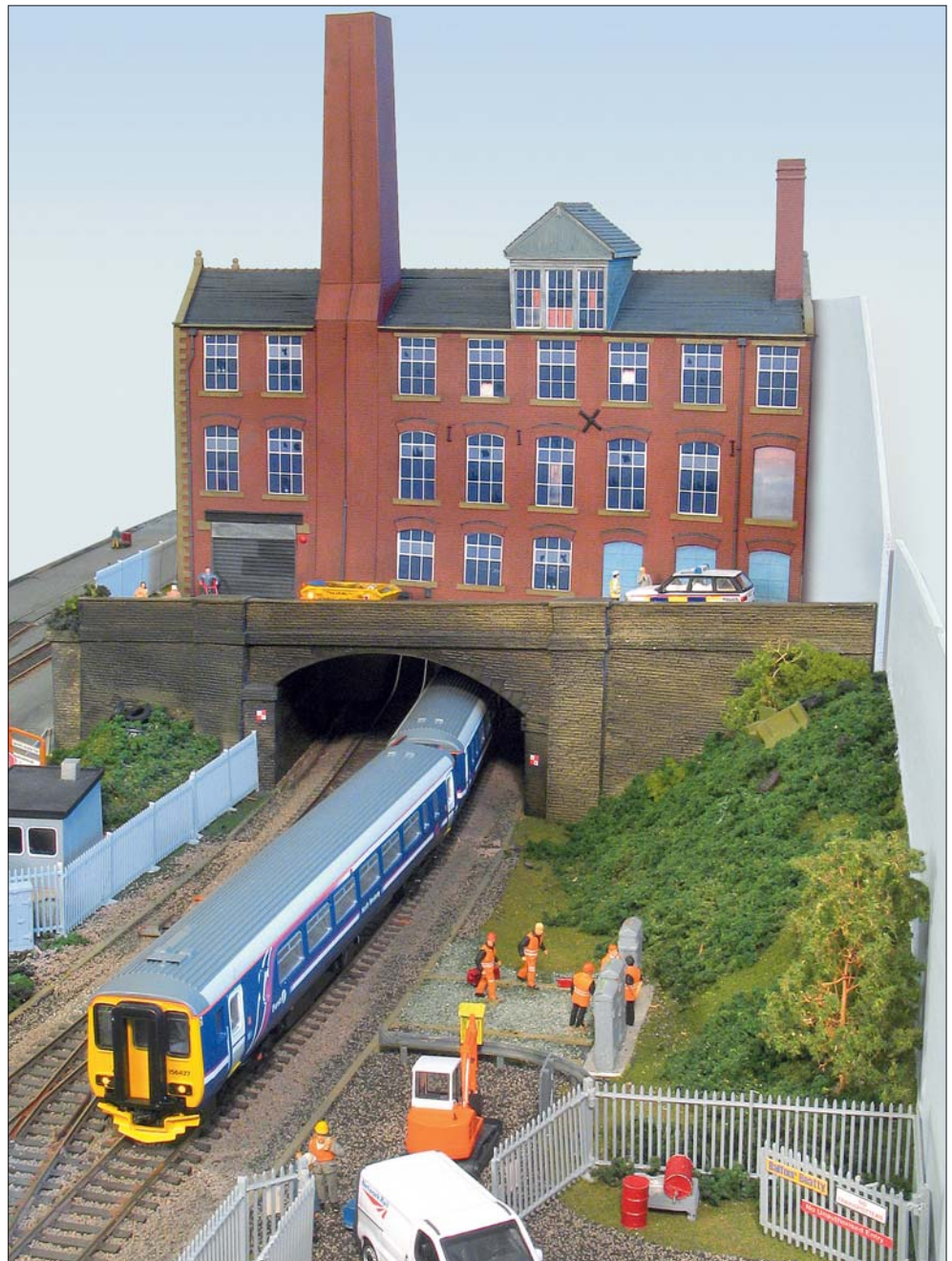
Once the whole layout had been completed in the track and wiring departments, we ran a few test trains on it, before starting work on the scenic items.

It was only at the first full exhibition that we realised that we hadn't actually 'played trains' with more than a couple of locomotives or multiple units! At the first outing, we were all keen to play with our new creation and chaos reigned for a few hours, as anyone near a controller decided to drive a train! After a few near misses, we soon discovered it requires co-operation between the operators at the ends and the central operator overseeing the points and signals.

The central operator is essentially a signalman and gives permission for each of the end operators to drive a train into the central section of the layout. One downside of DCC operation is that you need to know the unique address number of each loco or multiple unit before you can drive it. On *Blackmill* each four-figure address number is based upon the actual number carried by the model, for example, 66 238 becomes 6238 and unit 170 637 is 0637. This can cause minor problems when the stock number is not immediately visible. Before each exhibition, a list is printed out of the available stock and its address number. This list is posted at each of the operator areas and also details any visible features that allow the stock to be recognised without reference to the fleet number and any unusual functions that the loco may have, for example, sound. The list is invaluable in helping the operator to pick up the correct address. At present, the address identity of the loco is passed verbally along the layout, but we are looking at using small two-way radios, rather than shouting down the length of the layout!

One feature of the DCC system that we have found useful is the ability of one operator to 'pick up' a loco already under control of another operator, whilst it is still moving. This particular facility definitely requires good communication, or it's very easy to have a train out of control. At least the system is fitted with an emergency stop button if it gets too out of hand!

Converting a loco to DCC operation requires the installation of a decoder. Many of





Left: 37 674 *Saint Blaise Church 1445-1995* starts empty spoil wagons out of the goods loop as a pair of 158s – one a partially-rebranded First unit – enters Blackmill with an Yorkshire bound Trans-Pennine working.

Below: in the early evening light, 60 033 *Tees Steel Express* in Corus silver, departs for Warrington with empty BYA-coded steel carriers. The local shunter *Katherine* gets ready to move the cement wagons into the next siding for unloading.

the recent offerings from the major manufacturers now come supplied with a DCC socket and dummy plug, so it is a simple process to remove the dummy plug and fit a decoder into the socket. Many of the recent releases by the major manufacturers are already fitted with lighting and wherever possible, these are modified to allow for independent control of tail-lights on the locomotive or multiple unit. If the item isn't fitted, the stock is then fitted with light emitting diodes (LEDs) to represent the modern head- and tail-lights. Many of these modifications are carried out with the use of Express Models lighting kits, or LEDs bought from electronics suppliers.

One of the misconceptions of DCC is that once a loco is fitted with a decoder, it can no longer be used on a conventional DC system. This is simply not the case for the majority of decoder types. Even the inertia that is programmed into the decoder works on a conventional DC controller. Non-DCC equipped locos can also be used on a DCC layout, under the address code 0, although certain types of motor will buzz when stationary and possibly overheat. In order to allow us to display non-DCC fitted stock on the layout for long periods, two short sections of a siding are equipped with conventional section switches to protect the non-DCC stock.



Right: 170 637 is operating a Liverpool-Stansted Airport service as a Britannia Models tampo is stabled in the engineer's siding at Blackmill. 66 238 also waits for the road with a southbound trainload of coal.

Below: the private shunter *Katherine* waits as 66 200 *Railway Heritage Committee* backs into the warehouse siding. The uniquely-liveried 66 522 in Shanks/Freightliner colours is working a block cement train from Earles Sidings in the Hope Valley.

Scenery

Wherever possible, we have used commercially available items from a number of manufacturers. This has accounted for a large proportion of the details. However, there are a number of scratchbuilt items, principally the station building and mill.

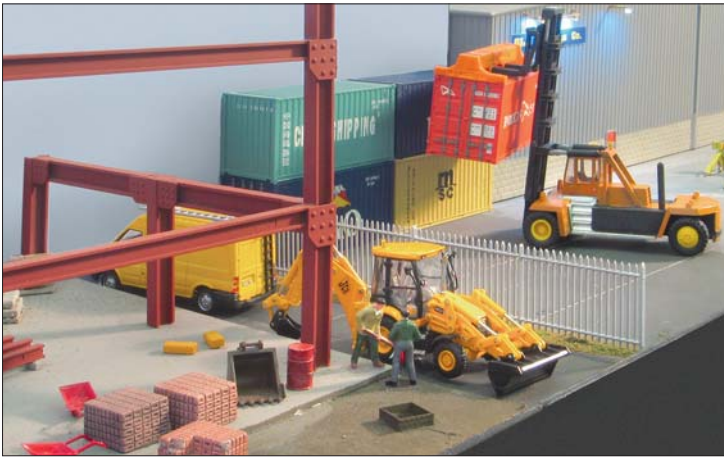
The station has been based upon the one found at Hendon in North London, with changes made to suit the location.

The mill above the tunnel is a smaller version of the former 'Foster, Yates and Thoms' building found above Blackburn West tunnel. The mill is the first ever attempt at building construction by one of our group, Les Green, and he has faithfully captured the style of the building so well that, at the first outing of *Blackmill*, we had a number of visitors to the exhibition who commented that they used to work in it!

All the windows have been created using a computer drawing program and even include a pigeon or two sitting on the window ledge!

The two bridges over the road on the central section of the layout are modelled closely upon those found at Daisyfield Junction, about a half-mile from Blackburn station – one is a typical East Lancashire plate girder bridge, constructed using a Wills 'vari-girder' kit. The modern concrete beam bridge is





made from plywood strips covered in plasticard, suitably painted and weathered. The retaining walls around the bridges are created using plaster mouldings from the excellent S&D range, suitably cut to fit the location.

The modern warehouse units have been created by using Pikestuff structures. These have been made taller by mounting the Pikestuff cladding on plywood sheets and then Wills brick or block overlays added to the lower section.

Apart from the obvious movement of trains, we have added extra spectator interest in the form of the Faller Car System. A road truck, powered by an internal rechargeable battery, follows a buried steel guide wire, by means of a magnet fixed to the front steering axle. At present, the truck emerges from the warehouse and drives down the access road and disappears under the bridge. Here the truck turns round on a low-level turning loop and

Above left: 'I'm sure there should be a hole here'.

Above right: a busy scene on Station Road. The local Bobby watches to see that no-one parks where they shouldn't!

Below: 221 135 Donald Campbell passes Blackmill with Plymouth-Glasgow service, diverted off the West Coast Main Line due to engineering works. 142 065 has recently been transferred north from the Welsh Valleys and has yet to receive a repaint into Arriva Trains Northern colours.

re-emerges to return to the warehouse. A permanent magnet fixed in the roadway automatically stops it by operating a small reed switch built into the fuel tank of the vehicle.

Future plans include automatic stopping of the wagon before it returns inside the warehouse through the working roller shutter door. If we're not careful and forget to open the

door, we have our own model version of 'ram-raiding'!

The colour light signals are LEDs mounted in Knightwing signal heads. The signal posts and gantry are scratchbuilt from brass section. The ground shunt signal that controls the exit from the warehouse siding is an Eckon item. We have even recreated the 'upside-down' 3-aspect signal that is located next to the tamper siding on the 'real' Blackburn.

As with every layout, there are always jobs to do and one outstanding item is the fitting of position-light 'cat's eyes' to the main running signals. Further interest has been added with model lighting, from external spotlights fitted to the buildings, to flashing yellow lights on the JCB and hazard lights on the truck backing into the warehouse. Even the skip next to the mill has flashing yellow lights provided from the Express Models range.

In order to permit exhibition viewing of the



Right: 66 135 rumbles through on empty HTA hoppers returning to the Scottish coalfields as a couple of engineering staff stand back to await the passage of an approaching train.

Centre: First 'Barbie'-liveried 156 427 heads for Clitheroe. Note the working orange central door locking lights.

Below: 60 029 *Clitheroe Castle* was named at a ceremony held at the Castle Cement works in Clitheroe to mark the relationship between Castle Cement and EWS. Here it is appropriately in charge of the coal empties, returning from Clitheroe Works to Healey Mills yard.

layout, it is lit with a low-voltage catenary lighting system. We had looked at commercially available systems with their associated high cost, but settled on a couple of units from our local electrical wholesaler. These consist of two insulated steel cables carrying 12 volts, to which the lighting units are fixed by means of pointed screws that pierce the insulation and thus provide power to the lamp holders.

The cables themselves are supported from steel uprights at either end of the layout. To prevent the two uprights from being pulled inwards by the lighting units, they are simply connected together near floor level along the length of the layout, by a long strap. We have accidentally found a benefit in this, in that the effect of the tension and counter-tension is to 'squeeze' the layout together and minimise expansion problems in warm exhibition halls.

What next?

We are continually trying to improve the layout, in many ways. We are constantly looking at the prototype modern day railway and line-side for detail additions, as well as finishing off those already fitted! Operationally, we are regularly updating the stock to keep abreast of the prototype, as time for modification and production releases of the model manufacturers permits. We also feel, that each time the layout appears at an exhibition, that it's a chance to improve our operator skills.

Future plans, as already mentioned above, may see the layout converted to continuous run. Additions to the road system to permit more stop and starting of the vehicle are also in the planning stage, as well as a means to slow it down, as it descends the ramp onto the High Street at breakneck speed in typical 'white van' fashion.

And finally

Thanks to the Blackburn & East Lancashire Model Railway Society for enabling a small group of members to build a layout to run their 'paraffin cans'. Thanks also to our long-suffering wives and girlfriends for letting us out to play trains. More thanks to Steve Flint for his usual superb photography and skills to edit out the blemishes!

Why the name *Blackmill*? Blackburn's Modern Image Layout!

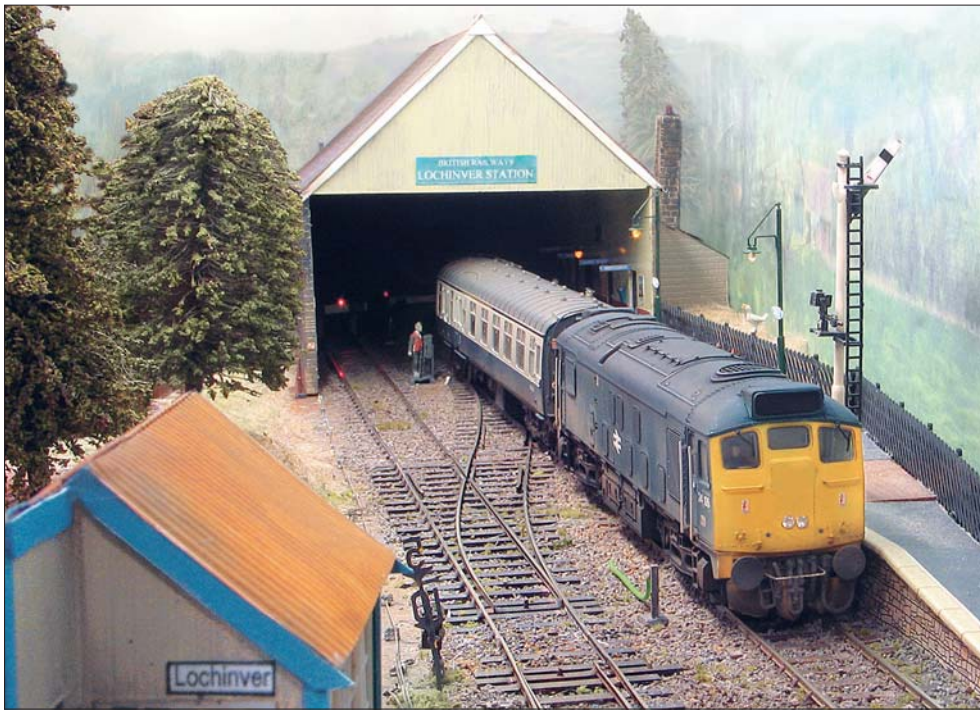
See **Blackmill** at the Blackburn & East Lancs MRS Exhibition at King George's Hall in Blackburn, October 20-22, 2006. See **Societies & Clubs** for full details.



Lochinver

Planning and building a might-have-been Highland Railway terminus

ADRIAN WALBY built this 1970s-based model as an entry for a small layout competition.



As an occasional part of its annual Showcase Exhibition, the DEMU group (Diesel and Electric Modellers United) holds a small layout competition. When the rules for the 2003 competition were published in September 2002 I felt interested enough to read on and decided that I would have a go.

The rules were simple: build a layout including a station and at least one operable point in an area of not more than 654 sq.in. in 4mm scale, including the fiddle-yard. The final clincher – the layout had to be complete and ready to be exhibited at the Burton-on-Trent venue on 7 June 2003.

Having built a few large permanent layouts, the majority of which were never actually finished, the thought of building, and completing, a small portable layout was extremely appealing. At this point I should mention that although I had been a member of the EM Gauge Society for ten years I had never

actually got around to building an EM layout, all the previous attempts had been in 00, so this seemed a good time to start.

The prototype location for the layout was simple: I'd long had a deep fascination for the railways of Scotland, especially the West Highland and Far North lines, so I decided that the layout would be set in the region. The era though was a bit more difficult. My first thoughts were to model the period around

2001 when Class 37s were just beginning to be replaced by Class 66s. This plan would utilise these locos on intermodal traffic (e.g. Safeway containers) and oil tanks whilst a Class 158 DMU would handle the passenger traffic. It was only when I started to measure up various vehicles I realised to my horror that this plan was not going to work. The vehicles would be too long to fit in the run-round loop, loco release line or even the cassette fiddle-yard, so obviously a rethink was required.

Throughout the 1970s the Far North lines were operated by Sulzer Type 2 locomotives of classes 24 and 26, so maybe this was the answer. After a lot of head-scratching, drawing and redrawing of track plans, a layout formation was decided upon which would allow a Type 2 locomotive to fit in the release head-shunt, with a Mk.I coach and parcel van fitting in the platform road whilst the loco ran round.

Baseboards and track

To allow a decent length of layout I decided to make two baseboards, each 3' long and 9" wide, giving an area of 648 sq.in.; nicely within the competition rules. The frames were made of 2" x 1" timbers with the tops made from 9mm plywood. The two boards are held together by spring clips and sit on an H-frame with a 2" x 2" leg at each corner.

With the boards made and the trackplan sorted it was time to bring the two physically together. The boards were covered with cork tiles and track laying commenced. Previously I had purchased a selection of 36" radius points from Marway and these along with lengths of

Above: this shot belies the fact that the station site is really cramped. The trainshed is based on those at Wick and Thurso stations in the Far North, though foreshortened to fit the site.

Right: the goods sidings can accommodate up to six BR standard wagons. It is assumed that the original goods shed was replaced with a 1950s concrete provender store.



Right: the station loop is just long enough for a single coach and a CCT parcel van. A modified Bachmann Class 24, No 24 125, runs into the station with the morning service.

Photographs by Steve Flint, Peco Studio.

SMP flexible track were used on the layout. The track was glued to the cork with contact adhesive and then ballasted with granite chippings mixed with Cascamite wood glue. Once this had been brushed and prodded into position it was sprayed with water and a drop of washing-up liquid and left overnight to dry. Seep point motors were fitted, which were wired up to a capacitor discharge unit to ensure reliable operation.

To complete the presentation, the layout is provided with a front plywood frame that holds a pair of under-cabinet style fluorescent lights which provide illumination. This frame, along with the backscene forces the viewer to look into the layout rather than over it. At exhibitions a black curtain hangs down from the front fascia to hide all the nasties that can accumulate under a layout!

Electrics

The electrics are kept simple: 24 volts AC and DC is supplied to the layout, the AC supplies the CDU and homemade controller whilst the DC feeds the platform and bufferstop lights via two voltage regulator chips.

The controller feeds the track through section switches mounted in a control panel that plugs into the back of the layout.

Buildings and scenery

The layout has only three buildings; the goods shed, signal box and station building.

The goods shed was constructed from the Ratio Provender Store kit, which was just the right size for the yard. A model of a disused Highland Railway goods shed alongside its replacement would really have set the scene but unfortunately there was no room. The signal box was scratchbuilt from styrene sheet using photographs of the boxes that used to stand at Culrain and Brora. The box steps and window frames are from Ratio whilst the nameboard was made up on the PC using Microsoft Word™.

The Highland Railway had quite distinctive trainsheds at some of their termini; mine was scratchbuilt, again in styrene sheet, using photographs of Wick and Thurso as a guide. Due to the restrictive nature of the competition rules, the inner end of the trainshed had to be cut off at an angle, although this is disguised by the layout fascia. The platform itself was made



from plastic sheet and Peco platform edges whilst the starter signal is by Ratio and is operated by a Peco point motor.

The rest of the scenery is made in the usual way using shaped polystyrene tiles covered with a thin layer of plaster. On top of this is some furry fabric that I purchased a long time ago which is then coloured with acrylic paint and finally covered with ground foam.

The backscene usually generates a lot of interest. It consists of three photographs which were stuck together and then scanned into a computer. They were then adjusted using Photoshop to give a hazy appearance and then printed out using a laser printer. The resulting scene was then pasted onto the plywood backboard – *et voilà!* I am often asked if I went to Lochinver to obtain the photos, but I must confess that they were actually taken at the northern edge of the North Yorkshire Moors to the south of Middlesbrough!

Being a small layout means that quite a lot of detail needs to be put on the model to provide interest. Consequently there are point rodding, water taps and hosepipes, a ground frame and various animals and people from a variety of manufacturers, all of which go towards setting the scene.

Locomotives and stock

The locomotive fleet is almost all Bachmann, the one exception being a Lima Class 26. However, at the time of writing I am eagerly awaiting the release of the Heljan Class 26.

The fleet is as follows:

20 002: Bachmann. Wheels re-gauged to EM and oval buffers fitted.

24 112: Bachmann. Wheels re-gauged, gangway doors filed off and headcode discs resited to centre of doors to represent a locomotive overhauled at Glasgow Works.

24 125: Bachmann. Wheels re-gauged, gangway doors filed off, headcode discs removed and roof-mounted headcode boxes fitted using Craftsman parts and Milliput. Tablet catcher recesses were added under driver's side windows. Hurst Models jewels were fitted to represent the headlights fitted to certain Inverness-based Type 2 locomotives.

26 015: Lima. Ultrascale replacement wheels fitted, A1 Models roof fan grille and radiator side grilles fitted, Craftsman bufferbeam detail pack and oval buffers fitted. Hurst Models jewels fitted to represent headlights.

All locos are weathered and 26 015 was painted with 'faded' paints from Railmatch to represent a loco long out of works.

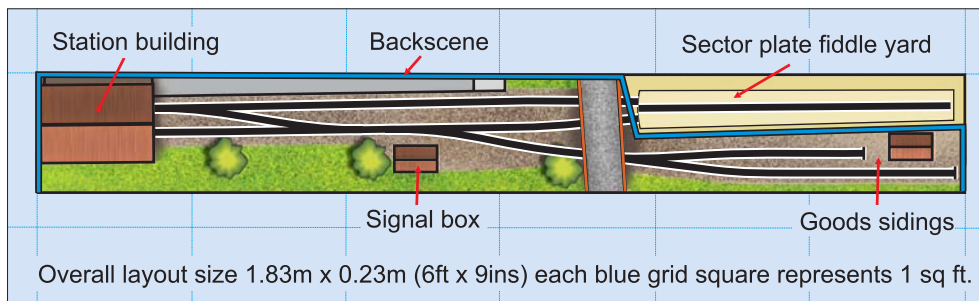
The lone coach used is a BCK, also from Bachmann whilst the goods wagons are all Parkside kits with the exception of an ex-LMS 20T brake van from Hornby. All the stock is fitted with Kean Maygib EM wheels and Sprat & Winkle auto couplings. However they are used in a semi-automatic mode, uncoupled with a shunter's pole, as I was originally going to use 3-links so no magnets were fitted underneath the track before it was glued down.

And finally...

Considering that when I started building the layout I had nine months to do it in, I only actually managed to get it into a state of readiness by 1am on the morning of the DEMU show! Since then it has seen a few modifications but is basically as built. I am sometimes asked if I would extend it to enable longer trains to be run but I feel that it should be left as it is to show that a large area is not necessary in which to build a finescale layout; remember it is only 6' long and 9" wide.

A lot of people are due thanks for this layout: Alan Monk at DEMU for organising the competition, Steve Flint for the photographs, Roger Purvis for his ideas and encouragement, Richard Christon for the controllers, weathering and backscene, and my long suffering wife Katherine for putting up with a nervous wreck who got steadily worse as the deadline drew nearer. Thank you all.

For information on the DEMU group, contact the Membership Secretary: David Anderson, 5 Selbourne Close, Beaconhill Green, Cramlington, Northumberland NE23 8HL, e-mail: membership@demu.co.uk.



Nethercreech Junction

What better way to use the upper floor of a farm barn!

*The essence of the S&D in 0 gauge, digitally controlled. A review by **ROBERT ILES.***

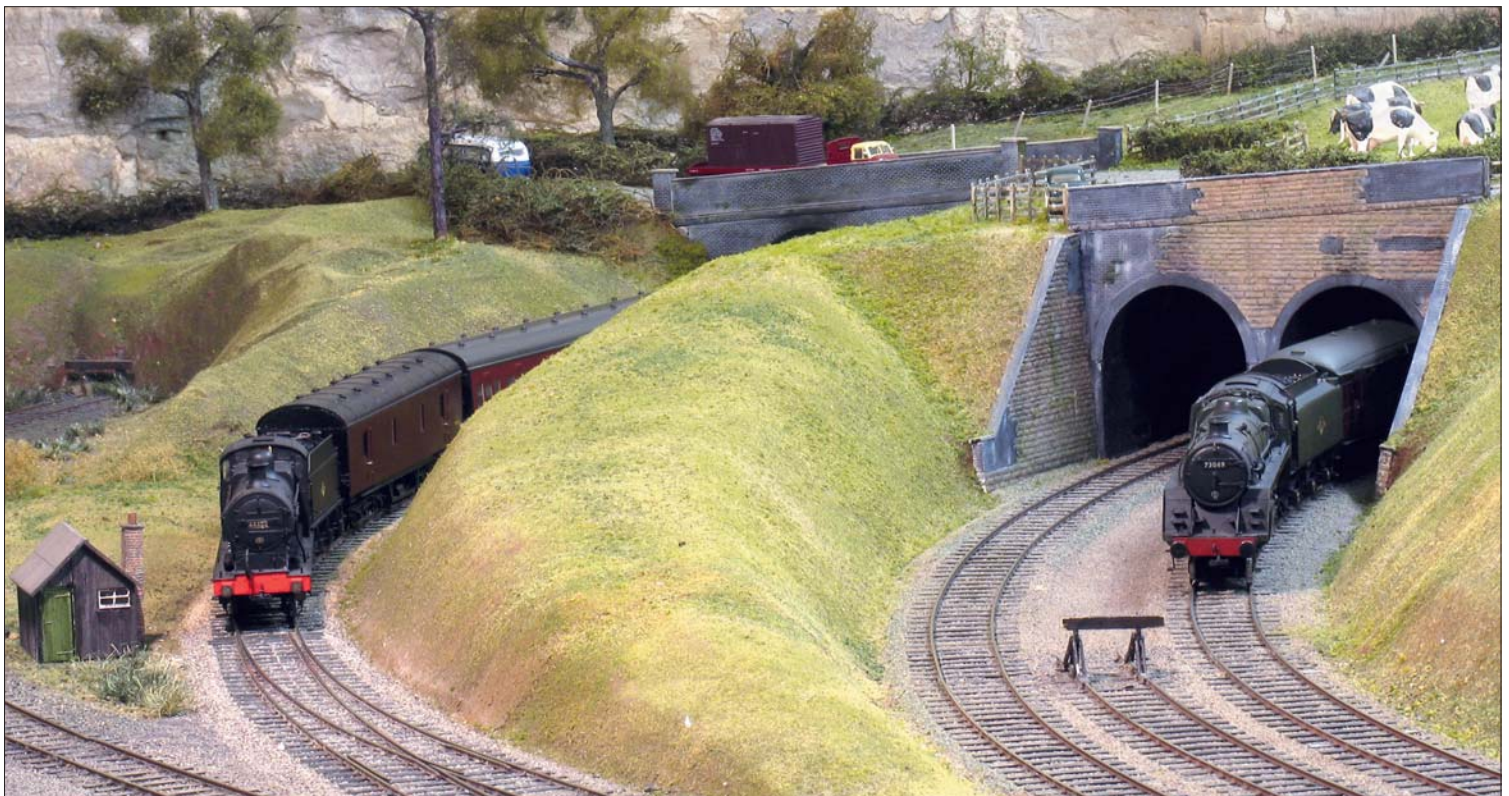
You need a bit of room for an 0 gauge layout but David Sedgman's barn has the perfect space for such a project. He runs an arable farm in the heart of Somerset. From the road, the first view of the farm is a group of stone buildings that was once a coaching house and stables on an old route through the county. The spacious farmhouse is on one side of the courtyard and opposite is a barn formerly used as accommodation for horse-drawn coaches.

The Sedgmans are busy people. Apart from David running the farm, his wife is a magistrate and they run a bed-and-breakfast business and a conference facility on the premises.

After boyhood railway interest was kindled by a clockwork locomotive, a three-rail and then a two-rail layout, there was a gap of some years when other priorities had to be observed. But in 1996, David decided to start the hobby again. At the farm, space is not restricted so the choice of 0 gauge allowed, arguably, a greater feel of authenticity and substance than smaller scales.

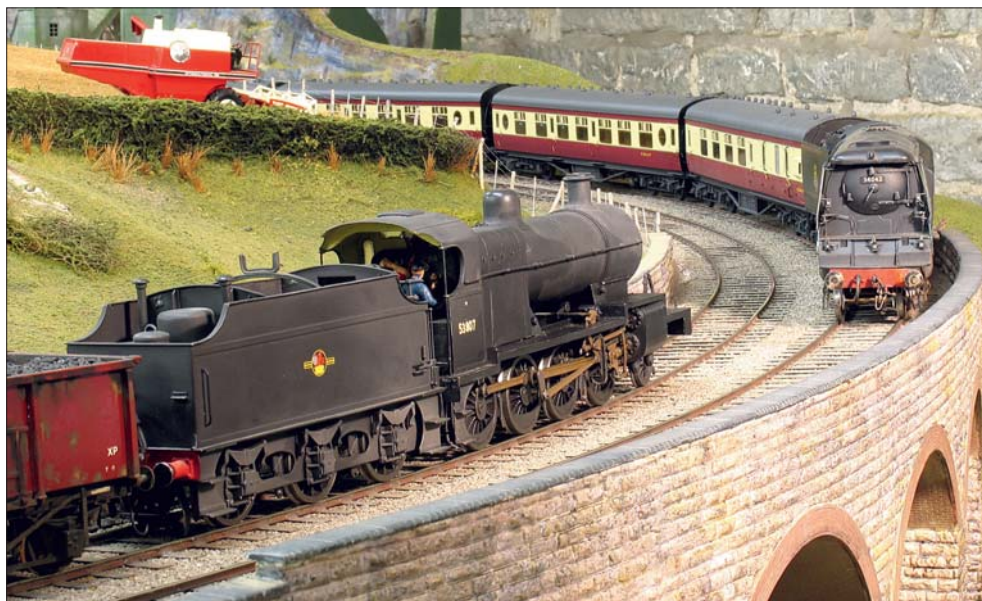
Right: Nethercreech Junction station seen from the operator's position. On the wall is one of the display boards outlining the history of the layout.

Below: Standard 5 and LMS 4F round the curves towards Nethercreech Junction.



The upper floor of the barn has the large conference room, but next to that is the 43' x 20' room that houses *Nethercreech Junction*. The railway room is well appointed. The first visual impression is that of the mellow stone walls that provide a background for railway pictures and boards that display photographs and printed sheets outlining the history of the layout. Good overall fluorescent lighting and heating radiators ensure civilised creature comforts throughout the year. There is also a fridge that is used for the conference room and it happens that the railway room is the most convenient place for it! It does, however, keep the odd can of beer cool.

The split-level floor supports a well-built wooden framework upon which the baseboard sits between waist and chest height. The viewing side is fully finished with a green, baseboard-to-floor curtain. At the back of the central main operating area, behind a screen



Above: 'West Country' Class 4-6-2 No.34042 *Dorchester* passes 7F No.53807 on the viaduct. The harvester works the field and in the background, the quarry is just visible.

Left: erstwhile large-boilered 7F No.53807 – the last of the fleet to remain in traffic – hauls a coal train across the viaduct against a rugged backdrop.

Below: perhaps the star of the show on an S&D layout – the *Pines Express* with a rake of BR Mk.Is. In charge is 9F 2-10-0 No.92204, the 'guinea pig' of the class's 1960 suitability test. Photographs by Jolyon Sargent.

operation and its own wiring is far simpler. The wiring underneath now looks complicated but the layout can be used with DCC or DC analogue. The main ZTC controller, mounted away from public view, is supplemented by remote hand-held units which send their commands to TCS decoders in the locomotives. After some experimentation with different makes, TCS is the preferred brand of decoder. The turnouts are still operated electrically in the conventional DC way; no material benefit



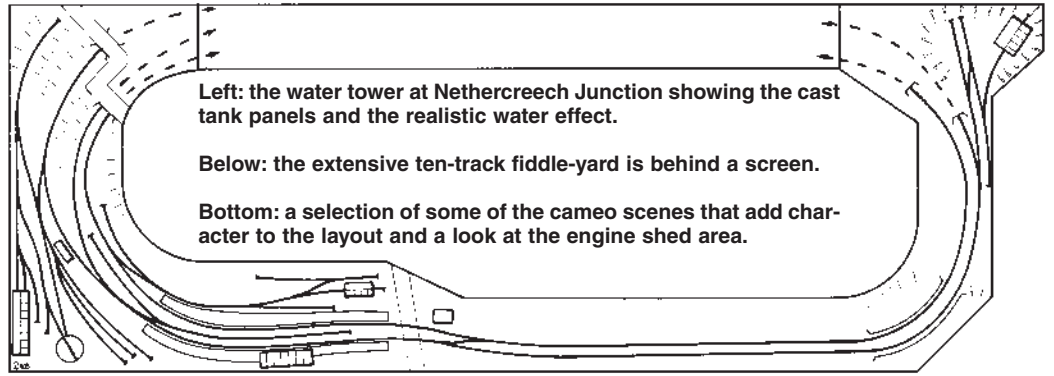
is the extensive ten-track fiddle-yard through which the main line also passes.

The framework is 3" x 1" timber with a 9mm plywood top. At some places the structure is reduced to 2" x 2" legs where the baseboard level is lower than the main track, for instance by the viaduct.

The track was laid onto a bed of cork but in hindsight, it would have been better to use a foam underlay to improve noise reduction. It was stuck down with PVA glue and was completed, as time allowed, in about two years. The track is mainly Marcway with some Peco Streamline. Some specially-built turnouts, such as a staggered three-way, provide features special to this layout.

Originally the layout was wired for conventional DC power. Isolated sections were installed to store locos when not in use. This wiring remains in place, but subsequently a full digital command control (DCC) system from Glastonbury-based ZTC has been installed. DCC permits much more flexible





would be gained with this layout by converting them to DCC. As time passes, more possibilities with DCC at *Nethercreech Junction* might develop. The absence of signals will be obvious, but these will be added when the scenic work is complete. This is to avoid accidental damage occurring to the signals during construction of the scenery.

Auto-uncoupling is a feature that David has pursued. To this end, he has experimented with B&B and Sprat & Winkle couplings and come up with a modification to the B&B that



Right: a passenger's eye view of the platforms at Nethercreech Junction.

Below right and bottom: 3F No.43194 on the turntable by the engine shed. The quarry blends in well against the stone walls of the barn. 4F No.44472 emerges from the bridge as the track curves around to the station approach.

suits his purposes. The modification involved replacing the etched dropper (wound with fine iron wire) with a solid length of shaped florist (iron) wire to increase the magnetic effect. This enables the coupling loops to rise high enough to allow easy separation when shunting over magnetic uncouplers.

At the beginning of a project such as this, a judgement has to be made about what degree of authenticity and faithful copying of a prototype is acceptable. *Nethercreech Junction* takes on the flavour of a part the S&D without slavishly sticking to extreme detail. The decision was made to concentrate the effort on building the layout and acquiring rolling stock as the opportunities arose.

This layout is not just for display. The era in which it is set and the busy nature of the S&D allow great possibilities for using a variety of rolling stock and an active timetable. A timetable is now being developed to represent what happened in reality. *Nethercreech Junction* is a balance of representative landscape through which a railway runs, and some well-detailed railway construction with incidental scenery. To this end, considerable emphasis has been placed on the quality and content of the scenic work. Much of the con-



tour work is achieved with just cardboard, paper, glue and paint. 'Blue Peter-style' technology is highly effective, simple and cheap. The

profiles of the hills are made from cardboard. This is covered in chicken wire and then newspaper, stuck down with PVA glue. The surface is finished with textured ceiling/wall paint and then painted. Scatter is added in places to make the texture more naturally uneven. The final colour is not the lurid green sometimes seen on layouts, but a more realistic, degraded colour effect created by adding earth browns stippled with a brush.

The majority of the buildings have been constructed by friend Bob Alderman. Plasticard is the main structural material, but detail parts are proprietary products or specially-made resin castings. The external quoins of, for instance, the water tower are readily available in the shops. The tank castings for the tower, however, were specially cast. A very good water effect in the tank was made using some clear plastic. It was painted with a dark blue/black on the underside. The top side was then coated with a layer of PVA which was slightly scuffed up to create a natural ripple appearance. It now has a good effect of depth and darkness.

The goods shed was constructed with an inner and an outer plasticard skin to give the effect of a thick stone wall. The skins are separated by, and glued to plasticard spacers. In a similar way to the other buildings, the walls were coated in textured paint which, when dry, was coated with a base emulsion and acrylic paint for the final colour and weathering. The roofs were finished with paper 'slates'.

There is a very impressive quarry complex that was built off-site and brought in complete. It transports rock along a conveyor belt driven





by a car windscreen wiper motor. The station building is based on Evercreech Junction on the S&D in Somerset, but there is considerable work to do before it is completed. The basic station has been made very usable by adding some small scenic items such as cars of the correct vintage. It will all be finished one day! The platforms, constructed of wooden sides with a plasticard top, are in place and some features have been added. The tops have been scored at the platform edges to represent paving slabs. The water tower is a recent addition and has now been set into the landscape in its correct location beyond the level crossing. This required some baseboard surgery on an area of land adjacent to the station, but the result is well worth the effort. The goods shed is also that of Evercreech and the engine shed is modelled on Radstock; this is an accurate, detailed replica. A close look at the layout will reveal several cameo scenes that will no doubt increase in number as time passes.

Set in the late 1950s and early 1960s, *Nethercreech Junction* would have had a huge

Above: the S&D's finest late-steam power, BR Standard classes 5 4-6-0 and 9F 2-10-0 meet at Nethercreech Junction. Period road vehicles help set the time and a place.

Below: closeup of the shed, with Johnson 1P 0-4-4T No.58051 in residence.

diversity of stock passing through. The acquisition of stock started at the beginning of the whole project and will continue for a long time yet. Loco stable companions include a 3F 'Bulldog', 7F 2-8-0, 'Jinty', Standard 5, Standard 4, 4F 0-6-0, 2P and some visiting locos such as a 'West Country' and a 9F. Coaches are mostly Westdale kits; there are other makes of ready-built examples that have been bought at shows, some of them for little more than the cost of a kit.

There are impressive rakes of Bulleid, Maunsell and suburban coaches. Goods wagons include show purchases and kit-built items. A great deal of money can be spent on rolling stock, but careful selection of perhaps

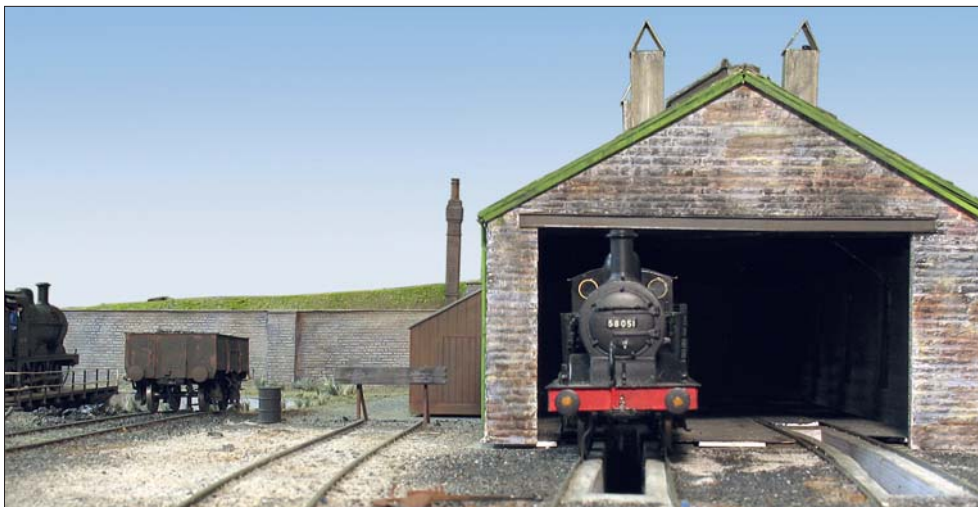
unbuilt kits or used items at model shows can save large amounts without sacrificing quality.

The gauge 0 fraternity is quite close-knit. One or two of the locomotives or parts thereof are made by Phil Beckey, Chairman of the Yeovil group of the Gauge 0 Guild. Phil's garden S&D layout *Tucking Mill* featured in the March 2005 issue. Phil visits with his locomotives too.

The current location of *Nethercreech Junction* is actually its second home. It was originally in the room next door which was subsequently converted into the conference room. In 2003, the layout was cut into six pieces and moved. It would not go through the relatively small connecting door, so the sections were manhandled around the barn to the larger door at the far end. This move, however, presented the opportunity to lengthen the layout by 10' – a good trade-off! The conference room was then equipped and another business venture was under way.

Occasionally the layout is open to the public for fund-raising events. There are a number of display boards around the walls of the room outlining the history of the layout and photographs showing how it has progressed over the years.

What about the name *Nethercreech Junction*? In 1958, the Western Region took control of the S&D which led to its eventual run-down and closure. A number of stations, including Evercreech Junction were repainted in Western Region colours, replacing the Southern Region scheme. This layout retains the earlier livery partly, as David says, as a protest at the way the line was treated by the Western Region. But *Nethercreech Junction* has an alter ego. The layout could easily be based on a fictitious location on 'The Withered Arm' – the Southern Region west of Exeter. *Nethercreech Junction* seems to fit both situations perfectly.



Coachbuilding in SM-32

I.P. Engineering kits, built for the new Pecorama layout

ROBERT ILES recounts the process by which some outdoor passenger vehicles were produced.

The outdoor SM-32 layout at Pecorama is again in fine condition after its overhaul and ready to run for many more seasons; you might have read about it in the August RAILWAY MODELLER.

The previous rolling stock consisted of Tenmille wagons and some re-gauged LGB coaches. The coaches were around twenty years old and therefore due for replacement.

The motive power is a Roundhouse Engineering live steam *Jack*, so the decision was made to build three compatible I.P. Engineering coach kits. The kits arrived just a few days after they were ordered, sealed in plastic. The wheelsets are available for either 32mm or 45mm gauge track, which the customer specifies when ordering.

The task of building the kits fell to Andrew Beard who runs the Pecorama exhibition.

In accordance with the comprehensive instructions supplied, some preparatory work was done. The machining tags were removed with a sharp knife. We used fine glasspaper to remove any whiskers of wood from the side and end panels, but the suggested dry foam-backed scourer would be equally effective. Around the windows, an emery board was the perfect tool for the job. The whitmetal parts had similar treatment with a fine file. This initial work would help to ensure the best finish when the kit is painted.

The next task was to mark the positions of the solebars on the underside of the floor. A centre line was drawn, either side of which two more lines, 48mm apart, were drawn. Two lines at 90° to the centre line, 50mm from the ends, were drawn crossing the centre line to mark the position of the pivot points for the bogies. The exploded diagrams in the instructions show this clearly. For the four-wheel coaches, the modeller decides the wheelbase required and fits the axleboxes accordingly.

The first items to glue in place were the seats. To prepare for this, a coach side was used as a position guide. The side was placed to overhang the ends of the floor by an equal amount and the position of the compartment dividers marked on the upper face of the floor. On the inner face of the end panels, a line 36mm from the bottom was drawn to mark the top edge of the seat panel. On both sides of the compartment dividers, a line was drawn 33mm from the bottom.

PVA adhesive was used for all wood-to-wood joints. The seat panels were glued to both the end and the divider panels, making sure the assembly was square. At each stage of assembly, plenty of time was allowed for the glue to dry thoroughly.

The coach floor, dividers and coach ends



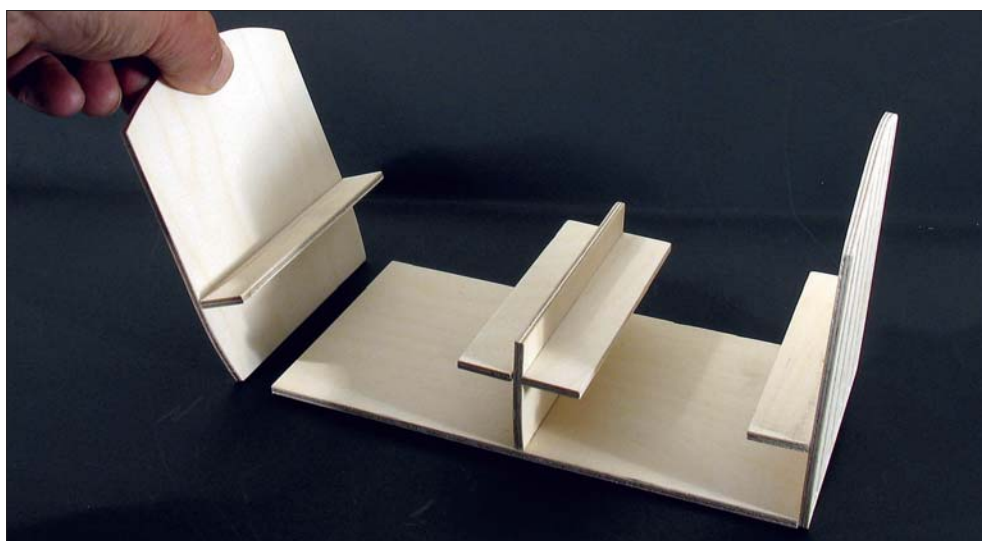
Above: this is what you get in the kit, plus the wheelsets to the gauge you specify at the time of ordering.

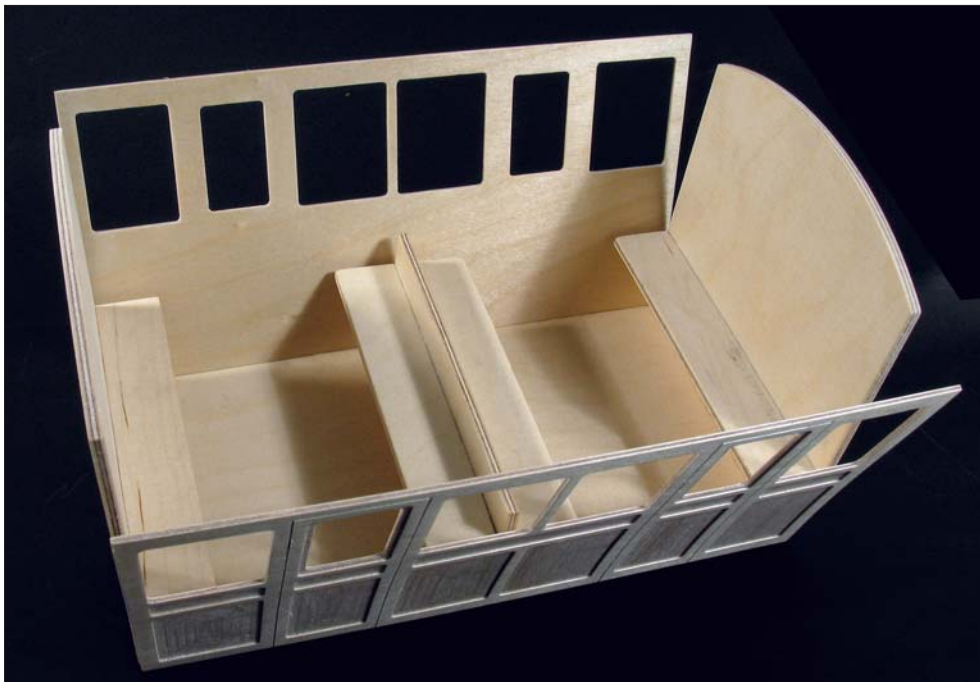
Right: the tumblehome, at the bottom of the sides, is clearly visible as is the drawn centre line on the partly completed coach.

Bottom: the seats and ends go into place.

were then glued together ensuring that the ends and dividers were perpendicular to the floor; the exploded diagram provided a guide.

To make an accurate fit between the floor and the sides, the edge of the floor was slightly chamfered to match the angle of the tumblehome (the lower curve) of the sides and





Left: the seats, ends and sides in place. The glue is allowed to set thoroughly before the sides are bent, glued and clamped up to their full height.

Middle: the edges of the doors are defined by narrow grooves instead of the drawn-on lines suggested.

Below: the first stage of painting. The raised panel frames are easier to paint when the red panels are painted.

Bottom: an assortment of available clamps was used to maintain equal pressure along the top of the sides when the strengthening strips were attached.

Photographs by Jolyon Sargent.

hand side of the doors to accept door handles which would be fitted later. A pin-chuck and 1.5mm drill were used.

The solebars were glued to the floor so that their inner faces aligned with the drawn lines. Before this, a 3mm hole was drilled centrally in each buffer beam to accept the buffer/coupling. The buffer beams were glued in place to the ends of the solebars.

It was now necessary to start painting. The interior was stained with Antique Pine wood-stain and the exterior undercoated with a pale emulsion. A top coat was applied to resemble Talylyn coaches: Humbrol 60 and 119. To bring out the deep colours, the bodywork was varnished with Humbrol Glosscote. The glazing was cut to fit and glued in place using impact adhesive.



partition. The instructions suggested the door outlines should be drawn on, but it was decided to cut narrow grooves to simulate the gap around each door. To do this, two cuts were made in the outer layer of the plywood 1/2mm apart, using a craft knife and a set square. The waste was removed. The bottoms of the sides were glued first and allowed to dry. The sides could then be bent to comply with the shape of the end panels. Clamps and blocks of wood were used to maintain pressure on the sides until the glue dried.

Strengthening strips were glued to the top of the side panels and secured with clamps. They protruded slightly above the top of the panel so that they could be sanded down to match the roof contour. To represent door hinges, small pieces of round plastic strip were attached with superglue to the left-hand side door grooves. Holes were drilled in the right-



Right: the strengthening strip at the top of the sides is glued so that the top edge can be sanded down to conform to the curvature of the roof.

Below right: a jig, made of two strips of wood and a board, was used to raise the sides of the inverted coach. Plenty of weight was required to maintain downward pressure whilst the glue dried.

Below: the passengers were installed before the roof was attached.

Lower right: views of the four-wheel and bogie coaches.

Bottom: the two four-wheel coaches coupled.

Before the roof was fitted, the coach interior was fitted with passengers. A jig was made, as recommended in the instructions, to help attach the roof. To hold the coach body in place and provide enough pressure to curve the roof, the instructions suggest using a book or similar. We needed considerably more weight than this to do the job, several kilograms in fact. The roof was glued and left overnight to dry fully. Holes were drilled in the roof to take the ventilators.

The rain strips, buffers, coupling hooks, door handles and ventilators were assembled and fitted as the instructions recommended. The buffer casting needed a $\frac{1}{16}$ " hole to take the shaped brass wire hook. This was secured with a drop of superglue. The assembled buffer was placed bolt-first in a block of wood to allow easy painting.

The footboards were next. These were glued



Metalcote which can be polished when dry.

There were many separate stages to assembling the kits but they were straightforward to build. Plenty of time was allowed for glued parts to set and paint to dry.

The coaches, hauled by *Jack*, now run regularly at the Pecorama exhibition.



into position and when set, appropriate size holes were drilled for the supplied brackets which were attached using superglue. The chassis and the bogies were painted matt black.

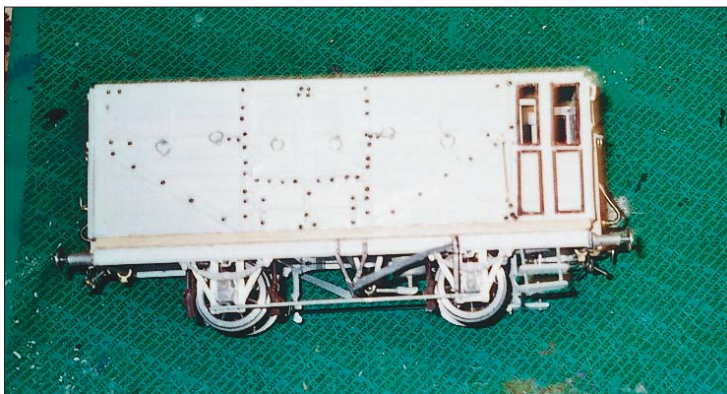
Kits for four-wheel and bogie coaches had to be made. The four-wheel coach bearings were pressed into the axleboxes before they were glued in place with epoxy adhesive. It was essential to fit the wheelsets at this stage too. The bogies were soldered separately using low-melting-point solder and flux. The bogie pivot blocks were glued in position on the coach underside using epoxy adhesive. The bogies were secured with self-tapping screws and the door handles painted with Humbrol



LNWR prize cattle van

A rare beast 2

This pre-grouping livestock vehicle has been scratchbuilt in 7mm scale by **D.T. DOWLING**.



In November 1954, I spotted a sparkling, ex-Wolverton, vehicle of an antique style. Together with two horse-boxes, it was waiting to transport the Regent Street's Christmas Lights - all of 28 miles! It was so unusual that I expended some of my precious twelve shots in the Box Brownie!

It haunted me. In 1973 (I never rush things) I approached the LMS Society and their Non-passenger Coaching Stock expert, the late 'Smokey' Bourne was a mine of information.

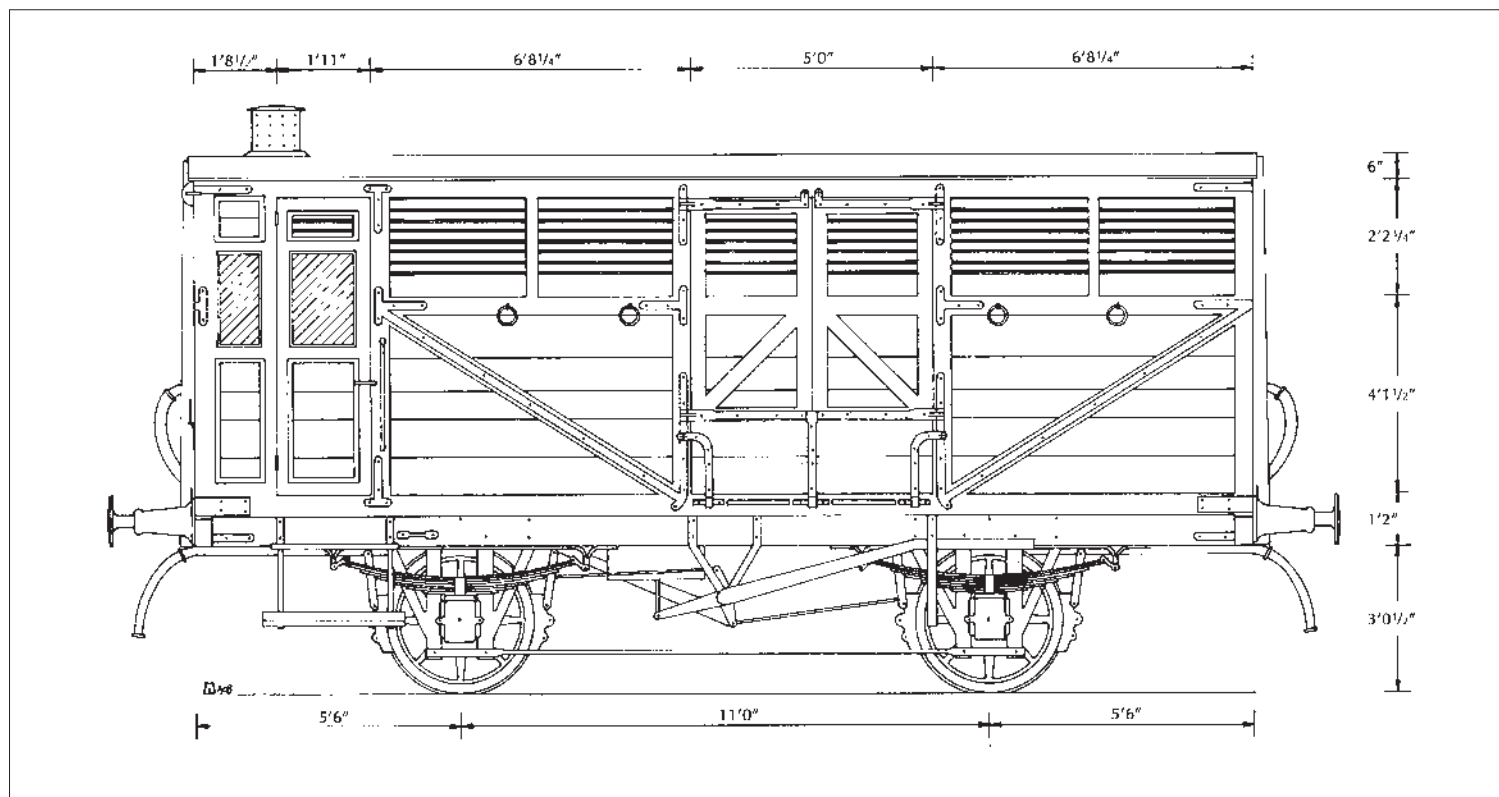
He identified it as one of a small batch of Prize Cattle Vans produced by the LNWR in 1880 and kindly provided a drawing.

This prompted a couple of efforts at scratchbuilding in 4mm scale and a brief article entitled *A Rare Beast* was published in the December 1974 issue of *Model Railways*. Hence the '2' in the sub-title above for, having changed scales to 7mm, I felt that I had to have another go.

The materials are a mixture of liqueur

chocolate-box wood (many had to be consumed) Slater's wheels and Plastikard, Premier screw couplings, MSC oil pot top, Peco track pins, glues and paints, plus bits and bobs patiently provided by Hendford Halt. Tools are the normal range of scalpels, files, pliers, tweezers and jeweller's screwdrivers.

I started by marking out and cutting the sides in plasticard, scribing the necessary planking and vents. Over these went a jig-saw of Plastruct 0.125" strip for framing, then 0.060"





strip for the 'iron' banding. Then holes were drilled to markings for the bolt heads. Cut down Peco track pins provided these. You'll need over 160! The photos show this stage.

The 'Compartment for Man' sections were more tricky, with fiddly cutting out and scribing. Fine plastic rod was used for the beading. A bench seat was added to the relevant end and, in addition to the compartment partition, two more were created, to assist strengthening and to avoid roof line dip. Before assembling sides and ends, it was checked that as many 'bolts' as possible were in place. Holes were drilled for the tethering rings, the door handles and the access handrails. The items were added after painting, but hole-drilling is easier, prior to assembly.

The drawings don't show detail for the chassis and, as always, I've gone for the impression and not counted the rivets! Wood provides the base/floor, with Plastruct/Plastikard bracing, buffer beams and weights from an old Cooper Craft kit, vacuum cylinder courtesy of the Gauge 0 Guild Executors' Stand, Premier Components screw couplings (excellent), Slater's spoked wheels and LNWR mountings

Heading photos: unpainted, unglazed and unroofed model, showing 'bolts', tethering rings and beading. Other side completed, square on.

Above left and right: the archive Brownie prints, taken in 1954.

Below: completed model. Door window modelled part open, three-quarter view.

Photographs by the author.

The drawing, reproduced to 7mm scale, is based on the original by T.W. Bourne, supplied by the author and redrawn for publication by Andrew Beard.

from ABS. I delayed fitting brakes/pipes etc. until the van was more advanced. The working buffers replicate the drawing, which shows goods-vehicle mountings, with passenger-vehicle heads.

Once the van was complete, I sprayed the body in dark LMS maroon and hand-painted beneath and within. The roof was then added, followed by passenger-stock lettering and a coat of satin varnish. I've yet to identify 'Permitted Loading' and 'Tare' details, so they will have to follow, together with WB 11'0". Some 'Underframe Dirt' touching, a light spray of 'Roof Dirt' and a tail lamp round it off.

So there she is. Ideal for leaving in a bay, or

attaching to a small cross-country set. She would not have appeared in a parcel or goods train, except for empty positioning.

Further historical details

The drawing and photographs show the post-1912 handbrake system. Some vehicles had horizontal vacuum cylinders, but the drawings and photographs show a vertical one.

Early LMS livery is uncertain. The vans were probably not repainted until the early 1930s. After 1932 they were renumbered in the Passenger list, painted in unlined LMS maroon with yellow coach-style insignia, grey roofs and black undergear.

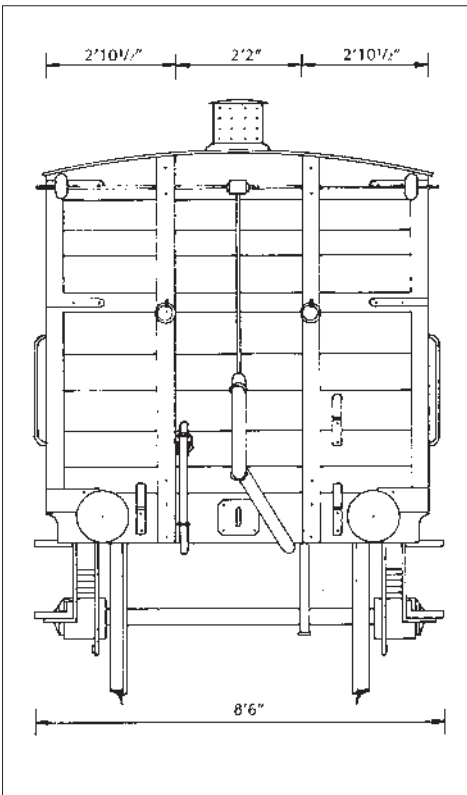
LNWR numbers were 49476-7, 49607, 49616, 49618, 49626, 67397-406, 72329-43.

For first LMS numbers add 200,000 to the above. Survivors for the 1932 renumbering were 267397, 267400, 272329, 272322, 249476, 249477, 349607, 249616, 249618, 249626.

Second LMS numbers were 43960-9.

BR survivors were M43966 and 8. The latter was the one viewed. Both were renovated and running in 1954. Both had vertical vacuum cylinders.

When the vehicle was viewed it could be seen that the drover's compartment was painted out in a yellowing cream with brown fittings and a padded bench seat. Lighting was by an oil lamp in the ceiling.



Caer Faban

scenic modelling in N

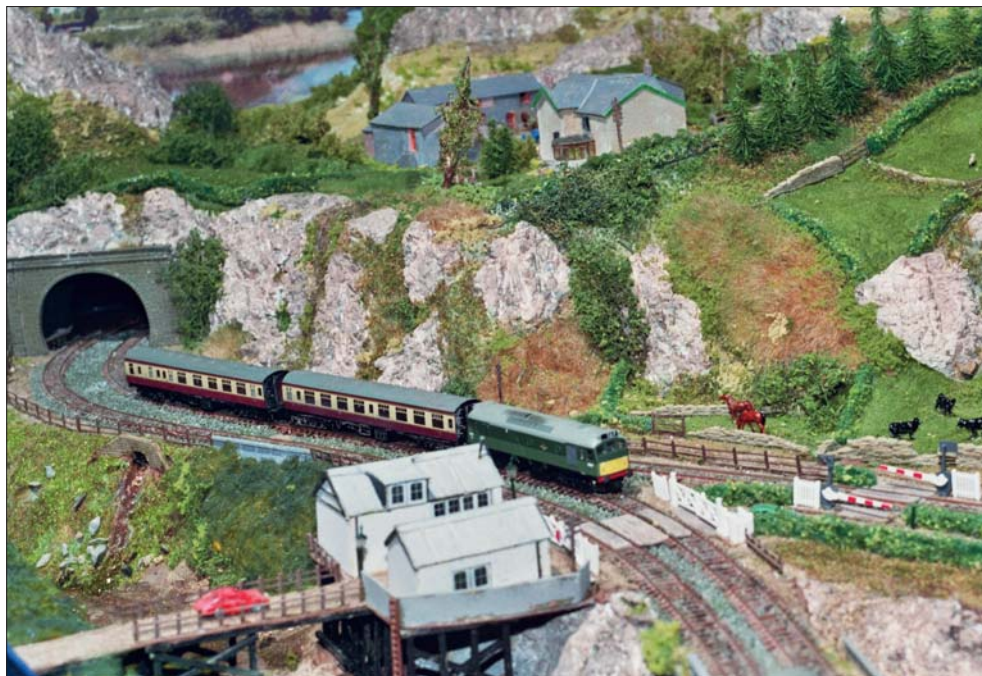
JOHN PARKINSON presents another North Wales-based scene.

Believe it or not, this is my eighth small N gauge portable layout, the third in my North Wales series after *Dyffryn* (RM Dec 2004), and *Clogwyn* (RM Nov 2005); the others being American outline, see CM each August issue 2000-2004, thus marking another chapter in a modelling 'career' spanning 15 years, 25 if you count my 00 phase, not to mention childhood dreams. I suppose many of you can clock up much more than that!

It's a hard life, but somebody has to do it. It's also a sad chapter in one respect, as my mother died before she could see it finished, and I would like to dedicate this article and the layout to her memory. And yes, Ma, I did give the trees more dark shading compared to those on *Clogwyn*, as you suggested.

Though some of you may think my layout tally is a bit excessive, it can be explained by my earlier isolation due to location, job and family, followed by the relatively successful small self-contained format. I was never happy with my attempts at sectional track-laying.

I never intended to do this many, but I must now admit to feeling a certain satisfaction in having created these mini-scenes. I have become a dedicated scenic modeller partly through being fortunate to have the time to do it, enforced early retirement minus the pension until recently, partly as a tribute to our late handicapped foster daughter Lisa. She was like our own child because she had no contact with her natural family, and her early death convinced me that I should use my time

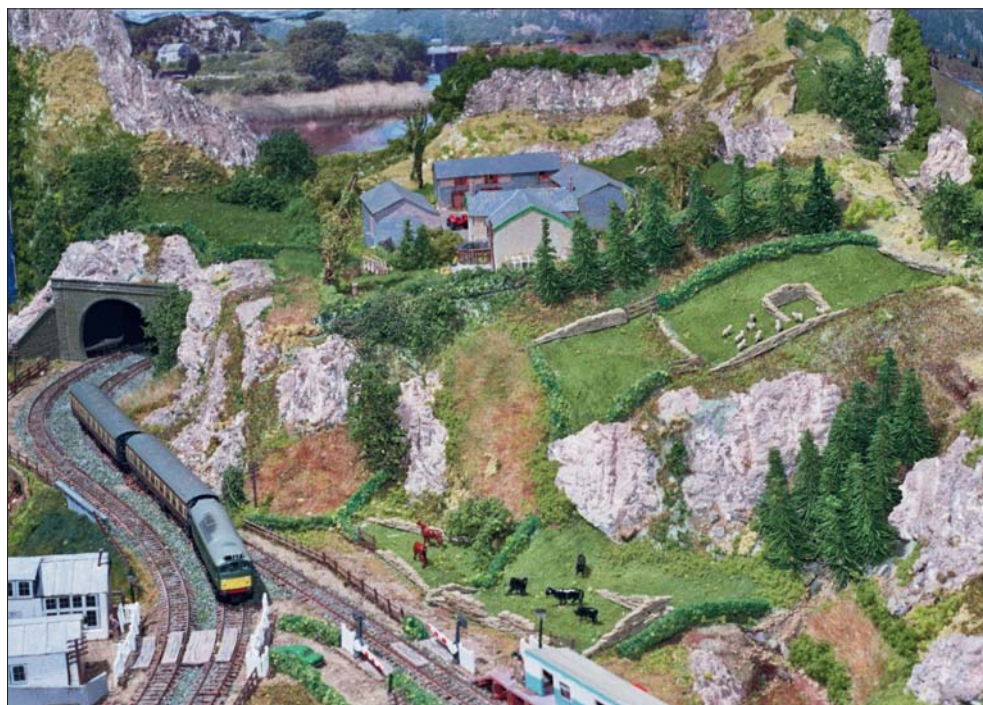


positively and create what she never could do or even see, as a kind of memorial, but also because of my desire to re-create nature in model form, as I love scenery and want to 'capture' slices of it on my layout boards.

Of course, limitations of space mean that I will soon have to find homes for one or more of these if I'm to continue (I can't bear the thought of breaking them up) and there is a

limit to how long even I want to continue spending up to 500 hours of each year building one of these 3-D working dioramas. From now on, I may spend more time going out to appreciate the beauty of the real thing, visiting family, and writing or even painting like my mother did, but of course still modelling in moderation and exhibiting, where I can meet people and chat about common interests.

I'm sometimes asked 'how do you do it?' It's really simple; I spend lots of time and exert lots of patience; it's not because I have any really special skills, I've just had a lot of practice, and I'm determined and focussed on what I want to achieve. But I'm very lucky to



Above: the Class 25 with two coaches approaching the crossing near the toll-bridge.

Left: a general view of the front part of the layout looking to the left.

Top right: an early stage of baseboard construction, showing the frame, trackbed and track.

Top far right: the beginnings of the hillside section.

Above right: the card lattice forming the scenery contours with some PVA-impregnated old sheet in place over it. The farm scene is in position, having been completed earlier.

Above far right: the hard shell with beginnings of scenery.

Photographs by the author.



have my health and the time to do it; so many other people do not, and I try to console or help some of these people wherever and whenever I can. But in the last analysis life cannot all be modelling – can it?

Inspiration

The layout is named after a farm in the Conwy Valley near Llanrwst, which I decided straight away was a modelling subject when we visited the current owners and friends John and Margaret Begley after they moved there three years ago. They love scenery, both real and recreated, though trains they can take or leave, and wanted me to do it.

After the layout has been exhibited for a while, the farm section will be given to them as a present. For this reason, it is on a separate piece of plywood set in a specially constructed hillside, and it will be replaced in due course by another section of similar size, though not necessarily a reproduction of the farm, as I spent nearly three months ‘working’ on it, albeit intermittently. For once I was trying to get a close representation of a real place. When I sent some photos of this section to the Begleys, a friend thought they’d had a helicopter over taking aerial shots of the place! As far as we know, the name *Caer Faban* means Maban’s fort (the F being a mutation following the feminine noun for the linguists among you), so it would appear to go back a long way.

Because I usually make up a scene based on three constituent parts derived from real places, to exercise my poetic licence without

people making comments like ‘That bit isn’t like the real thing’, this scene also comprises elements of the estuary at Porthmadog, including digital images of the view of the mountains and sea from there for the background, and the toll-bridge at Penmaenpool, on the Mawddach estuary. The cottage is based on one next to the harbour at Abersoch, but as for the general composition and setting, that is just loosely taken from photos of the Conwy Valley and Snowdonia, no particular place.

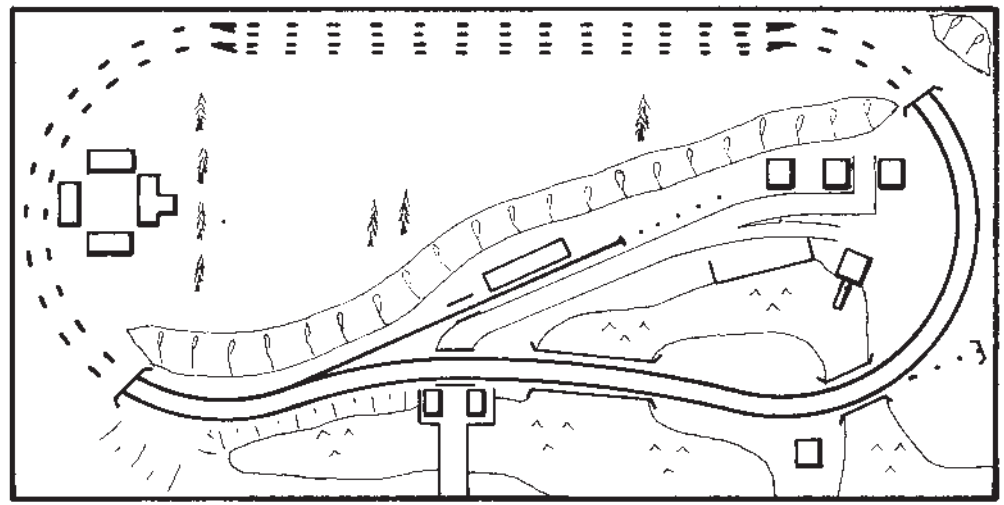
Baseboard and track

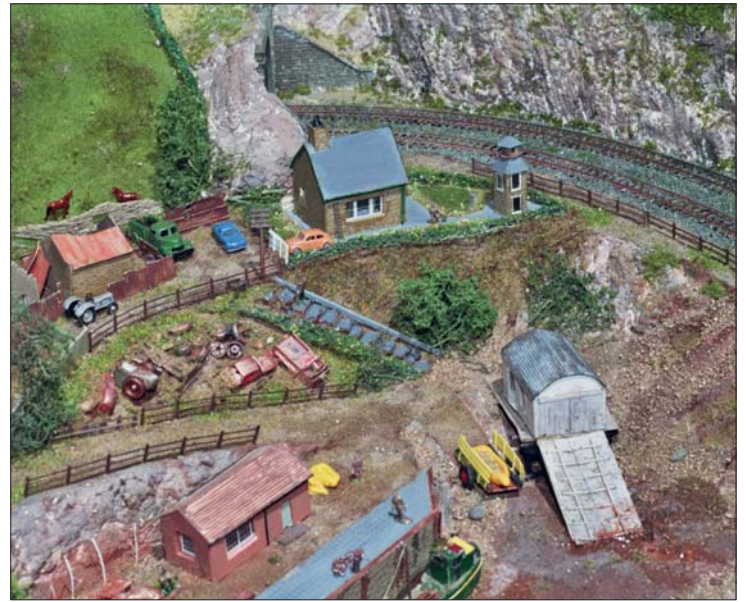
The baseboard is made up as usual from a 5' x 2'6" frame of 2" x 1" wood with base and sides of hardboard. The trackbed is also essen-

tially on hardboard, tacked and glued to the edges and cross-pieces, and the main hillside is built up with hardboard on risers, with a hole to allow the farm section to be pushed out, and a gap at the side to allow track access. That and the rest of the hillside conceals the two passing loops at the back, one for each direction, to allow a change of train when one has ‘departed’ to distant places.

That’s what you younger enthusiasts all want to see, I know, sometimes peering round the back, as if that was more interesting and exciting than the viewing section. You may be right!

For the sharp-eyed viewer, my story is that the disused track leading off on the right did of course once connect with the obviously





Above: the farm is situated above the centre of the layout.

Above right: the Class 20 pulling wagons over the estuary bridge.

Top right: a closer look at the cottage, dove-cote and field of scrap.

Opposite page, top: a close-up of the farm.

Opposite page, bottom: the quayside and harbour, seen at low tide.

still working line on the background scene. Many will recognize that the photo is of the Cob and you have to pretend that it now runs away to the right, a perhaps less than plausible explanation of why it was not practical for me to make it operable in the space available!

As before, there is a detachable pelmet with inbuilt fluorescent strip to complete the front and give illumination.

The track and points are all Peco this time, kindly given to me by John Gunton, friend and optician.

Structures

I usually mention these first because along with other small items, that's what I usually make first for an intended scene, although this

is not a rigid plan of action, and some are in any case rejected or changed in the final stages. Perhaps I should briefly explain my general construction strategy at this point, which, on discussing with Bill Gates of *Alameda* fame (CM Dec 98) I realised I hadn't previously explained or got clear in my own mind. My layouts do 'evolve' to a certain extent, but only after I've fixed on a subject and made a rough plan based loosely on two or three scenes. Then I spend ages sitting at my table making buildings and structures, boats, stone walls, bridges etc, because they take a long time.

Next I physically construct the baseboard, also laying the trackbed and other scenic levels, and then the track, which I wire up and test. After this stage comes the scenic backdrop with photos, pictures or painted elements, scenic contours, i.e. card lattice, old sheet and PVA, basic painting of ground, adding fields and rocks. Finally comes the critical positioning of buildings and structures, setting them in, detailing small areas, texturing and blending everything into a composite whole. Does that make sense? Of course, I have to be flexible, if only because sometimes things go wrong, or I don't like what I've done and have to re-do it.

The shells of buildings are mainly made with mount board, faced where necessary with Slater's Plastikard, but I also use cereal packet card for some roofs and smaller sections. Windows are mainly Downesglaze, but also ordinary thin clear plastic with Slater's microstrip.

The stone walls are small pieces of cereal packet card cut up and stuck in layers, very time-consuming!

The boats are again mainly cereal packet card where necessary on mount board formers, all scratch built from photos. The dinghies are from Milliput. The dove-cote is also from cereal packet card and Plastikard, from a photo in the *Shire Scenes* book on Dovecotes, adapted to North Wales stone.

The bridge supports are made with match wood, painted black, and the main bridge sides are mount board with added Microstrip painted grey.

Scenery

As I indicated earlier, not rocket science, and made easier by the availability of a wide range of scenic materials, mainly involving lots of time and patience. I can't stress too much how important it is to finish off the edges of things and make everything match. That is probably a

large part of it. Having said that, you'll probably now find several bits of mine which haven't been properly finished if you look closely!

It was particularly difficult round the detachable section, and there is an unavoidable gap there almost impossible to conceal, but in the circumstances I hope you'll be charitable.

The scenery contours are card lattice covered in pieces of PVA impregnated sheet. The rocks are Sculptamold, dolloped on, shaped and painted. That answers the two questions I'm most often asked at shows.

Scenery detailing involves painting. I use mainly tester pots, small acrylic pots and an ordinary child's water colour palette, but also some spray paint, mainly for trees and rough grass.

Texturing is with Woodland Scenics turf and foliage but also other scatters here and there.

The pine trees are out-of-the-box Heki, the deciduous ones are made up from a box of Seamoss Forest, sprayed with paint, then Spraymount adhesive, dipped in foliage, then sprayed again, some bits of darker, some lighter green.

The water is Deluxe Materials Scenic Water, which you heat up in the tub, and pour on. For the waterfall, I just waited till it was setting and dribbled it on.

The field grass is as usual of the dyed lint variety, see Barry Norman's *Landscape Modelling*.

Whilst making my last layout *Clogwyn*, I discovered the usefulness of brown frame sealant to make mud. I promised in that article I would make more here, and I have. You just squirt it on, wet and brush it, and leave it to set with little puddles and channels. You can soak up excess water to speed this process, using kitchen roll or the like. I have now found that frame sealant is also very handy for many other things, like fixing the thick card on to the backdrop panel, setting buildings or structures in place, making roads, filling gaps etc.

Rolling stock

The old re-constructed DMU broke down last year, so I'm now waiting for the new Bachmann-Farish model to come out. In the meantime, I'm still using the Class 25 and the two Class 20s, with a variety of wagons and mainly maroon coaches.

Although I still have and cherish the 'Deltic', it's currently being serviced and does not appear in my photos, except in those showing construction stages. That's another way of saying I'm avoiding the critical comment by an exhibition visitor who pointed out that they never ran on the Conwy Valley Line!

Conclusion

In a sense, I started with some of the things I would otherwise have said here.

I just want to thank my family and friends for their help and support this last year, and hope they carry on in the way they are.

Special thanks to my wife Chris, my 'children' Jack, Nancy, Frances, Ruth and Bridget, friends Dave, Gerry and John and others for their input.



It means a lot to me also to know that there are people who value my appearance at shows, and I certainly feel honoured and privileged to be invited. I would like to mention especially the Southport and Tring Clubs, at whose shows *Caer Faban* is booked to appear this autumn, whose members always make me feel welcome, and with whom I still hope to be associated in the coming years, exhibiting or otherwise.

I do have a plan to make another small lay-

out at some stage, possibly of American prototype, but I'm not now sure of the time-scale. Although I have kept saying I was going to take a year out from modelling, this time I may really do it, as I have a bank of layouts, some of which have not been seen by many people. I am still open to invitations to shows, subject to distance and availability.

***Caer Faban* is expected to be present at the exhibitions at Southport on Sept 23 and 24 and Berkhamsted on Oct 7.**



Aldeburgh

The East Anglian branch terminus modelled in Z scale

*This small layout reproduces the prototype almost to scale, and was built by **BRIAN YALLOP**.*

Aldeburgh is the first prototype I have ever modelled and it proved more difficult than modelling a freelance layout. Living in East Anglia I wanted to do something with Great Eastern flavour and eventually decided on Aldeburgh, which is situated on the east coast between Lowestoft and Woodbridge. The terminus, at the end of a short branch line from Saxmundham, was built in 1859. It consisted of an interesting station building with a canopy over part of the platform, a goods shed, and loco shed with facilities for water and coaling. The signal box and water tower add to the interest.

Aldeburgh was never a busy terminus. In its heyday it could only manage eight passenger trains a day although in the early days the goods depot was quite busy with fish freight etc. As with many branch lines its days were numbered and the goods facility was closed in 1959 and the last passenger train ran in 1966. The whole area has now been converted into a housing estate.

Layout

As a branch terminus, the layout would obviously be an end-to-end (another first for me), with Aldeburgh at one end and at the other a three-road turntable replacing the line to Saxmundham. The turntable is long enough to hold a tender loco with four coaches.

With only a small amount of contraction I was able to get the station area into about 1.5 metres which met my overall target of two 1 metre boards end-to-end x 30 cm wide. Any contraction was carried out uniformly over the whole area to maintain the right perspective. On the viewing side are two hinged boards on which information and pho-



tographs of Aldeburgh station are displayed. These double as side panels when the layout is boxed for transit.

The baseboards are constructed with 1/2" chipboard covered with a thin layer of cork. All track and points are Märklin and are laid directly on the cork. As Märklin points have a rather ugly metal-covered extension on the side, this is removed with a sharp craft knife to be replaced later with a wire-in-tube method of operation. The tubes are fitted under the baseboard and the fine piano wire insert is bent each end to suit connection.

My preferred method of ballasting for Z gauge is to use textured paint of the 'general muck' variety. This is applied with brush or spatula and worked into the gaps between sleepers. Keep clear of the points though.

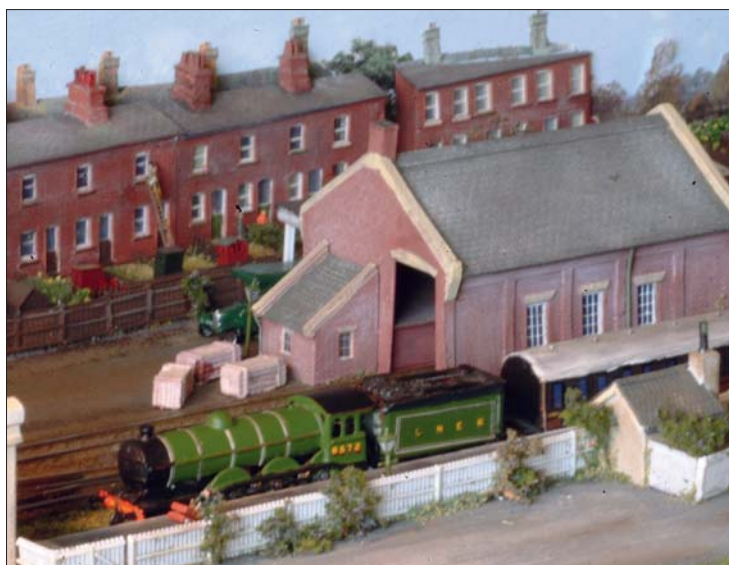
Once dry any excess can be scraped off especially on the inside edges of the track.

The buildings are all scratchbuilt using plasticard while the trees are mainly of wire and foliage construction.

Stock

Coaches and wagons are all scratchbuilt and were 'borrowed' from my other layouts. Three trains are used on the layout to replicate the typical running of the branch. The occasional special is headed by a B12 which is tender-powered. A local passenger train has a J15 in charge, and there is a mixed goods with another J15.

All locos are scratchbuilt in brass. The J15s are somewhat special as they, like the B12, are tender-powered, but the loco runs on a split



Left: the attractive station building.

Below far left: a B12 heads an up special past the goods shed at Aldeburgh.

Below left: the branch J15 about to take on water.

Right: a general view of the layout from the station end.

Lower right: J15 shunting the mixed goods and a glimpse of the engine shed.

Below: bird's eye view looking towards Thorpeness.

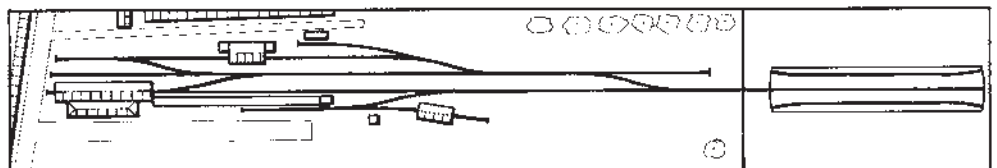
Photographs by Andrew Burnham.

frame chassis. The wheels are from the 2mm Scale Association and have the axles reduced in length. As the track profile is the same as for 2mm scale they navigate the points very well.

Postscript

I have been scratchbuilding in Z gauge now for about twenty years and have found it most rewarding. If you are a rivet-counter, don't try it. If you want to create a model railway which gives the right effect when viewed as a whole, then *do* try it. It's not that difficult but perhaps a bit more expensive.

Aldeburgh is booked to appear at the Maidstone and Sudbury shows this month. Details in Societies & Clubs.



Donegal

Part 2 – structures, stock and road vehicles

This evocation of the Irish 3' gauge in 4mm scale (part 1 last month) is described by G.A. GEE.

Now that I had a reasonable amount of rolling stock it was time, after 18 months' modelling, to decide which part of the County Donegal Railways I should actually model. I wanted to create a layout that had all the character of the real location. I knew I would not be able to work to museum quality due to lack of space and inexperience but at least people looking at photographs of the location should be able to see some resemblance in the model.

I had intended the layout to be of the terminus to fiddle-yard type, so my first thoughts were the CDRJC termini. Londonderry on the shore of Lough Foyle, with its connection over the dual-gauge Harbours Railway, would make a nice subject to model. However for my chosen period 1949-1959, this line was primarily steam-hauled and therefore the railcars I had made would be of little use. The Glenties branch closed in 1947 except for an occasional livestock train, then fully closed in 1952. Letterkenny had already been exhibited by Andy Cundick, who had also previously modelled Donegal and Castlefinn. Ballyshannon was constructed on a curved approach and an L shaped layout would be needed to model this correctly. Killybegs has been modelled in 5.5mm scale by Neil Tee but due to the expansion of the fish processing industry very little of the original station is still left standing. Of the larger intermediate stations Strabane and Stranolar are really club layout projects. This leaves Donegal, Castlefinn, Inver, Raphoe and Ballintra as the smaller intermediate stations for construction. Without question, Donegal is the most interesting of these locations. Until 1893, when the main line was extended to Killybegs, Donegal had been the terminus of the railway.

It had therefore been a station of moderate proportions having a locomotive shed and a turntable which was later used to turn the railcars using the Ballyshannon branch which

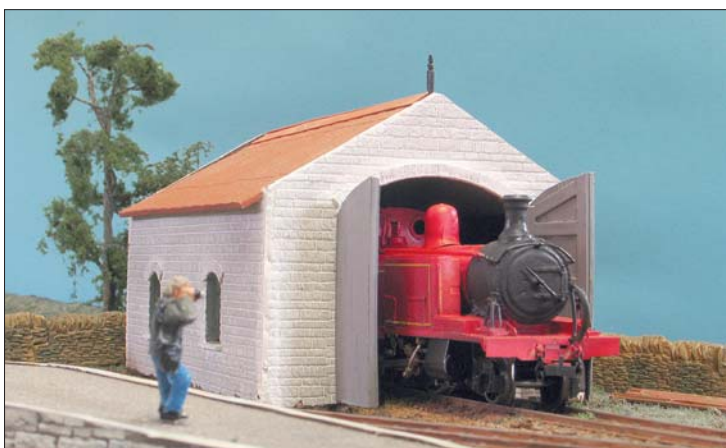


was opened in 1905. Donegal station has four platform faces, two main and two bays and also a large goods shed. A level crossing immediately to the west of the station makes an interesting modelling feature.

A model of Donegal had previously been exhibited by Andy Cundick and photographs of this layout are shown on the County Donegal Railway Restoration's website. In the 1960s George Hanan also built a 5mm model of Donegal, which is now a static exhibit at the Heritage Centre at the old station at Donegal.

Without actually visiting these locations it would be impossible to decide exactly what to model, therefore my wife and I decided to holiday in Ireland, using Donegal Town as our

main centre. I had joined the County Donegal Railway Restoration Limited, which is based at the Heritage Centre in Donegal station, and the Manager there, Mrs Ann Temple, said she would assist me wherever possible with this project. Having decided, due to its size, location and diversity of traffic, that Donegal station was the one that I was going to model, Mrs Temple allowed me to photograph and measure the station buildings and the locomotive shed which are all that is left on the Donegal station site. I was also able to obtain many copies of black and white photographs from the Heritage Centre's website of Donegal station, showing many aspects of the station that had not been previously published.



Left: outside the Station Master's house at Donegal, a porter tries to explain to irate passengers why the afternoon railcar service to Killybegs is one hour late.

Below far left: a keen railway photographer takes pictures of Class 5A 2-6-2T No.3 *Lydia* as she slowly emerges after undergoing minor repairs in the Donegal locomotive shed.

Below left: railcar No.20, a model of the last diesel railcar to be purchased by the CDR from Walker Brothers, leaves Donegal for Killybegs. The model is constructed from a Worsley Works etched brass body and powered by a Mick Chinery motor bogie.

Right: Great Northern Railway of Ireland Class RT bus waiting outside Donegal goods shed to transfer passengers from the train at Donegal to Portnoo. The EFE diecast metal bus body has been modified to fit on to a Faller Car System bus chassis.

Below: *Phoenix* is held up at the signal protecting the level crossing just before Donegal station as CDR's Leyland Class P bus passes en route to Killybegs.

Below far right: the crossing keeper's cottage at Drumark on the Donegal to Killybegs line, as restored to its original condition by Constance Ayers Denne. Mrs Denne's grandparents Agnes and Michael McDaid lived in this cottage and worked on the Railway.



I also took numerous photographs of George Hanan's layout and made approximate estimates of the size of several of the buildings on the model. In time this information would become priceless in my modelling of Donegal.

Buildings for Donegal

On my last layout, based on the Wisconsin Central, I modelled the main line running down the centre of a street, serving industries along it. Having first laid the track, I then had great difficulties in purchasing and then kit-bashing buildings that would fit into the spaces that were left between the tracks on the baseboard. As the buildings for Donegal had to be near-perfect replicas of the actual buildings, the obvious conclusion was that if I was to avoid the problems I had had with the Wisconsin Central layout, the buildings would have to be made first. The track plan would then be compressed to fit the available size of the baseboard.

I have previously mentioned that at the

Macclesfield exhibition I met three experienced modellers who helped me with this layout. Two of these I have already mentioned, the third needs little introduction to readers of the magazine, for he is a legend when it comes to articles on scale building construction. It is of course, Ken Ball. Ken was promoting his book *Modelling Buildings the Easy Way* and I strongly recommend this book to you. Ken took time to explain to me the importance of first having a drawing from which to work; using three layers of card or plastic sheet held together by double-sided tape to stop distortion of the walls; and how to add those little details that makes your buildings unique. Modelling Donegal would require many buildings. These are the main station building with canopy, station master's house, goods shed with platform, locomotive shed, water tower, diesel fuel point, signal cabin, telegraph office, platform shelter, cattle dock, gents toilet block and footbridge.

In 1937 the Great Northern Railway of Ireland also built, in the station yard at Donegal, a hideous-looking corrugated bus

garage to house the buses that it operated here in conjunction with the trains. Somehow this would also have to be included in the model as it was such a feature of the station.

I decided I would use Wills plastic building sheets as the main material in the construction of these buildings and wherever possible use commercial windows and door parts instead of fabricating my own out of plastic strip. I first produced a drawing of the locomotive shed from the dimensions I had taken at Donegal and was able to proceed with its construction using the principles outlined in Ken Ball's book. Without question a 4mm scale ruler, Olfa cutting knife – used for cutting the Wills plastic sheets – and a coping saw for cutting out window and door openings, are essential tools for use in plastic model building construction.

One of the main problems I encountered was that I did not have specific dimensions for many of the buildings. I could only estimate from old photographs what actual size these buildings should be. Many times I had to



repeat my initial drawings to make the building size look correct. The estimated dimensions I had from the buildings on George Hanan's layout proved absolutely invaluable in scaling down the real buildings to the correct size. There were also very few old photographs which showed the rear of buildings. However, by requesting help from members of the Yahoo! County Donegal Railway Enthusiasts' Group site, I was able to obtain more information. I would like to thank at this point, Joe Bagley for all the information he emailed to me.

All the buildings were painted with acrylic paints. On the CDR many of the buildings were painted annually with white limestone and this made the painting of many buildings on the model quite easy.

The exposed stone buildings however, were much more difficult to paint correctly. The method I eventually used was first to put a base coat of Tamyra Deck Tan XF55 and then pick out individual stones with greys, flat browns and black.

When totally dry the stone building was given a wash of very pale grey, which was then wiped off to leave this as the mortar colour in the cracks. Even this did not look perfect until I realised that Irish stonework takes on a dark green colour due to the build up of algae in the stonework caused by persistent rain. A wash of olive drab all over the stonework produced the effect on the buildings that I was looking for.

Baseboards, tracklaying and signals

Having built sufficient rolling stock and all the buildings for Donegal, it was now time to think about what actual size the layout was going to be. I had a room over the garage available in which to build the railway. It measured 16' x 17' giving a diagonal allowing for projection into the corners of just over 20'.

If you look at the plan of Donegal you will see that the station layout is not the easiest to fit into a long narrow space, as the goods depot is to the right of the main line whilst the



loco shed and turntable are off to the left. The solution was to angle the main line diagonally across the baseboard. The result of this is that the fiddle-yards at each end of *Donegal* would not be central on the baseboards. This meant that a turntable or traverser could not be used for these fiddle-yards and the cassette method of changing rolling stock had to be adopted.

These limitations and the room size available resulted in the final size of the layout being 20' x 2'3". The 20' was split into two 4' fiddle-yards, leaving three further 4' boards making the 12' length for Donegal station.

The next stage was to obtain a sheet of wallpaper lining paper, which I cut to the exact size of Donegal station, 12' x 2'3". Then using Peco H0m points and track as a template, I drew out the complete track diagram full-size. This approach meant that the points would be located in the correct position so as not to infringe upon any baseboard joints.

The buildings were then laid out on the wallpaper and their positions clearly marked. I have previously mentioned that the County Donegal Railways Joint Committee ran a road transport operation until 1971 and I decided that I wanted to show this in some way on the model. Like many Irish stations, Donegal had been situated on the outskirts of the town. It had been reached by an approach road off the Donegal-Killybegs road, which ended in the goods yard. I took the liberty of extending this road, after it had passed over the level crossing and behind the goods yard, and continuing it along the back of the railway. It then passes over the main line on a stone arch bridge. This would allow me to use the bridge as a scenic divide and I could also incorporate a Faller Car System on the road to illustrate the CDR's road transport network of buses and lorries.

In sketching out this road on the lining paper it became apparent that there were two glaring spaces on the layout that were calling out for the location of new buildings.

The first of these near the level crossing was filled with a model of the level crossing keepers cottage. This is based on a restored cottage at Drumark on the Killybegs line. The second space was filled with a model of the famous Biddy's O' Barnes pub which is situated in the picturesque Barnesmore Gap through which the railway ran.

The baseboard frames were constructed from 3" strips of 5/16" plywood strengthened at the corners with wooden blocks. As an experiment, to keep the layout boards as light as possible, after a sheet of plywood was laid on the frames, a 1" thick sheet of heavy dense polystyrene was glued down onto the plywood.

Wood strips, the same height as the polystyrene, were placed at the ends of each board to give a protective edge. This allowed screws and copper-clads to be fixed for the rail joints when spanning the track between the baseboards.



Left: Biddy's O'Barnes public house is situated in the famous Barnesmore Gap through which ran the main line of the CDRJC from Donegal to Stranorlar. Modeller's licence has allowed Biddy's to be moved closer to Donegal.

Below left: Class 5A approaches Donegal with an excursion special from Killybegs. All scheduled passenger services on the County Donegal were operated by railcars and only excursion specials were hauled by steam locomotives.

Right: railcar No.20 with two red vans and a goods van approaches Donegal from Strabane with a through service to Killybegs. At Donegal station, No.20 will wait for the railcar from Ballyshannon to arrive in case any Ballyshannon passengers are catching the Killybegs service.

Photographs by Steve Flint, Peco Studio.

A 7" backdrop was fitted along one side of each board so that the fiddle-yard boards would lie on top of the scenic boards for protection during transportation. The baseboards are held together by pattern maker's dowels and spring clamps. Legs were also made of 3" strips of plywood suitably strengthened by crossbraces and set to give a viewing height of 3'3".

A pelmet held in place by 1" square metal cantilever arms fixed at the rear of the baseboards conceals 12 spotlights which illuminate the three central boards for use at exhibitions. Two boards, shielding the hidden fiddle-yards from public view, have photographs of Donegal taken in the late 1950s so that the visiting public can compare the model to the real location.

The whole of the layout will fit into the rear of a Vauxhall Zafira so that travel expenses for exhibitions are kept to a minimum as no van hire will be necessary when exhibiting.

The whole layout, including tracks, buildings and roads, was then marked out on the polystyrene. Cork underlay was then glued down for the track bed and Peco track laid and pinned on top of this. The layout is wired for 12 volts DC twin cab control using 3-way centre off switches. Points are operated by the wire-in-tube method. After the trackwork had been thoroughly tested and weathered, the track was ballasted with Green Scene sandstone ballast. This is similar in colour to that used on the real railway. In places this was taken up to the top of the sleepers particularly in the station area.

Before commencing on the scenery I decided that it would be easier at this stage to make and install all the signals. Details of these signals are given on the County Donegal Railway Restoration website and their positions could be readily identified from photographs of Donegal. One of these signals however, the Up Home, I could not locate but a request for help from the Yahoo! site resulted in a photograph of this location from Joe Bagley.

The signals were all manufactured from brass and whitemetal components supplied by Model Signal Engineering. I sent a list of the signals to Andrew Hartshorne of MSE and from this he was able to supply all my require-



ments. Andrew also recommended that I purchase the book *Constructing and Operating Semaphore Signals* by Mick Nicholson which helped me considerably with the signals' construction.

Phil Tombs, a colleague of mine at the Bodmin MRC, had fitted bi-colour LEDs to the Ratio signals on the club's layout and with advice from Phil I was able to do this with the Donegal signals. The secret is to be bold and file down with a needle file the dome face of the smaller bi-colour LEDs until it is flat and compact. These were then mounted behind the signal arm on a piece of brass strip using an epoxy adhesive. By changing the polarity of the current to the LED the light can be made to change from red to green. All the signals were made to operate using the solenoids supplied by Model Signal Engineering connected to the signal cranks by thin brass wire.

Regrettably due to space restrictions the two 3-arm bracket signals situated where the Ballyshannon branch joins the main line on the layout are very close to the road bridge I introduced. I still decided to model them as they were such a prominent feature of Donegal station.

Road traffic and scenery

I have previously mentioned that I had intentionally added a through road behind the goods shed on the layout so that I could use this to illustrate the County Donegal Railways' road transport operation.

Phil Tombs on the Bodmin MRC's layout had modelled a similar feature using the Faller Car System. He had converted the Faller motorised chassis to accept British outline road vehicles. For readers who do not know of the Faller Car System, the basic principle is that an iron wire

is imbedded into the road and a magnet at the front of the vehicle guides the vehicle along the wire and therefore the road. Vehicles are moved by an electric motor driving the rear axle powered by a battery giving three hours of operation. Under each vehicle is an on/off switch and also a reed switch to cut off the power, which can be operated by powering an electro-magnet fixed under the road.

At the Bradford exhibition a colleague, Geoff Bridge, came across a stand run by Model Road and Tramways. One of the partners of this concern, Roland Boxall, was sure he could help me with this project. I sent them all the information I had available. This included photographs of both the Great Northern Railway of Ireland buses, that integrated with the CDR trains until closure in 1959, and the County Donegal Railways buses that took over after that date. In addition I supplied information on the lorry transport fleet.

While they searched for a suitable diecast body to adapt to the Faller chassis, I discussed with Roland the best materials to use for actually making the road surface. He recommended MDF board with a groove cut into it using the Faller cutter for laying the wire. The Faller cutter retails at over £90 but Phil Tombs managed to purchase one on eBay for under £60 and we shared the cost between us.

Wherever possible the MDF board for the road should be laid in complete lengths with as few gaps as possible. For buses a minimum radius of 6" and a maximum gradient of 7% were recommended. Where breaks in the road do occur, for example at the level crossing or on baseboard joints, a three-pronged crow's foot was cut at each side of the joint. This enabled the magnet steering on the vehicle to have a chance to pick up any of the three tracks to guide it back onto the main guide wire.

The first vehicle Model Roads and Tramways was able to make for me was a model of a Great Northern Railway of Ireland half-cab Leyland Tiger Cub TS8 in blue livery. I have also been able to source die cast bodies and re-spray them in County Donegal livery for a full-front Leyland Tiger Cub and a Great Northern Railway of Ireland AEC Regal IV bus. I also intend to use the Cooper Craft lorry kits to produce replicas of the County Donegal lorry fleet at a later date.

The road was laid using $\frac{3}{16}$ " MDF as had been recommended. A pencil line was drawn down the centre of the road and the Faller iron wire laid on this and held there by masking tape. When the bus had run successfully along this guide wire, minor adjustments were made to the curves which allowed for the outswinging of the vehicle. These were marked on the road and the wire and tape were removed. The Faller cutter was then run along the pencil line to cut a groove into the MDF into which, using a small screwdriver blade, the Faller wire was positioned. The wire was then checked again with the vehicle to make sure that the vehicle ran correctly and then PVA white glue was brushed over the wire to glue it down permanently and to protect it from rusting. Faller recommends that a thin surfac-



ing is laid over the road using the firm's special plaster. I did this, but then found that I had to sandpaper the bulk of this plaster away to get the magnet on the vehicle to follow the guide wire.

If I had to do this again I would simply paint the road after laying in the guide wire and not use the Faller plaster as any gain in realism was at the expense of good running.

Electromagnets for the stopping places were fitted under the road on each side of the level crossing outside the public house and at the railway station. These have to be positioned very precisely to the Faller instructions or they will not work correctly.

Scenery

With the road in place and the Faller system working it was time at last to turn my attention to the scenery. Contours to follow the road were made out of polystyrene. Instead of carving these to a final shape and incurring the inconvenience and mess that goes with this, a flexible aluminium gauze which is sold at good craft shops for sculpture modelling, was placed over the polystyrene. This gives the scenery its final shape and it is then glued down using a hot glue gun.

In order to cover this surgical lint was dyed green using Dylon Dye 34 and stuck onto the aluminium foil gauze using PVA white glue. Flock powder from Woodland Scenics was then scattered over the lint and held in place with diluted Matt Medium. Hedges were made from horse hair dipped in Matt Medium and covered in Woodland Scenics scatter materials. Trees are from sea grass first soaked in boiling water and pegged out with weights to make them straight, then dipped in Matt Medium and finally covered with scatter materials.

The coarse grassland, going out of Donegal, was made by using the brown/green matting that is sold at garden centres for lining flower baskets. This was glued down with the black backing paper on the outside. When completely dry the backing paper was removed to leave the coarse fibres which could then be trimmed and covered with flock powders.

I could find no commercial crossing gates that were like those at Donegal station so eventually I had to manufacture the gates on the layout out of brass strips.

The main gate posts are fitted onto the drive shafts of two very low-g geared electric motors which when powered will open and close the crossing gates.

Similarly I could not find any footbridge that was commercially available that was of the open construction and diamond metal frame like the one situated at Donegal station. Eventually the footbridge was modelled by kit bashing two Hornby clip-together footbridges.

Aidan Campbell figures and many items from the Langley Miniature Models range have been used to add atmosphere to the model and wherever possible create little cameos of interest for the general public.

I was concerned that the sky backdrop I had painted behind the model did not represent the true location of Donegal station but I knew that I would never be able to improve on this.

Using the photographs I had taken of George Hanan's layout at Donegal and a set of postcards of Donegal Town kindly sent to me by Mrs Ann Temple, I was able to enlist a local artist, Graham Hooper, to paint a new backdrop. This shows many of the buildings in Donegal such as the Catholic Church, the High Street, the Diamond Square and the famous Obelisk, communicating the Annals of the Four Martyrs.

Left: Great Northern Railway of Ireland's bus passing Biddy's O'Barnes with the Donegal to Portnoo service.

Right: railcar No.10, constructed from a Backwoods Miniatures kit with red van No.19 which was used to carry luggage and parcels, approaches Donegal from Killybegs.

Below: the excursion seen on the previous spread has arrived at Donegal, and waits to cross the service railcar from Stranorlar.

Operation

From my experience of exhibiting layouts over numerous years I have concluded that the general public does not spend more than five or ten minutes at a time in front of any layout. They may go to look at other exhibits and then return later. Therefore, in operating *Donegal*, I set out to show in a short time the type of operation that would have occurred.

This can be briefly described as: a mixed goods train, the meeting of the scheduled railcar services from Killybegs, Stranorlar and Ballyshannon, and the departure of the three railcars. It also includes the turning of the Ballyshannon railcar, a steam-hauled excursion train from Strabane passing straight through the station to Killybegs, and a further excursion steam train to Ballyshannon – or more correctly to the wonderful beach at Rosnowlagh – which has to be reversed at Donegal. Running these trains in reverse order brings the stock to the starting point so that the sequence can be repeated.

I hope that the visitor will look at the photographs on display and compare these to the actual model. What he or she will see is not an exact likeness but a sufficient comparison to enable some similarity to be apparent from the real past to the present model.

I hope that I have created sufficient enthusiasm in the visitor to learn more about the CDR and if they ever holiday in Ireland they will make a point of visiting the County Donegal Railway's Heritage Centre at Donegal Station.

May I conclude by thanking the following, without whose help this model of Donegal Station would never have been completed. My thanks to Keith Blanshard, to Ron White of Colour Rail, John Langford and James Tawse for allowing their colour photographs of Donegal to be displayed with the model, to Keith's wife Tina Blanshard who introduced my wife and I to her native Ireland, to my niece Claire Millard for typing this manuscript and finally to my wife Julie for all her help and encouragement throughout this project.

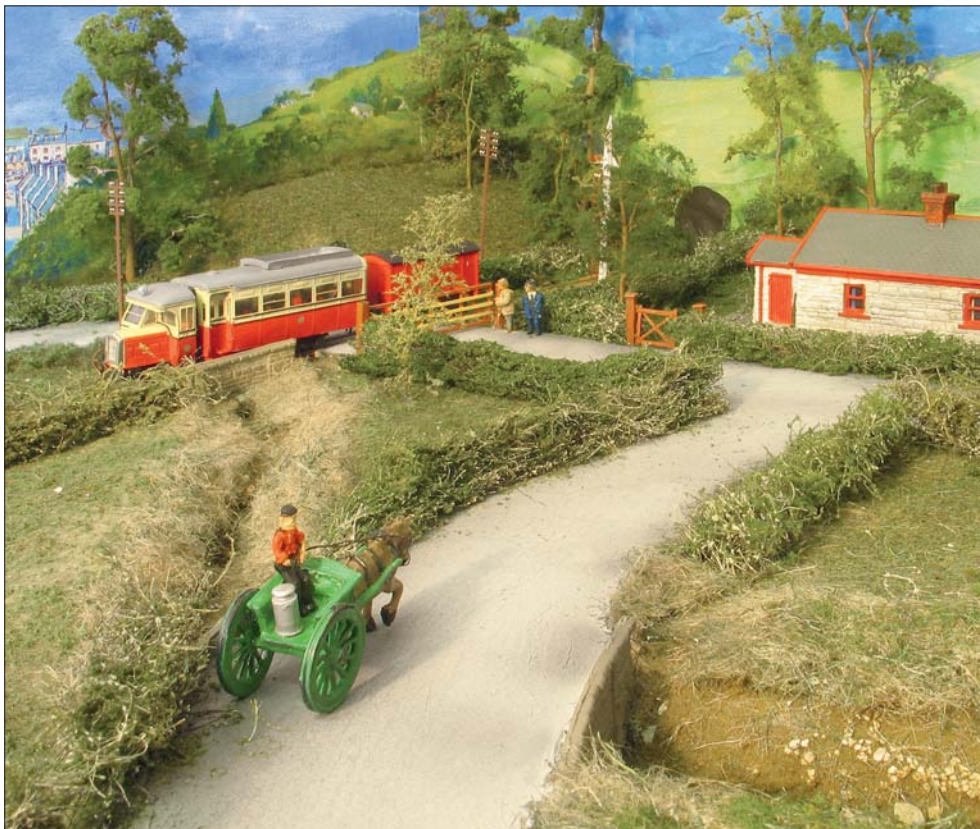
I am keen to display the layout to promote the County Donegal Railway Restoration Heritage Centre at Donegal. Exhibition Managers can reach me by the Editor or by email at ggee3@onetel.com.

Donegal will be exhibited at the Bodmin Model Railway Exhibition on 21 and 22 October. See Societies & Clubs.

Recommended books

The Last Years of the Wee Donegal by Robert Robotham and Joe Curran (published by Colourpoint Books).

The Wee Donegal Revisited by Robert



Robotham and Joe Curran (published by Colourpoint Books).

The County Donegal Railways Companion by Roger Crombleholme (published by Midland Publishing).

The Irish Narrow Gauge in Colour by Norman Johnston (published by Colourpoint Books).

The Irish Narrow Gauge Volume II – The Ulster Lines by Tom Ferris (published by Black Staff Press, Belfast).

The County Donegal Railways by Edward M. Patterson (published by David & Charles, now out of print).

Modelling Irish Railways by Stephen Johnson and Alan O'Rourke (published by Midland Publishing).

Modelling Buildings the Easy Way by Ken Ball (published by Cheona Publications).

Constructing and Operating Semaphore Signals by Mick Nicholson (published by Book Law Distribution).

County Donegal survivors

County Donegal Railway Restoration Limited, The Old School House, Tyrconnell Street, Donegal Town, County Donegal, Ireland.

Tel: +353 74 97 22 655 www.cdrrl.com

Fintown and Glenties Railway, The Station House, Fintown, County Donegal, Ireland.

Tel: +353 74 95 46 280

Ulster Folk and Transport Museum, Cultra, Holywood, County Down, Northern Ireland BT18 0EU. Tel: 028 9042 8428 www.uftm.org.uk

Foyle Valley Railway Centre, Foyle Road, Londonderry, Northern Ireland (at time of writing, temporarily closed). www.derrycity.gov.uk



8750 Pannier

Part 3 – electrics and final thoughts

CHRIS GWILLIAM concludes his construction of the 0 gauge Scorpio kit (pt.1 Aug, pt.2 Sept).

The Mashima has two small holes in its end surface, the one at the opposite end to the wiring tags, and the gearbox, which was evidently designed to fit this motor, was folded up into a U and screwed into position over these holes. It might have been better to seam up the folds with a little solder but I did not bother. It would certainly have been cleverer to solder the gearbox bearings in place before adding the motor – stray heat is not good for electrical gubbins. Next the rear axle was slid into position to trap the gearbox/motor assembly between the frame-bearings.

At this point I called in the cavalry in the form of my good friend Martin Jeffrey – as a former RN artificer he knows how many electrical beans make five. He immediately spotted that I had placed the rear plunger housings exactly where the motor needed to be, so two more 4mm holes had to be drilled in the frames rearwards of the third axle instead of ahead of it, and the pick-ups were unglued and relocated. We then fed two lengths of the insulated wire provided with the kit through the holes in the motion plate, forming a path from the front pick-ups, past the middle pick-ups to the motor tags.

The front pick-up springs (you have not heard the last of them) and phosphor bronze pick-ups were placed in their housings and the pick-up rears were secured to the electrical circuit with a quick dab of 188 degree lead/tin solder and liquid flux, an earlier attempt at using new-fangled lead-free solder having ended in abject failure; dreadful stuff – I'm glad I've laid in a supply of the soon-to-be-outlawed lead/tin stuff. A short section of the wiring was stripped of insulation where it passed the centre pick-ups and further solder joints were made. There was insufficient wire for the rear pick-ups as well, so I scrounged some spare from Martin.

The worm was pushed onto the shaft of the motor, and tapped home with a small hammer until the end of the shaft was just visible. The



Above: body and chassis have been united, and the loco is able to move under its own power on my test track, together with some of the fitted vans with which it will earn its keep.

meshing of gear and worm took a while as it was over-tight to start with and the gearbox bearings had to be re-soldered a tiny fraction lower to relieve the pressure; on my next loco I will invest a little more cash on buying a motor with an already assembled gearbox to avoid wasting effort on trial-and-error meshing. Martin also passed on the useful tip that it's worth buying a spare bearing which can be slid onto the axle alongside the gearwheel so the gear cannot slip sideways out of mesh with the worm by accident.

There's a wiring convention which I would have had to look up in the Gauge 0 Guild Manual, but Martin can carry such clever stuff round in his head. It's to make sure that when power is applied every loco in your stud (or in anyone else's) will travel in the same direction. The rule is that when the loco is going forward the offside is positive. We allowed some slack in the wires in case of any future tweaking which might be needed, and then joined up the wiring from the pick-ups to the positive and negative terminals on the motor. The gear-wheel grub screw was then un-tightened for the moment while the wheels and rods were re-assembled in the frames, and it became apparent that despite my best efforts earlier, the coupling rods were binding slightly; muddling up the wheels won't have helped. The

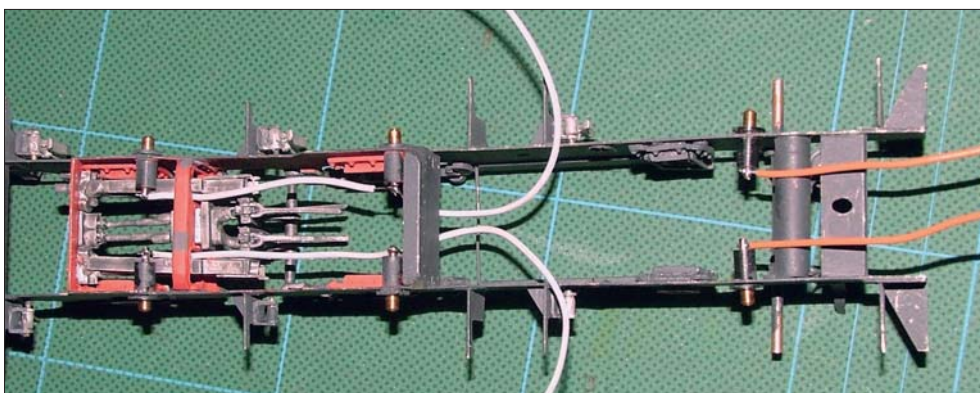
Below left: soldering the pick-ups; wire is attached to the rear of the phosphor bronze plungers. There's no significance in the different coloured wires. I ran out of the white stuff supplied (which will need painting black to tone it down anyway) and had to scrounge some brown to finish the job.

Below right: the chassis propped on two blocks of wood with croc clips attached to one pair of pick-ups so it could be run in gently. One of the guard-irons has been knocked off and needs replacing, and one balance weight has to be re-fitted.

Photographs by the author.

rods were removed and a tiny amount of metal was reamed out of the holes. It was also apparent that one wheel was wobbly, which imparted a degree of eccentricity to the crankpin.

Once the gear-wheel had been re-tightened power was applied to the rear of two of the pick-ups with crocodile clips, and lo and behold the wheels went round. Placed on a metre of track, the engine travelled under its own power, rather better in forward gear than reverse. But it took an awful lot of power from the controller to get movement, and the truth dawned on us that the springs in the pick-ups were far too strong, and the plungers were pressing so hard on the rear of the wheels that the friction almost stopped any motion at all. It was not long before there was a smell of burning, and we turned off power just in time to save the motor from frying. At that point we decided to call it a night, and the following day I had to dismantle the wheels and motion again, unsolder every pick-up, remove the offending springs and replace them with a much less bouncy version, tiny phosphor-bronze ones which were in my spares box and I think came from a set of buffers. The new



springs were much lighter but once the wires had been re-soldered it became apparent that the springs were over-long and inhibited travel in the plunger. I unsoldered all the pick-ups yet again, trimmed the springs and re-assembled. And finally, at long last, a smooth running mechanism!

Now satisfied everything was OK, I tightened the crank pin nuts with pliers, and re-checked for smooth running. Running-in seemed advisable, with powered crocodile clips applied to one set of pickup rears and the ends of the underframe suspended on two blocks of wood, and a series of ten-minute sessions in alternating forward and reverse mode followed. The slight wheel wobble was not eradicated but did not seem serious enough to worry about. Finally I cut off the excess length in the crank-pins and filed flush with the nuts, before moving on to fitting the brake shoes, cross-rods and pull-rods, which was a pretty well trouble-free process. I know some builders use tiny nuts and screws to hold the pull-rods in place, but I simply soldered them to the cross-rods. If I have to dismantle the motion at some future date, a quick touch with a hot iron will soon have them free, and once replaced a touch of weathering will hide any bare solder. Brushed dirty black paint toned down all the remaining bright parts, eg wheel-rims. The rear coupling was added, with both shank and spring shortened to clear the rear chassis spacer. The lost-wax sanding pipes are amongst the most vulnerable items, so I had left them until last, and in fact eventually decided not to fit them at all, as they thread through the brake rigging and would need removing every time the chassis was dropped out of the body for maintenance.

There were a few other unidentified bits left over as well, but to my eye there's more than enough detail to be convincing. Richard Spratt helped with a fault-finding session when the re-assembled body and chassis seemed reluctant to start, though it ran well enough once in motion; I think I may need another motor, as this one has a tendency to stall at low speed. Maybe it got over-heated in the re-soldering which was needed to get good meshing or when over-worked by the stiff plunger springs. But this irritation pales into insignificance compared with the thrill of seeing my engine trundle along my test track under its own power.

Verdict and final thoughts

So as a tyro builder, what do I think? Well, it was challenging and very time-consuming, every bit as tough as I expected. Both the tank-forming and the electrics tested my ingenuity just as I feared they would when the kit was first hidden at the back of the drawer, so maybe the long delay in getting started was worthwhile, as I'm not sure I would have succeeded with the skills I had back in the 20th century. But the kit has the top-drawer quality and attention to detail you would expect to find in something much more expensive, building into a highly accurate model.

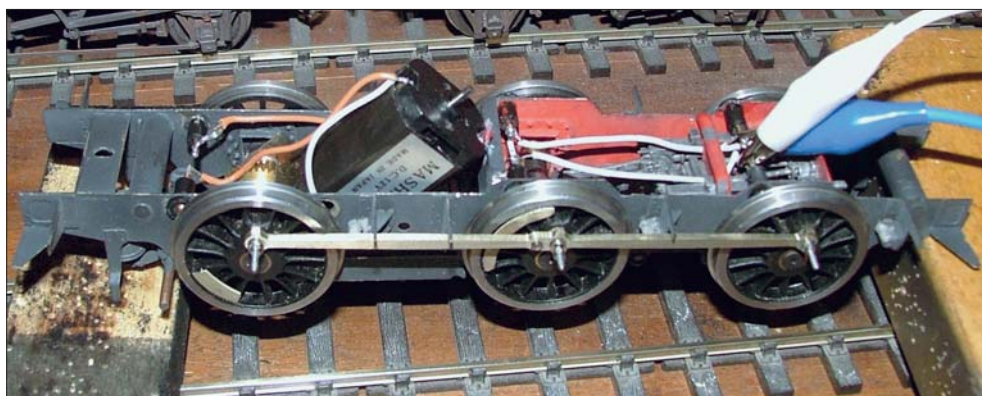
If I were doing an 8750 again, I'd get a better job done, having learnt plenty of new skills on



this one; whether this one is up to snuff is for you to judge, but I'm reasonably happy with my effort. There are a few niggles as with any product, but my only real gripe concerns the inadequate instructions which really slowed me down. Put it this way; before I had even finished this engine I had ordered another 57xx/8750 kit from Scorpio, which when added to my huge bag of left-overs from this build will be turned into a half-cab pannier in 1914 condition, No.1767, another Newport engine though before my time. I model two periods, BR c.1957 and GWR pre-1914. If I had not been impressed with the kit and enjoyed the project, I would hardly have parted with any more of my hard-earned, would I? And no, I'm not expecting the next one to take over nine years.

After a month of intermittent tinkering, I concluded that the Mashima 1833 motor was never going to give smooth operation, so I bagged a replacement on eBay, not an 1833 but an 1830 which is really designed for big 00 locos rather than small 0 gauge ones. But it had the advantage of a slightly shorter shaft which did not need pruning. I have a feeling in my bones that it was the heat generated by the slitting disc which cooked the original, despite my efforts to provide a heat-sink.

Result: a loco which now runs as smooth as silk – poetry in motion. It seems to have plenty of grunt too. And am I pleased with my first effort? What do you think?



Main suppliers

Scorpio Models, 3 Meads Close, Newport, South Wales NP9 0NR.

Slaters Plastikard, Temple Rd, Matlock Bath, Matlock, Derbyshire DE4 3PG.

Premier Components, 14 Swanlow Avenue, Swanlow Park, Winsford, Cheshire CW7 1PB.

MetalSmith, Enterprise Close, Telford Way Industrial Estate, Kettering, Northamptonshire NN16 8NS.

Severn Mill Nameplates, 16 Porters Lane, Easton-on-Hill, Stamford, Lincs PE9 3NF.

Some published references

The Locomotives of the Great Western Railway, Part 5 (RCTS) – out of print. Really useful if you are modelling one of the early classes, as it lists dates of conversion from saddle-tank to pannier.

A Pictorial Record of Great Western Engines Vol.2 by J.H. Russell (OPC) – several pages of useful photos and drawings, figs 451-466, and a good shot of 5727's bunker rear at fig 616.

GWR Engines – Names Numbers Types & Classes reprint (David & Charles) – ex-works photo of nearside of 9716, a non-top-feed example.

Great Western Engines, Names, Numbers, Types & Classes by Brian Whitehurst (OPC) – scale drawings of 57xx, 1854, 2721 classes.

Forgotten Railways Vol.8: South Wales by James Page (David & Charles) – 3767 nearside; 9644 bunker first; 3638 smokebox.



The early morning milk train

Milk traffic from the Isle of Wight is seen passing Exbury on its way to London

RICHARD KIRKBY re-creates a Southern speciality in 0 gauge.

If one travelled to Waterloo 40-odd years ago and looked out of a left-hand side window as the train passed through Vauxhall in the morning you would see the milk train in Platform 1. It had been allowed into the platform after the main morning rush had subsided and stayed there until about midday discharging its cargo which was destined for the United Dairies bottling plant. This plant was on the east side of the viaducts which formed the approaches to Waterloo and, as Platform 1 was on the west side, the milk was piped from platform level on the west side down and under the station and away to the plant.

Milk trains were a feature of Southern Railway operation and required swift handling if their contents were not to deteriorate on the journey between source and distribution. Milk trains were therefore run at passenger speeds and the vehicles in the train would be fully brake-fitted.

About five years ago the layout had but one milk tanker. It was built from a kit and ran well. The trouble was that, apart from attaching it to the rear of a passenger train, on its mythical up journey towards Waterloo, it didn't really fit in.

Above right: ACE Trains Nestlé milk tanker is adjacent to the kitbuilt United Dairies tanker.

Right: all four tankers are in view as the short train heads past the camera and Exbury West signal box.



Left: the early morning milk train heads out into the low morning sunshine of the New Forest on its way to Southampton with one of the Southern bogie goods brakes at the rear. 21 motor luggage vans were built by the Metropolitan Carriage Wagon & Finance Co in 1923-24 for the LBSCR overhead electrification system. They were converted to bogie goods brakes in 1933 and numbered in the 56250 series. Although barely visible in this view, Drummond L11 4-4-0 No.174 has the correct Eastleigh Duty Number 357 on its headcode disc.

Photographs by Paul Mills.

Last year, however, an advertisement from Modelfair.com of Manchester caught the eye and an order was placed for three ACE Trains coarse scale 4-wheeled lithographed milk tankers, one of each of United Dairies, Express Dairies and Nestles Milk. They swiftly arrived – beautifully boxed. They are lovely models. The design is ingenious; the engineering both clever and neat; and the litho printing of a very high standard.

By unscrewing the buffers it is possible, by undoing two screws which hold the whole thing together, to remove the coarse scale wheels. Having now got the two sides to work on it is possible to drill out the axleboxes in the cast sides until the top hat fine scale wheel bearings can be dropped into the holes. One then puts the wheels into the bearings and re-assembles the chassis and – in a little more than a few minutes – one has a milk tanker adapted for fine scale track operation.

The model has traditional (Hornby) type couplings but as these are capable of accepting three-link couplings they were left as they were. One milk tanker had now become four. Two old (Slater's ex-Midland?) cattle wagons were added to the tankers to carry the milk churns which were still much in evidence in the late 1940s and so was born the milk train. It runs in the Up direction towards London from the Isle of Wight. It will join up with the ex-Weymouth and Bournemouth milk train in Bevois Sidings at Northam in Southampton and at Basingstoke will be amalgamated further with the Up ex-Exmouth Junction milk train before carrying on to Vauxhall. The erstwhile LSWR L11 4-4-0 which usually pulls it is an Eastleigh-based engine and its duty number (357) on the headcode disc shows that part of this duty, which included a trip between Eastleigh and Southampton Docks, also involved the 'Up early morning milk'. The L11 will come off the train at Southampton at about 0810 and something else, a little stronger, will tackle the rising grades to get to Basingstoke on time. About 0900 an even larger and longer train will set out on the Up Fast to get to Vauxhall just before 1000.

Rowland Emett immortalised the 'Early morning milk train' in one of his famous railway cartoons for *Punch Magazine* in the late 1940s.

Editor's Note – see *RAILWAY MODELLER August 2006* for Richard's article on Southern Duty numbers, and how his fictitious system is dovetailed into them.

GWR iron cattle wagon

A conversion for a Ratio kit in 4mm scale

PETER MOYLE built a model of this unusual one-off of 1888.

In 1887/8 the Great Western Railway introduced the first metal-stanchioned wooden cattle wagon, in two sizes – small and large – later to become W3 and W1.

In 1888 a prototype vehicle was built, based on the Iron Mink body and using the 4-plank open underframe; its dimensions were 16'1" x 7'5" x 6'11½". It was fitted with grease axleboxes, a one-sided brake lever, vertical rod inner V hangers and spring bearing shoes. Only one wagon was built, and it was condemned in 1935.

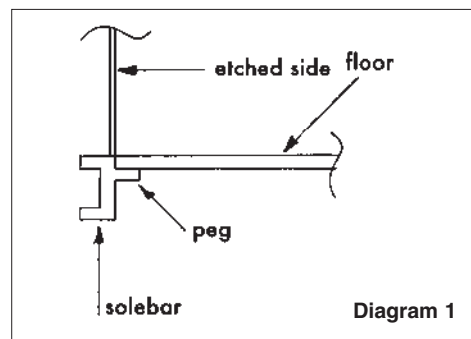
The model

This requires a Ratio Iron Mink kit (ref.563) and the Shire Scenes etched brass sides.

The first task is to cut the Ratio bodysides from the solebars. The instructions suggest the use of a craft knife, but I felt that this was very risky as it is vital to retain the top flange of the solebars, as the etched sides sit on top.

I found it best to turn the side face-down and cut above the solebar with a fine razor saw; this gave a clean, level cut. The ends can then be fitted to the floor, and the etched sides dropped in.

As I model in P4 a flat floor was required in order to fit the MJT compensation units. At this point I noticed that both the Ratio floor and the roof had a slight twist, so a new floor was constructed from scrap Wills plastic sheet, using the Ratio floor as a template. The new floor was fitted on top of the two pegs on the inside of each solebar so that the solebar top and the floor are level with each other. See Diagram 1. Also check that the etched sides are at the correct height to the ends, so as to allow the roof to sit down on the curved tops of the ends.



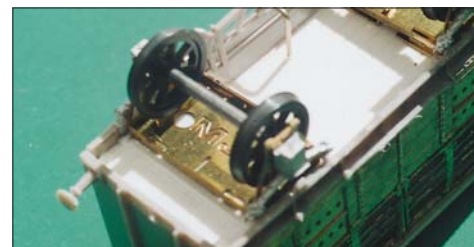
The Shire Scenes etching is excellent, and very fragile in places. It only requires some parts to be folded down and others folded up to construct the sides. However, the lower door L-shaped strapping has to be cut free and swapped over so that the short legs of the L face towards the wagon ends. See Diagram 2.



Above: the top of the solebar is level in reality! The Ratio plastic is soft, and tends to roughen up even when cut with a fine razor saw.

Below: the non-rocking MJT unit requires packing underneath it.

Photographs by the author.



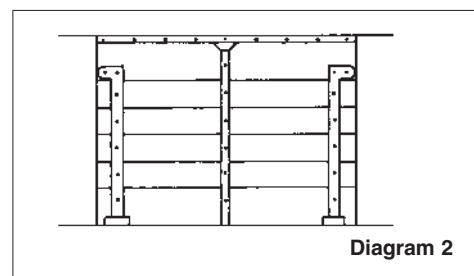
At this point with the roof fitted the lack of support for the etched sides did not seem to be a problem, and so far they have not bowed, or collapsed.

To complete the conversion I removed the Ratio axleboxes/springs and fitted MJT grease axleboxes/springs, as these would be correct for the original. The V hanger was moved to its inner position, and the vertical rod support for the Vs were made from brass wire.

This kit has the advantage of a simple replacement of the Ratio sides, or a more detailed and authentic finish as desired.

References

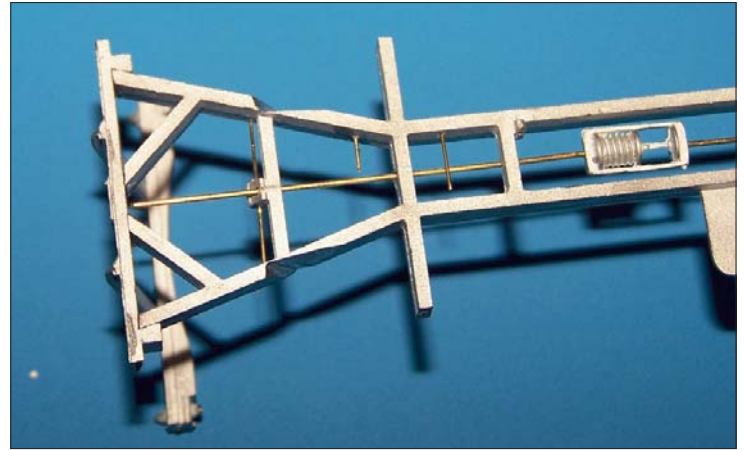
GWR Iron Minks by J.H. Lewis *et al*
History of GWR Goods Wagons volumes 1 and 2 by A.G. Atkins *et al*.



GWR milk tank in 4mm

The David Geen kit assembled

*This former Great Western six-wheeler was constructed and described by **ERIC LOBB.***



This is the second article that I have written on the subject of milk tanks, the previous one (see RM March 06) referring to the Falcon Brass model. So at the risk of boring readers, I have taken it upon myself to describe the latest David Geen kit. This is not a blow-by-blow account of how I built the kit, these are merely simple notes as an addendum to the instructions, and at the same time correcting some errors.

This kit is very high fidelity and a lot of thought has gone into producing what will hopefully turn out to be a very nice model. It is not a quickie and not really for the beginner although, with some help from a more seasoned modeller, I think that a less experienced builder would be able to construct it once the instructions have been figured out. One of the gripes I had was that the pages were not numbered so once unstapled no longer made sense. The wagon I chose to model is a diagram 042 No.W2561 built in 1935 for the Express Dairy. Photographs are an essential, and I could have done worse than look up those taken by Paul Bartlett. On his website, there are hundreds of photos of wagons from the Big Four and BR, plus some from pre-grouping.

Parts are whitemetal, nickel silver and lost wax brass castings. There is very little flash on the whitemetal castings, and what there is, needs to be removed with fine files and a scalpel. Many of the etched brake parts are minute and more akin to micro-surgery than modelling. I found the easiest way to remove these from the main sheet was to put a cocktail stick in one of the holes before cutting with a Stanley knife. This prevents the part becoming airborne. There are some spares on the fret just in case. I was building mine to 16.5mm gauge and, as the instructions suggested, needed to remove a section from the angled framework of the chassis to allow the

wheels to clear them. I found the easiest way to mark for this operation was to hold one of the side frames up to the chassis and hold the wheel set in place and then mark where the flange comes against the frame with a pencil. Yes that's three hands you will need, or a medium blob of Blu-tack to hold the wheelset down to the bench whilst you hold the other parts for marking. Be very sure that the chassis is the right way up when you mark for the cut-outs and that you file out the right side, as a mistake will mean that filing both sides will make the chassis very weak at those four points. As a guide, the small pip, (marked D in Fig.1 of the instructions) should be underneath as this is a hanger for part of the brake gear. The instructions suggest that all the holes that are needed are drilled before assembly commences as it will be very difficult later on; wise words indeed. Those in the end frames need to be drilled outwards and do not have to go all the way through, although mine do.

Holes in the very finely etched and thin decking were marked out before removal from the fret, as they tend to curl up. This curling can be removed by pulling gently and carefully between thumb and finger. I also marked two fine pips to help with positioning the ladders later on.

The brass axle bearings for the centre wheelset are deeper than the outer ones and the white metal axlebox needs to be drilled carefully to prevent the drill breaking out through the front of the axlebox, as this would be a disaster. Drill a little at a time and keep offering the bearing to the hole to check for a good fit.

The chassis gained a slight twist during preparation so before fitting the end frames I gently twisted it back into shape and checked it on a piece of sheet glass.

All mating surfaces need to be burnished with a fibreglass pencil to remove release

agent from the cast metal. This is necessary for whatever means of fixing you choose to adopt. I was gluing my whitemetal parts as I cannot solder whitemetal for all the tea in China. The end frames fit to the chassis with the finest of dovetail joints, which allows for the best and closest alignment you could ask for.

A clever idea included with the kit is the 'plastic skip', no, it's not for putting all the off-cuts into! It is used as a jig-come-rest for the chassis and assembled end frames whilst the brake gear is assembled.

Brake gear

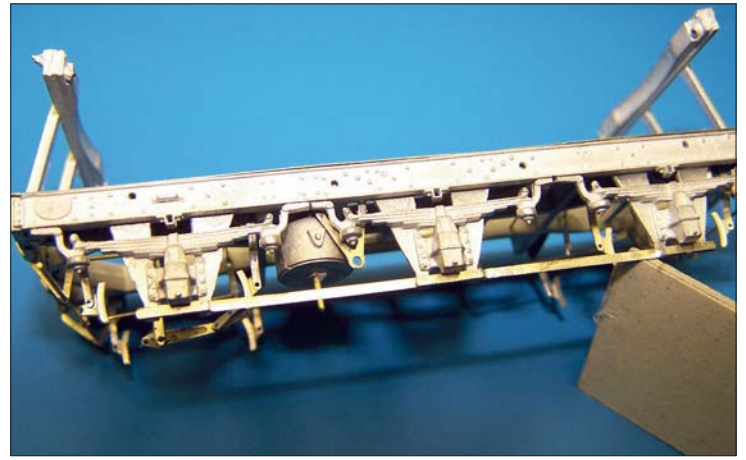
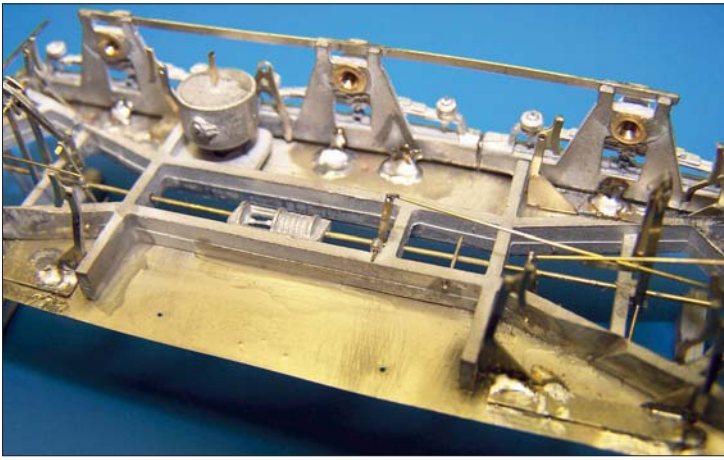
The brake gear is very complex and I found that the instructions for it were too. Nothing has been left out parts-wise and if you want to include everything, then time will have to be on your side. However, there are some typographical mistakes in the instructions, as well as being poorly laid out in my opinion, and if like me, you don't understand the complexities of a wagon's braking system, then you may well run into some difficulties here. What I can offer are, the following notes and amendments to the instructions as I see fit and hope that I am right in my own interpretation.

At the top of the page facing figs 3, 4 & 5 it says *take brake etches E/3 and locate them in the positions shown 8.5mm from the centre line and 5.5mm from the solebar.* So where is that then? I could not for the life of me work out what I was looking at or even if there was a diagram with these parts shown fitted!

Above: end frames fitted to chassis. Grooves filed in chassis members to clear wheel sets. Note brass wire brake hangers.

Above left: completed tank wagon lettered for Express Dairy.

Photographs by the author.



However I pressed on with the rest of the chassis and came back to this when I could not go any further.

Paragraph 4 on the same page reads *Fit to wire the parts in the order on the drawing fig 5 & plate 3* and needs this in addition *also see three dimensional drawing fig 6*. And should also mention that these are numbered B/1 & B/3 on the fret. B/2 is not mentioned and I assume that it should be the pawl of the ratchet (top of the left hand drawing in fig 6, although so small I left it out). I threaded these parts onto the wire twice, and still got it wrong, and after that I found I had the parts on the wrong end as well; the handbrake ratchet arrangement should be further from the vacuum cylinder. You need to concentrate on which way up the chassis is, which end you are looking at, and make sure the parts are fitted the right way round – fourth time lucky!

From here on things got more complex as I turned the pages over and over, back to front, to make sense of the typed instructions linked to the sketches and photos, until I eventually gave in and made a second copy of all the sheets so that I could keep the picture of fig 1 and the photocopy of the parts fret uppermost on the bench for reference whilst reading the text.

The brake pull rods and fulcrums (parts E4, 5, 7, 8), two in number, were fitted to their relevant hanging points (A in fig1). All the parts were assembled loosely onto 0.35mm brass wire pins soldered into the fulcrums with the ends pinched flat with fine flat pliers to prevent them from falling off. The reason for them being loose is so that they could be moved into the correct positions in relation to the other parts to be fitted later, and then soldered

Above: one solebar fitted. Note the brake hanger next to the vacuum cylinder. Make sure that the ends of the solebar fit flush into the buffer beams. This should have been checked with a dry run earlier on.

solid and the ends cut off and cleaned up when completed. In paragraph 4, below fig 6, we are reminded that the wheels will shortly be captive, and I thought that this would be a good point at which to paint the underframe. As already mentioned the rigging below decks is very finely detailed and it would be a shame to cover it all in grey primer and my favourite underframe gunk colour, so a good option here is metal black by Carr's, or Birchwood Casey gun blue. There are three problems I find with these products, one is that they react differently to different metals, in this case solder brass and nickel silver and will give different colours. Some of my joints had been assembled with cyano where they joined the whitmetal underframe, and this does not take metal black at all.

Thirdly I still had quite a few soldered joints to make and metal black prevents solder from taking to the metal. So painting was in this case left until later on. The wheels were treated the same way as in the last article, being pushed into punched holes in a piece of card and sprayed or stippled with paint before fitting, as the axles are visible though the deck of the wagon. I painted them and the backs of the wheels.

The brake shoe assemblies are straightfor-

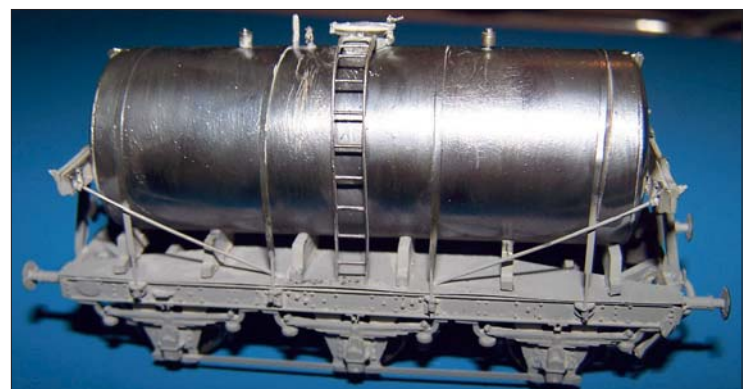
Below: part assembled tank (left) and the assembled model having been painted with Humbrol Metalcote and then buffed.

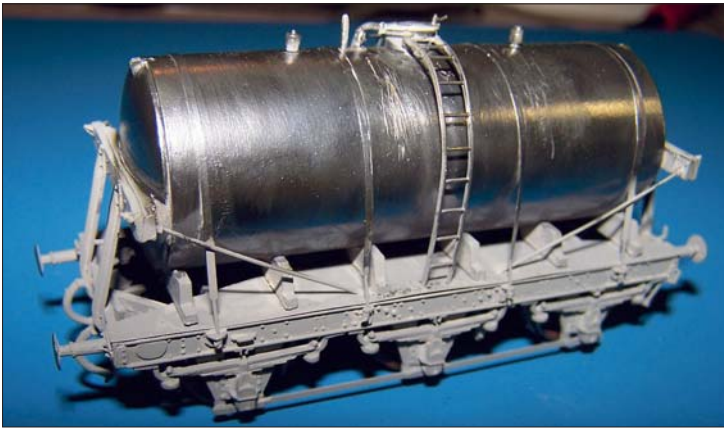
ward to fold up and the two halves can be aligned to one another with a broach or cocktail stick, clearing the holes in the shoes of solder so that the etched 'A' frames can be fitted later. If you are working in one of the fine scales then the brake shoes can be fitted without too much fiddling but for 16.5mm some trimming of the fixing tab by 0.75mm off the width will need to be carried out and I also set or joggled them 1mm inwards to get them to line up with the wheels.

The 'set' can be performed by holding the leg of the brake hanger with small smooth-faced pliers so that the nose of the pliers is exactly in line with the end of the triangular corner of the hanger. A second pair of pliers can be used to hold the other part when bending. Bend inwards towards the direction you want to move the brake shoe, then move the pliers out along the length by 2mm and bend back the other way until parallel with where it was before. This will make the hanger a fraction shorter but not enough to notice, and should be almost unnoticeable from the ends.

The flat tab at right-angles to the shoes is soldered to the underside of the deck after reinforcing the folded joint with some solder. The tab needs to be trimmed to prevent it and the solder fixing it from holding the decking away from the solebars and leaving an ugly gap.

Do you remember parts E3 and how I found the instructions and diagrams so difficult to follow? Well, I was at the point where I wanted to fit the solebars and wheels before fitting the brake cross shaft which is supported by parts E3 so I went back to the diagram fig 3. There were the centre points for the cross-shaft marked on the diagram and the penny dropped. These centres are 8.5mm from the





centre axle and 5.5mm from the lower edge of the solebar. I suppose that is what the instructions said and proves that you should read them again until you understand.

One side of the 'V' is at a greater angle than the other. The skip stays in place held by the end frames as there is still lots to do on the brake gear. The solebars and wheels can then be fitted at the same time adjusting the brake shoes as closely as possible to the wheels, also making sure that the various rods and actuators are on the right side of the axles. Refer to the general arrangement drawing for this.

The rest of the brake gear can be fitted now following the instructions as written without too much trouble. I found hooking up the links to the 'A' frames very fiddly. I used tweezers and a very fine broach to hook them together and once in place the smallest amount of solder to seal them together. Strength is not important but I did trim the pin ends down flush as in reality these would be clevis pins and split pins and are invisible in this scale.

I ran the chassis through some pointwork on the layout and all was fine. As far as the chassis is concerned there are now only the buffers (two types supplied, sprung and white-metal) lamp irons and vac/steam pipes to do.

The tank

The tank is simple enough, although I found that the hole sizes suggested for the tank fittings were mostly undersized, the manhole being the exception, and needed to be 0.5mm smaller. The instructions generalise that the inlet filler points are 5' from the centre. This is untrue in most cases and I found that the diagram 042 had them set at 4', the other diagrams mostly being less. In order to solder in the fittings a big iron is required (70 watt) as the tank barrel is very thick. Gloves or some layers of cloth are best to hold the tank with a small square of card to keep the part to be soldered in place with one finger, then the iron can be applied to the inside.

The photo shows my part-assembled tank with only one inlet valve fitted, the other one is on the floor somewhere, the search will resume at first light! Once fully assembled the tank can be fitted to the underframe, this is a tight fit between the end frames and some care is needed to prevent breakage of the white metal ends as they have to be bent gently outwards.

When in place the remaining straps and ties

can be fitted, the instructions tell us that the ends of the straps are possibly not going to fit the holes drilled in the brackets on the solebar. I found that trying to rub down the edge of the straps was near impossible, so I resorted to drilling out the brackets to 0.4mm, not too difficult *in situ* luckily.

Only the ladders and a walkway remain to be done. There is a helpful fold-up jig on the main fret to assist with assembly and spacing of the stiles. A walkway was shown on the photo I was working from, although none is supplied with the kit, so I made one up from a 1mm strip of nickel-silver and a rectangle of stainless steel mesh cut from the burner of an old gas boiler I had scrapped at some time. The mesh was superglued into the rectangle and the whole lot was invisibly soldered to the tank inlet filler as I thought that tank brackets would be beyond me and near invisible.

On the subject of mesh and scrap materials, some useful mesh can be had from kettles, tumbledriers and washing machines; also Tamiya car kits have some very nice fine plastic woven mesh supplied for their radiator grilles – more than enough for the car, so some left for us.

Although not completed the views shown are of a very fine model worth all the effort and a credit to the designer and manufacturer. I hoped that I could now paint it to a standard that would enhance the fine detail.

The first job is cleaning. Many articles in the model press suggest the use of Cillit Bang, which seems to work very well as it has a high pH and cuts through the grease left by handling. Once clean I go through the usual rigors of refitting the bits I have knocked off whilst scrubbing. As the wheels were pre-painted earlier, I gave them a coat of Maskol followed by an all-over coat of grey car primer and then a good look at the surface of the model to see if there were any blemishes that needed to be filled or removed.

When satisfied I gave the tank a coat of Humbrol Metalcote 'polished steel' and after about 15 minutes this was buffed with a soft to medium nylon cup brush in the mini drill.

The following day I mixed some rust/track colour with some Metalcote 'gunmetal' and airbrushed this over the underframe and onto the underside of the tank. This mix is very dark, but is OK as the works finish on the underframe was black. Next some light rust colour was applied over the solebars and

Above left: the model with missing inlet valve replaced.

Above: milk tank attached as tail traffic to auto working.

brake gear. I then applied the nylon cup brush to the underframe very lightly, just enough to touch the raised detail. This gives some highlights and shows up the detail which is lost in the gloom if the area is all the same colour. The paint on the tank is still quite soft at this stage so I used a brass suede brush on it in random strokes to distress the surface to look like where the fill hoses had been dragged across it over the years.

The end frames were hand-painted a dark dirty metallic colour to contrast with the tank filth. Finally the raised areas were very subtly dry-brushed with a very dirty white. After all this work had been done I bought myself a resistance soldering unit and as I was desperate to use it in anger I made the Express Dairy nameplates for the tank sides from Scale Link letters on a backing of 15 thou nickel silver. The letters are only about 1mm high, but the RSU makes easy work of the soldering. Even though I say it myself, they make the model come alive and really finish it off.

So what are my conclusions about the kit? Well I think that it is very fiddly but has immense detail, and what can be seen when completed is of high quality. I am particularly keen on the way the tank straps fix through prototypical fixings on the solebars, and rivet detail and the springs and axleboxes are excellent.

If I had to find any fault with the appearance, it would be that the solebars are a little on the shallow side, but this is nitpicking when you look at the rest of the model. By the way, the lost inlet valve was found by my wife, after I had made a new one, and just before I painted the model.

The Falcon Brass model has flat etched ladders and if built with the brake gear supplied will look very undernourished in the brake department. The fine tank strap fixings are not present, but it comes out as a good overall model with a little extra work.

All the processes and methods used are borrowed from modellers who have written in the model press over the last 40 years and I lay no claim to any originality, for all of those ideas. I thank them very much.



...an exchange of railway modelling ideas for beginners of all ages

Thomas's railway

On from the basic oval in 00

NICHOLAS GRAHAM has incorporated working road vehicles into a well-known scenario.

The Thomas referred to in the title of this piece is not a cheeky tank engine from a well-known island railway just off the coast of the Lake District, but in fact my now 12-year old son.

Of course, all right-minded fathers are only too willing for their son-and-heir to have a 'train set' and thus it was with Thomas – by three years old he was already the proud owner of a basic oval, with passing loop and siding, occupying a fold-away 4' x 4' board.

Thomas loved that railway but, as the siding became sidings, bulging at the seams with the likes of *Flying Scotsman* and *Britannia*, it became clear that he had outgrown it somewhat and something a little more elaborate was required.

I had in mind a portable layout with exhibition potential from the outset but the final format was crystallised by a chance comment from my good friend Andrew Burchell (of *Whitburn Corporation Tramways* fame) who observed that 'you don't tend to see many main line 'Thomas' layouts at exhibitions'.

That was all the inspiration I needed! The concept was perfect. There would be room for a certain 0-6-0T on his branch line and the opportunity for those larger engines from the 'other railway' (that Thomas really wanted) to speed round the main line. Plenty to keep Thomas satisfied and almost limitless entertainment potential for exhibitions.

Design inspirations

At this stage I have to make a confession. The original 'Thomas' books were an integral part of my upbringing and I still retain a soft spot for the original stories. To my young eyes, 'Thomas' was not necessarily the 'star'; the adventures of 'Gordon', 'James' and 'Edward' were just as exciting. I also felt that, despite the fantasy world, there was at its heart a real enough railway, working to normal operational rules. How much of this could I incorporate in the new layout?

Somehow, the whole essence of the stories was captured by the 'Junction Station', those idyllic colour illustrations with 'Thomas' waiting impatiently at the branch platform for



those bothersome main line engines which always seemed to be late. When they finally arrived there would be a few 'exchanges' and 'Thomas' would puff off importantly into the distance, a tunnel mouth never seeming far away.

And so it was that the junction station became an integral part of the design, where main line and branch line would meet.

Other 'Thomas' features to be included were the 'main line' station (round the other side) with the curves for continuous running hidden from view to create the illusion of a terminus, complete with suitably grand overall roof as per the books! An ample loco depot, taken from the pictures seen in book No.1, carriage sidings, goods yard and a harbour siding for the *Flying Kipper* vans would complete the facilities.

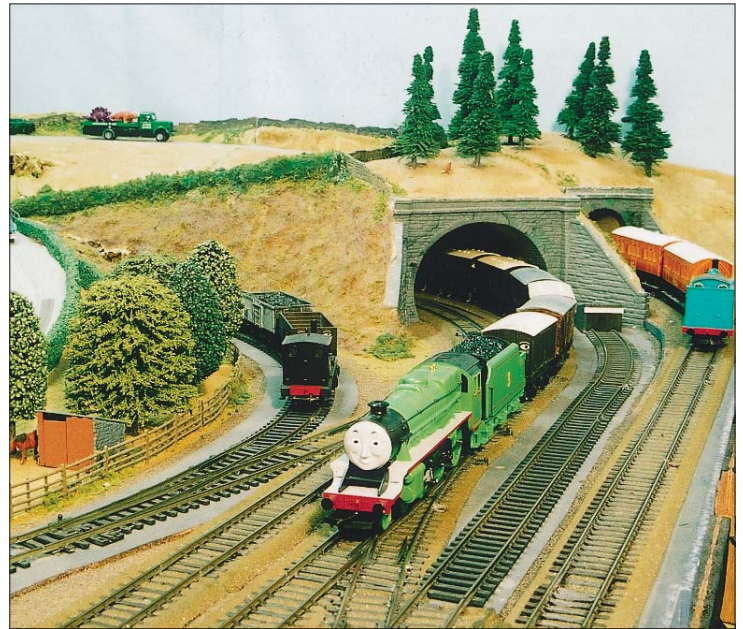
On the 'scenic' side, 'Thomas's branch line could be made to climb round the layout in a lazy S-shape, so as to keep clear of the main line station – this also meant that virtually the whole of the branch could be seen from the principal viewing side. Along the way would

be a tunnel (remember him getting stuck in the snow drift?) overlooked by Mrs Kyndley's cottage, an intermediate halt with level crossing gates and finally the branch line terminus at the left-hand end of the layout at a higher level, conveniently hiding the sharp curves of the main line. Meanwhile, there would be just enough room to squeeze in a quarry branch for the troublesome trucks.

However, it was the final Thomas 'touch' that has become almost the dominant feature of the layout. The inspiration was the story of the race between 'Thomas' and 'Bertie'. Remember? 'Thomas' only won because his railway went through the hill whereas 'Bertie' had to climb over it. I sucked on my pencil and sketched some more.

Above: a general view of the Junction station side of the layout. The switch-back nature of the road can clearly be seen from this viewpoint. The 'Dyno Saws' (groan!) lorry is purely for audience entertainment, although one knowledgeable visitor did identify the cab as a Bedford!

Photographs by the author.



Left: view of the Junction station from the tunnel mouth. The collection of station and roadside buildings is enough to suggest a nearby small town, although careful work has been necessary to emphasize the separation from the branch line above. 'James' is in charge of the tar train (hopefully he will not come to a sticky end on this occasion). The branch line connection (in the shape of 'Daisy') is kept waiting again; locos from the 'other railway' are in charge of the main line passenger service.

Above: 'Henry' and the 'Flying Kipper' head out of the tunnel and approach the Junction station as a rake of 'troublesome trucks' is brought out of the quarry. Meanwhile 'Thomas' nears the end of yet another journey down the branch. The trees on the hillside behind are home to a group of squirrels, the presence of which has attracted the attentions of a fox.

The hill would be at the right-hand end of the layout, thus hiding the curves at that side. and the branch line would therefore go through a genuine tunnel whilst the road would wind its way, via a couple of hair-pin bends, over the top. That should slow 'Bertie' down a bit. And then the fatal thought. Are we actually going to be able to make this road 'go'?

Andrew had done just that on his tramway layout via a clever adaptation of the Faller Car System. I just had to do the same on *Thomas's Railway!* Somehow, a 'double track' road would not be right so a scheme for a single vehicle width road was overlaid on the railway

track plan. Room had to be found for reversing loops at both ends, with a couple of 'passing loops' along the way to enable more than one vehicle to be on the system at a time. And the final 'pièce de résistance' – the level crossing was to have working gates!

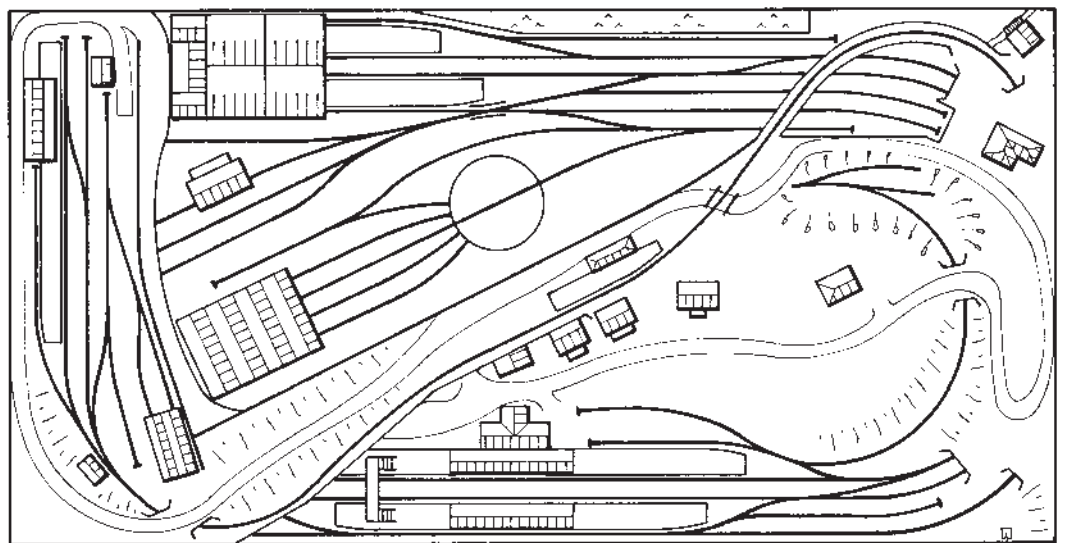
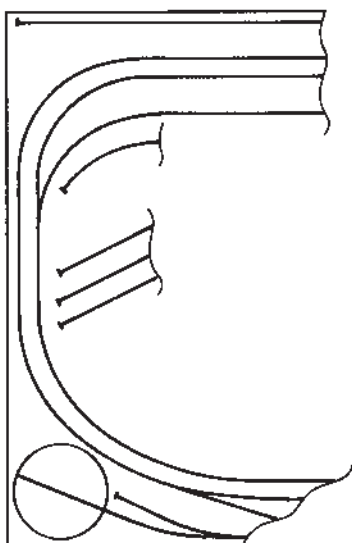
Construction details

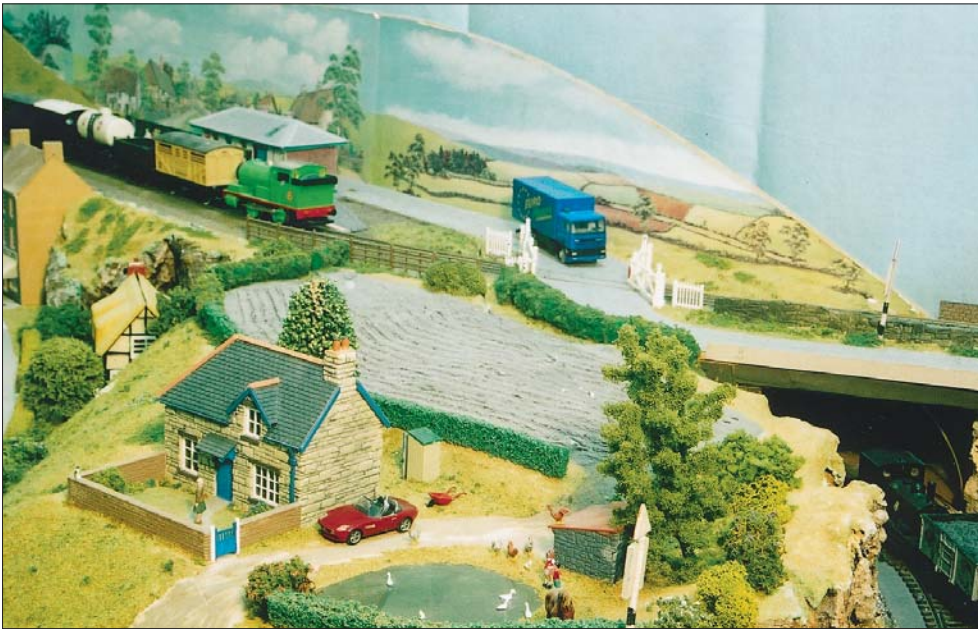
The first sketch for the layout envisaged a total size of 8' x 4' but when I came to draw it out in more detail, it became clear that this would not be big enough to accommodate the planned four-coach express trains. The final size was therefore fixed at 10' x 5' (or, as I drew it out on 2mm square graph paper, 3m x

1.5m!). This comprises six separate boards for the basic oval, plus two higher level boards for the upper sections of the branch line.

Construction was based on frameworks of 2" x 1" with 6mm ply for the track beds; the road runs on 4mm MDF 2" x 2" folding legs are built into each board, with a viewing height of 21", set deliberately low for junior viewing.

Trackwork is a mixture of Peco Setrack and Streamline, with foam underlay used for all running lines. Electric control is as simple as can be, with a faithful H&M Duette at the main line station and a more contemporary but just as impressive Gaugemaster Series D twin panel controller at the Junction station. A





ture. Once dry, some have a few select dabs of paint applied to represent those in flower.

Buildings and structures are a mix of mainly proprietary items. The accompanying table gives an idea of the items used.

The only scratchbuilt item of note is the four-road engine shed at the main line station where I copied the style of the shed in the original 'Thomas' books – the very same building from where the sad face of 'Edward' peers out at the start the very first story! Otherwise, the careful juxtaposition of the above buildings is perfectly adequate – in fact quite deliberately 'twee' in an attempt to capture the 'too good to be true' look.

The cast list

Most of the usual suspects are present in the loco stud – see table – but not all from predictable sources.

Without any prompting, Thomas developed a penchant early on for Eastern Region locos and engines from the 'other railway' therefore tend to have an LNER bias. Amongst the regulars are a Hornby *Flying Scotsman*, which did appear in one of the books, a Bachmann A1 which miraculously manages to make it round the 1st radius Setrack curves, Bachmann V2, Bachmann V3 tank, and a Replica B1. Perhaps, therefore, Sodor is an extension of Lindisfarne, the 'other railway' is the ECML and London is Kings Cross after all.

Rolling stock is almost exclusively Hornby, with various bespoke 'Thomas' items. On account of the engines from the 'other railway' having an LNER bias, the 'express' set is formed up of Gresley teaks, which is strangely fitting for 'Gordon'.

Operationally, there is a timetable, partly to prevent aimless running at exhibitions (I hate seeing the same train going round in the same direction all day) and partly to cycle round some trains from the actual stories. So 'Henry' is diagrammed to appear on the *Flying Kipper* and Gordon pulls the Express apart from one occasion where 'Edward' and 'James' – prototypically(!) – doublehead.

The basic idea is that trains depart from the main station in a clockwise direction and, after a few circuits to represent a run, arrive in the loop line platform at the Junction station. The engine from the previous train (having visited the hidden turntable) is then waiting in the engine spur to haul the train back, in an anti-clockwise direction. Once arrived back at the main station, the engine retires to the shed and it may be some time before it re-appears again.

The branch line trains also use the back platform at the junction station, alternating between main line arrival/departures. Additionally, the sidings and the quarry branch

Above: view of the farm, with the branch line behind. Business must be good judging by the farmer's choice of motor vehicle. The Wills Craftsman farm building has been modified slightly (roof lowered) to prevent it overpowering the scene. The bush by the entrance is flowering in pink (see text) and the duckpond, ducks and chickens complete an unashamedly 'twee' scene.

<i>Main line station</i>	Peco platforms, Superquick main building modified for location, Hornby station roof, Hornby footbridge (modified), Hornby goods shed, Dapol turntable, Faller water mill (with motorised wheel!) at the 'country end'.
<i>Junction station/village</i>	Peco platforms, Superquick 'country station' and platform buildings, Dapol footbridge, Dapol garage, Faller cafe (with flashing 'Planet Pizza' sign!), Airfix thatched cottage, Wills 'Craftsman' farmhouse (modified)
<i>Branch line terminus</i>	Hornby station building and platforms, Dapol engine shed (two kits made into a two-road shed), Wills signalbox, Wills goods shed.

Gaugemaster Combi suffices at the branch line terminus. Section and dead-end switches are provided where required; otherwise current feed is achieved direct from the point switching.

Scenery is chicken wire on plywood formers, covered with Modroc. A filler mix, with

some PVA glue and powder paint added, is spread on top, following which the usual scatter mixes are applied. A selection of ready-made trees has been used, including some grouped as an orchard and others as a suggestion of a forest. Bushes are lichen sprigs, dipped in PVA glue and then flock to add tex-

No.1 <i>Thomas</i>	Standard Hornby item (the second Thomas we've had – the first one got dropped a few too many times).
No.2 <i>Edward</i>	A rarity on a Thomas layout, this one is a Triang L1 loco, coupled to a resin GC tender kit of uncertain origin! A classic 'scrapbox' combination but, painted up with a Milliput face, he's a real crowd-pleaser.
No.3 <i>Henry</i>	Standard Hornby item.
No.4 <i>Gordon</i>	Triang <i>Flying Scotsman</i> loco, coupled to a 'King Arthur' tender, repainted with Milliput face.
No.5 <i>James</i>	Standard Hornby item.
No.6 <i>Percy</i>	Standard Hornby item.
No.7 <i>Toby</i>	Nu-cast kit (J70) body on old DMU power bogie with Milliput face. The Hornby model has come out subsequently but is too tall for the tunnels and bridges!
No.8 <i>Duck</i>	Triang body on standard Hornby 0-6-0T chassis (from the first Thomas!).
No.11 <i>Oliver Ben</i>	Re-chassised Airfix with Milliput face. The Quarry loco; standard Hornby item. Like the Hornby <i>Toby</i> the loco is over-scale and consequently won't fit down the quarry! With some judicious filing of buffer beams and cylinder on one side it can be made to clear platform edges and works the branch instead. I am therefore on the lookout for a <i>Mavis</i> (Bachmann 03); meanwhile a Dapol 'Pug' shunts the quarry...
<i>Diesel</i>	Triang Class 08, painted black with Milliput face.
<i>Boco</i>	Hornby-Dublo Co-Bo with Milliput face.
<i>Daisy</i>	A real favourite! A Triang two-car Met-Camm (Class 101) DMU with the two bodies made into one (and Milliput face!). It was acquired already fitted with a replacement (and superior) power bogie. Picks up off all eight-wheels and consequently runs quietly and smoothly.



Above: the climax of the race between 'Thomas' and 'Bertie'. The gates are just changing in favour of rail as 'Thomas' approaches, activating the stop magnet under the road surface which will halt the progress of 'Bertie'. Beaten again!

Above right: the earlier incarnation of the 'Thomas' and 'Bertie' race along the upper stretches of the branch line. Two local children wave encouragement to 'Thomas'. The convincing ground cover on the hillside beyond was applied using the techniques in the RM supplement *Railway Modelling Explored, No.8 – Scenery & Buildings*.

provide opportunities to interchange the goods wagons a bit. The junction station operator has to have his wits about him!

Road system

For most of its length, the road is just a single track width, with the one central steel guide-wire directly beneath the surface of thin grey card (150g/m²) from an art shop. However, several features provide interest and the flexibility to run multiple vehicles.

At the junction station is the lower level return loop. Associated with this is a 'point' to let a vehicle (usually 'Bertie'!) pull in alongside the station and stop whilst other vehicles effectively overtake.

Next is the level crossing, operated via a Tortoise slow-action motor. The switch contacts on the motor activate a pair of stop mag-

nets under the road surface either side of the crossing, thus preventing a vehicle crashing into the gates; likewise, the stretch of track over the crossing is isolated when the gates are set for the road to avoid a similar thing happening with a train.

Beyond the halfway halt, there is a passing loop (i.e. double road width) but this is not automated and relies on the skill of the operator to set the vehicles off at the right time to avoid a head-on collision!

At the high level end, where the road crosses the top of the main line station, I have used some IRDOTs in conjunction with the stop magnets to bring some much-needed automation to this stretch of the road. A vehicle approaching the stop position runs over the IRDOT which breaks the feed to the stop magnet ahead, thus releasing a vehicle held there. Once clear of the IRDOT, the magnet re-energises, just in time to catch the vehicle concerned. There are two such set-ups – one outside the station front and the other on the reversing loop under the hill. Thus, there is an automatic 'shuffle up' system whereby up to three vehicles can be in this section at the same time.

The vehicles for the road system are a stock list in their own right.

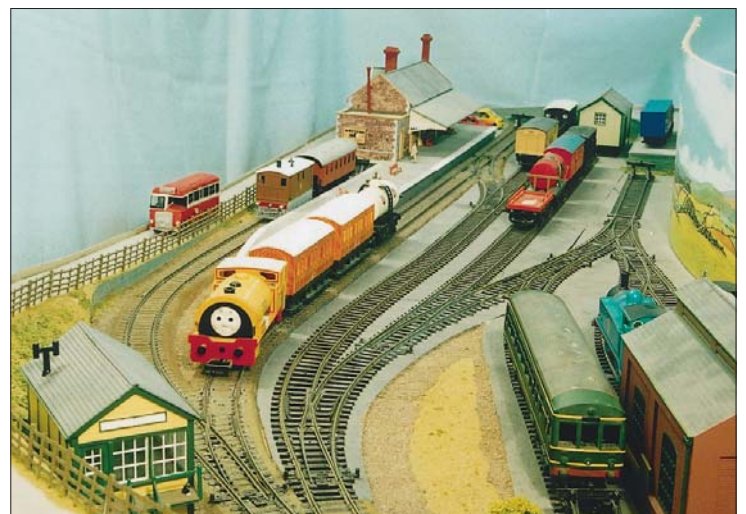
The blue 'Euro Flowers International' Lorry is basically an un-touched Faller product, the original vehicle I bought (before I'd learnt about starter sets!)

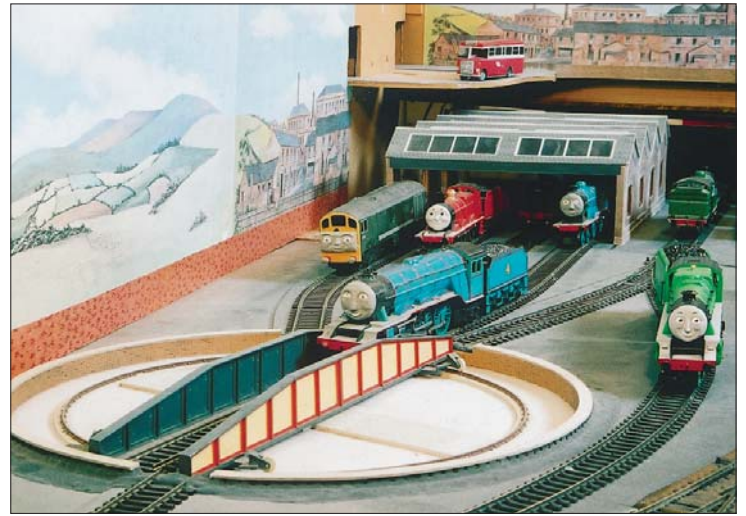
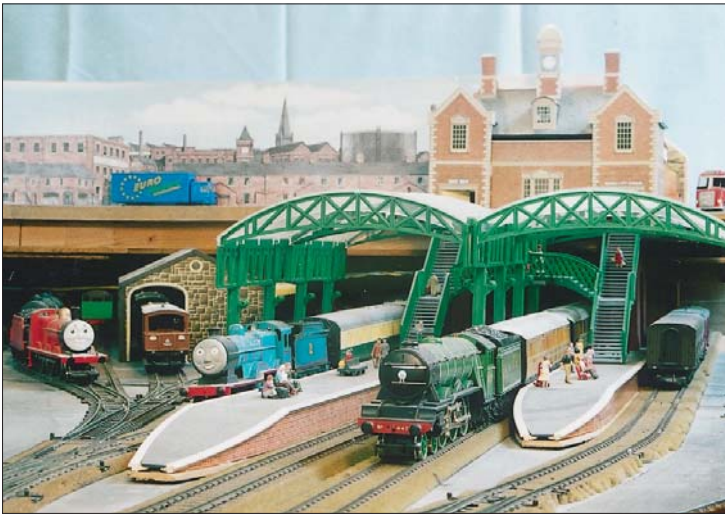
'Bertie' was purchased as a yellow post-bus in a Faller Starter set. The body was discarded and the closest-looking red single-decker from the Alphagraphix card bus range substituted. More surgery than I'd anticipated was necessary, first of all to create the half-cab front and then to accommodate the H0 scale chassis, where it was necessary to foreshorten both width and length. The resulting vehicle is the best runner of the lot (being very light helps),

Below left: the entrance to the branch terminus. The twin Dapol engine shed seemed 'right' for the location, whilst the positioning of the signalbox (Wills) was undertaken after careful thought. On the outside of the bend, giving good visibility for the signalman, it requires a retaining wall cut into the side of the road embankment to provide a base. Even with a 'fun' layout, such considerations add an air of believability to the overall railway scene.

Below: general view of the branch terminus. This is compact (just 5' in length) and Setrack points and curves predominate. However, mainly due to the over-riding use of small tank engines and 4-wheel carriages & wagons, it looks – and works – OK. A pleasant layout in its own right and a nice contrast to the more hectic world of the main line.

Right: the scene as the branch line exits the tunnel at the higher level. The water-wheel (a Faller product) contains a homemade mechanism that makes the wheel go round. The Heki tree looks quite convincing 'planted' into a scene such as this.





which is useful bearing in mind that it is required to make many appearances.

The Dino-truck is from another starter set based on a bus, although this one turned out to have a longer wheelbase than the one above which is not ideal given the tight corners involved. Off went the body, to be replaced with a metal lorry cab (from a pro-

motional model) and a plasticard back deck, with its unusual cargo attached! Always a few shrieks of delight when it appears...

The Transit van is tiny compared to the others, a real miracle of model engineering. Once again, it came in a starter set (handy things starter sets, as they each have a stop magnet as part of the contents, all of which have been

put to good use). As yet untouched, a repaint into the Scooby-Doo 'Mystery Machine' livery is a distinct possibility!

Thomas's Railway is booked to appear at the Merseyside Model Rail Exhibition in Birkenhead on October 27-29. See Societies & Clubs for full details.

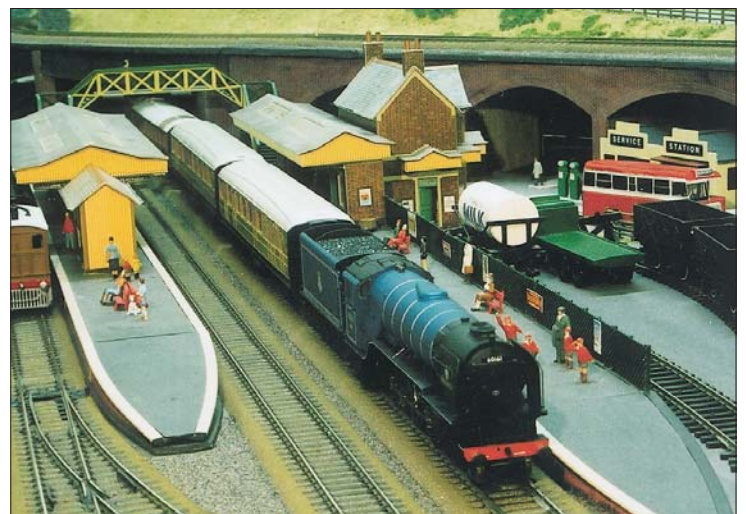


Above left: the main line station. An attempt to create the 'big station' atmosphere. Despite appearances, the tracks curve sharply behind the trains. *Flying Scotsman* heads the Express on the outer main line whilst 'Edward' waits to follow with a stopping train.

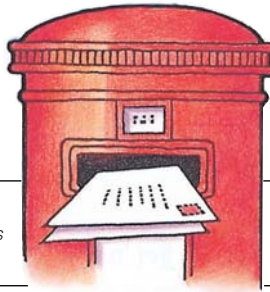
Above: loco depot at the main station. Operationally somewhere to keep a large number of locos, in keeping with the fact that all trains do actually start and terminate here. In the background can be seen the upper level reversing loop for the road system. At exhibitions, this side of the layout is not on public view and hence the scenery is not as well developed.

Below left: something rather different. Whilst 'Thomas' and friends form the basis for the railway, it works just as well with 'proper' trains. A DJH small-boilered Atlantic, portrayed in original (un-superheated) GNR form, takes centre stage.

Below: another virtually 'non-Thomas' scene as a Bachmann *North British* thunders through at the head of the teak express rake – a just possible combination in the early lives of the A1s (c.1949).



READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

KNOTTS WHARF

Thank you very much for the impressive way you displayed the photographs in my article in RM August 2006. A far cry from the rectangular black and white ones in my RM January 1970 article on *Harlyn Junction*. Definitely a progression in technique for the better.

To set the record straight, the photographs were all taken by me and not by son Jeffrey. I apologise for not having made this clear in my correspondence with the editorial office. I also note that in some of the captions I stated that 'figures in the distance can be clearly seen'. This, in itself is not unusual. What I should have said is that 'detail' on figures in the distance can be clearly seen. This, I think, is unusual but I admit I am biased on this score.

BRIAN FAYLE

LOCO LAMPS

Regarding the article in the July issue by Andrew Sharples, I decided to write about moveable lamps. Although Mr H.V. Astin's drilled lamps (September issue) are a splendid idea, I thought I had better write about my method, as some modellers do not have very fine drills, or the expertise or confidence to use them.

My father and I have a large collection of locomotives and lamps and required a simple method of attaching lamps quickly. The method we chose is simple – we put some Pritt Stick glue on the bases of the lamps (and backs for smokeboxes and stock ends) and stuck them on. Simple as that!

The glue is fairly strong and is water-soluble so when the lamp is removed a dab of water will remove any residual glue.

I hope this provides some help and enlightenment; thanks for the excellent magazine.

JAMES JOHNSON

WEST MIDLAND MEMORIES

It was refreshing to read the contributions from Messrs. Simpson (RM May) and Newbon (July).

The Rev. Edward Beal was a great pioneer in the promotion and development of the smaller scales in the 1930s. He wrote extensively from the inception of the *Model Railway News* which first appeared in 1925. In the 1930s hardly an edition went by without a contribution from him, well-illustrated by scale drawings and pen-and-ink sketches. Although Mr. Beal's calling in life was that of a Minister of the Kirk one feels he must have had artistic and draughtsmanship training in his youth. Indeed, it is understood he came from a family building firm, whence, perhaps, came his knowledge of architectural methods and proportions.

In those halcyon days some numbers of the *MRN* were almost written by Mr. Beal alone, so much so that he adopted a number of *nomms-de-plume*: Abel Deward, E.H., The Padre, The Works Manager, Father and, of course, Teddy.

The present writer is fortunate to have the *MRN* from 1925 to 1940 and it is easy to spot a Beal article from the drawings alone, so characteristic are they.

Some modellers tend to be dismissive of Mr. Beal's work regarding it as theoretical. Certainly he did things on a grand scale. His layout designs usually required generous areas. One in the *Craft of Modelling Railways* (1937), described as for a small space, measures 18' x 8' no less! In the mid-1930s, a time of economic hardship for many, those fortunate enough to have sufficient disposable income to indulge in the hobby of model railways almost certainly lived in accommodation liable to have the sort of space he envisaged. The exquisitely-modelled branch line and the device of hidden sidings had not really become current in his time. Even so, he much admired the work of John Ahern, using pictures of J.H.A.'s layout in some of his books.

West Midland trains ran on a number of layouts. In the writer's view the joining of *West Midland No.3* to *WMMR No.2* across a 9' landing was, for all its faults, the jolliest. The headquarters station of the *WMMR* was always at

Laurenceton (not named after the writer, he hastens to add.) and at one stage enabled the use of lithograph coach sheets for LMS and LNER to be used for the Laurenceton, Methven & Southern (as mentioned by Mr. Newbon) and the Laurenceton & New Elms companies which ran on layouts 2 and 3 mentioned above.

The grandest *WMMR* must have been the one at Kilspindie Manse near Errol in Perthshire, to which place Mr. Beal moved just after the war. Here the system had its tracks laid round a space of 32' x 17' and was the first 2-rail layout, all the preceding ones being outside third rail. This system had a book all to itself, *West Midland*, published by Percival Marshall in 1952.

Mr. Beal enthusiastically followed developments in the smaller scales and thus embraced TT gauge when it came about; he wrote about a *West Midland* in this scale in the *MRN*. This was a sizeable layout built in his accommodation in Edinburgh. Among other features it had an imposing locomotive depot, as did all the previous *West Midlands*.

Below: in the reviews pages we feature the latest Bachmann Class 57 with the Dellner coupler fitment. Thanks to our (properly certified) contributor Phil Caley we present here some closeups of the real things, in the deployed (left) and retracted positions.

Photographs: Phil Caley.



He would surely have revelled in N gauge with its possibilities and been equally delighted with the wonderfully-detailed proprietary models of today both in 00 and N gauges.

Like Mr. Newbon, the writer has enjoyed, in the past, making up buildings from Edward Beal's designs, all of which have ended up on other folks' layouts. One particular favourite was a copy of the impressive station building situated at Laurenceton on the last 00 layout at Kilspindie Manse. I made the mistake of setting my model aside on a shelf in the garage, where my layout then was, whilst thought was given to its positioning. It was admired by a visiting tradesman and my mother, thinking I had no further use for it, gave it to this caller. A new version was started a few years ago, but other demands on time have so far prevented its completion.

Much more could be said of Edward Beal and his model work. One day, when the history of the first fifty years of small-scale modelling comes to be written, Teddy's work must surely form a substantial part and deservedly so.

H. LAURENCE CUMMINGS

EXHIBITION SIGNAGE

I have been visiting model railway exhibitions for nearly 50 years and been involved with running them for 41 years. I have been part of the team running the Porthmadog Model Railway Exhibition over the past eight years but this is being written as a private individual.

In the last few years Gwynedd Council has insisted on the exhibition I am involved with producing a Safety Policy and, more recently, a Risk Assessment. Now I am told, although I have no details, that nationally there will be a Fire Risk Assessment.

None of this compares with the latest ruling that has hit us, and others. We have never had any trouble displaying signs to promote and direct people to our show. However we heard

that we would need Planning Permission so we wrote to the Planning Department and were immediately given permission for temporary signs with copies of our letter and the permission forwarded to the Highways Department.

We went ahead and placed our signs in the full knowledge that we had completed our legal obligations. However I noticed one sign that we had put up had been removed on the following morning. I immediately went to the police to check that they had not removed it and to report the theft. On the former I understood they were not concerned but they made enquiries and suggested we contacted Planning so I checked with them. I found out that they knew nothing about it.

My enquiries lead me to a delightfully named Highways Enforcement Officer. I spent much of the day arguing about this to find out that Planning could not give permission (this interested the Planning Department), that no one was allowed to put up signs (so what about all the signs directing people to particular events put up by the Council, the AA and the RAC?) amongst other things. I did receive a promise that the signs would be returned to us the next morning first thing. Of course they were not!

I rang up again and this time spoke to a different Officer who said he could not deliver the signs. I then asked what authority he had to remove the signs and got the reply that he had the necessary authority. I promptly replied that was not what I had asked and repeated the question. I got a very angry response.

I am writing letters to our two local papers and we have two local County Council members (one is Chairman of Porthmadog Council) raising the matter. I would like to urge all model railway clubs who run exhibitions and the Associations of Model Railway Clubs to get their councillors to raise the matter with their Highways Departments and not to take no for an answer.

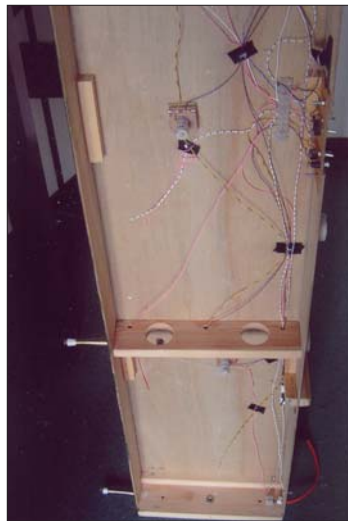
PAUL TOWERS

MATTERS ARISING

The August issue was absorbing reading as always, with several items particularly catching my eye.

A Baseboard Variation – yes Robin, I am quite sure you will find 6mm ply more than adequate; with a theory that, as a result of sheer logistics, the care a baseboard receives in handling is in inverse proportion to its weight. I have successfully used 4mm ply.

However, I also believe that railway modellers should stand on their own two feet and not lean against the nearest available baseboard while additionally preferring to discourage the 'laying on of hands' on the edges thereof and wearing out the scenic scatter. The vertical front edge beam is 100mm high and the rear is also carried up to form the backscene some 300mm tall with a deck about 350mm wide. End blocks are 25mm x 100mm planed softwood to take alignment dowels and bolt fastenings. 1.9m in from the ends are two cross-members of 25mm x 75mm planed, the latter drilled with a couple of about 38mm holes each as hand-holds for easy carrying (plus cable holes). Also a couple of ex-25mm square vertical stiffeners behind the backboard. Very light, ade-



quately stiff and easily manoeuvred single-handed.

A 6'4"-long board held vertically just goes through a 6'6" door (provided the carpet pile is not too luxurious). A photo of the board is enclosed.

BEC SR Class 700, letter from Martin James – not only do I still run one of these complete with Triang chassis plus Stephen Poole wheels (the 'crew' does its best to disguise the whopping big magnet in the cab) but I have another, unmade kit somewhere stashed away and a spare Triang chassis. The picture of 697, without crew, was taken when *Curyford* was under construction.



Southern Rolling Stock – could I hopefully try to persuade the gentleman who feels he could not succeed at kit-building to have a go, starting with perhaps an easy wagon, unless physically unable.

From those days before kits, or much else for that matter, as a teenager I built coach bodies from balsa wood, but admittedly standards and expectations are massively higher now and kits far more intimidatingly complex. It's a shame Kirk's Southern coach kits are no longer available, as they were good representations at a reasonable price and reasonably simple to construct.

DAVID CURTIS

Editor's note. Our apologies to Robin Baker for inadvertently printing his diagram inverted, and to readers who thus were confused!

IN THE WORDS OF 'SUPERMAC'...

Enclosed a photo (above) entitled 'weneveraditsogood', and as railway modellers, quite simply we haven't!

The image was taken on a small corner of my embryonic layout *Albion Yard*, which has been built as my young children have grown up, therefore it has had to rely on quality items that either go together well, or need no or very little work to bring them to my chosen 'standard'. This involved a switch back from EM.

The WD 2-8-0 is a straight from the box Bachmann WR variant. I've spent a little time weathering it, about two hours all told if that! This is set on a headshunt on the layout on Peco finescale track.

Within many of the internet forums I see, there are many critics of today's releases, and some criticism is indeed valid. My concern is that it frequently becomes very negative, and rarely do the critics show items they have either built or corrected, as some errors can be resolved with little effort, but with a little time. Surely this would be a more constructive way forward.

Today's manufacturers have come a significant way in the past 20 years, and as modellers we should appreciate that more; I certainly do.

PAUL MARSHALL-POTTER

MODEL RAILWAY TIMETABLE

I wondered whether you could find a little space to mention MRTT (Model Railway TimeTable), a computer program designed especially for use at Model Railway exhibitions to keep the public informed about what's happening on the model railway. The program shows trains and information (pictures or text) and can be clock-driven or advanced by the operator.

Full details are on the website:

<http://homepage.nflworld.com/mrtt.support> from where a trial version of the software can also be downloaded.

I would add that this is not a commercial enterprise – I am a pensioned-off 68 year-old IT professional with interests including railway modelling (N gauge) and playing with computers – since 1965!

GRAHAM DEAN

SCUNTHORPE, AND PITT LANE

RAILWAY MODELLER is rarely less than a cover to cover read for me but two articles in the June edition were of particular interest. These were *Wintringham Haven* and *Pitt Lane*.

Wintringham Haven revived memories of a very interesting period between late 1972 and early 1976 when I was based at Scunthorpe with British Rail. I am sure that the rail traffic situation was very different to that chosen as the background for *Wintringham Haven* but some comments might be of interest to your readers.

It must be remembered that, at that time, there were three fully functioning steelworks at Scunthorpe with the

Anchor project starting to come into production. If my memory is correct these plants produced about 20% of total steel output in the UK. Most all of the inputs and I think about 80% of the output were railborne.

Rail operations were still very much on the historical pattern which is well described in *Steam and Steel; an illustrated history of Scunthorpe's railways* (Longbone, Irwell Press 1996). Unless there was a lull in production the yards operated more or less continuously. The most significant change came with the commissioning of the Santon Foreign Ore Terminal. Iron ore was imported through a new terminal at Immingham and was moved in block loads of 21 rotary-coupled 100-ton tippler wagons powered by pairs of Class 37 locomotives. Once stocks had been built up the procurement of ironstone from the High Dyke area ceased and the operation of trains of fitted tippers powered by Class 47 locos, with Grantham crews came to an end.

The other principal incoming traffic was coking coal – known as slack – mainly from Yorkshire collieries in loose-coupled mineral wagons supplemented by coal from Kent which was loaded in a combination of fitted and unfitted wagons. Power for coal trips originating from Scunthorpe was provided by Class 31s whilst incoming loads from the Sheffield division were frequently powered by pairs of Class 25s which were known to us as spin dryers! Incoming loaded trains from the west generally required assistance up the bank from Gunhouse Junction to Scunthorpe and this was provided by single Class 20.

The outbound products were billets, plate, rod in coil and heavy sections. Wagons were bogie bolsters C, D and E for billets and sections – with over-length loads of sections requiring runners which were old plate wagons minus their sides and ends. Plate was loaded in plate wagons, boplates and a selection of trestle wagons for over-width loads. Rod in coil was mainly carried on converted highfits which had had their sides and ends removed and replaced by simple longitudinal cradles which allowed two rows of coils to be loaded.

Terry Tasker's article on *Pitt Lane* struck a chord with me not just for the quality of his work but also for the words 'just in case one day I might have the opportunity, skill and confidence to build a model'. I find myself in just this category having had the good fortune to acquire a reasonable quantity of track and rolling stock – not very common commodities in Zimbabwe – and now having a fair amount of time available. Not being a great handyman I can only admit to limited skills and confidence, particularly when one sees models of such high quality each month, but I would like to think that *Pitt Lane* and its builder have given me sufficient impetus to start on a model of my own. I hope so!

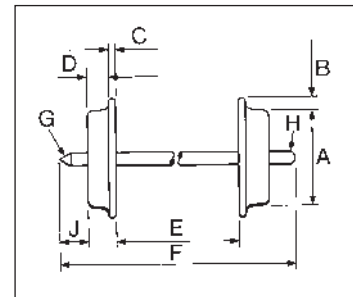
If any of your readers would like to contact me about the railways of Scunthorpe and the surrounding area it would be best to use email. My address: biffy@samara.co.zw

DAVID CRUTTENDEN

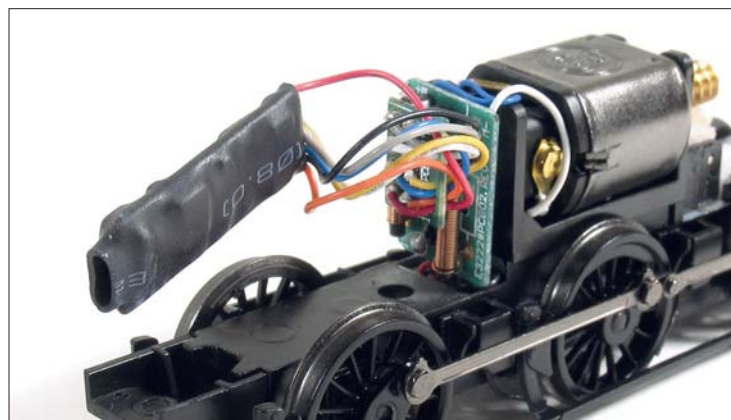
Sadly we have had to abridge Mr Cruttenden's lengthy letter concerning rail operations at Scunthorpe for reasons of space – Ed.

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DCC On Board – decoder-fitted ‘Jinty’ in 00 from Bachmann



Recent years have seen the major players in the UK-outline field add sockets for digital command control decoders for those who wish to pursue this method of control. Bachmann has taken the next logical step first: factory-fitting a decoder in a British outline model, namely ‘Jinty’ 0-6-0T No.47629 in BR late-crest finish.

It is important to stress that this machine will – and does – operate perfectly satisfactorily on standard 12V DC. In comparison with non-decoder fitted sister No.47279 there was no dis-

cernible difference in performance. The only real difference is in price: the DCC 3F is £9.00 dearer.

The decoder is a compact sleeved unit measuring 28mm x 10mm x 5mm in shade under 5mm thick, and is concealed in the forward section of the boiler and the smokebox. DC ‘Jinties’ have a semicircular weight in this part of the model, and although the decoder can fit in the remaining space above it, the DCC chassis cannot be fitted to a ‘DC’ body without alteration. (The ‘DCC’ body is notched slightly to

allow the NEM652 socket and plug to fit, and Bachmann has removed the weight. The DCC model thus weighs 180g, the DC version 200g.) The decoder is set to the default address of 03, and when placed on the programming track can be renumbered to the address of the purchaser’s choice.

Over the coming months Bachmann intends to add factory-fitted DCC to representatives of other prototypes including ex-Great Western classes 56xx 0-6-2T and 8750 0-6-0PT, BR Standard Class 4 2-6-4T, and

diesels of classes 37 and 57.

For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC, Moat Way,
Barwell, Leicestershire LE9 8EY

PRICE
ref.32-255DC, £62.25.

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Latest Hornby ‘Princess Coronation’, in lined maroon



The newest Stanier Pacific to be represented by the Hornby model is 46248 *City of Leeds* in late-period maroon livery (ref.R2552, £105.00).

The actual locomotive was built, as a streamliner, in autumn 1943: she was the last Stanier Pacific to be built thus. She was finished in the sombre wartime black, one of three black liveries in which she appeared (post-war

LMS, once de-streamlined, and BR experimental were the other two). By the time BR took her over she was a Crewe North machine, indeed one of the best 4-6-2s at 5A.

In time she received a fully-cylindrical smokebox and the revival maroon, with LMS-type lining, as per the Hornby model. Withdrawn in early September 1964, she was towed off to

Cashmore’s yard at Great Bridge, Tipton, for scrapping.

The Hornby model represents the machine in late 1950s condition onwards, with well-applied maroon with neat LMS-type lining. Naturally the small smokebox door shedplate reads 5A. The model carries an AWS battery box and front coupler protection plate, fitted to the real thing around 1960. The

speedo drive fitted to several iterations of Stanier Pacifics is present here: take care detaching it before accessing the interior, perhaps to add the digital command control decoder of the purchaser’s choice to the on-board NEM652 8-pole dual inline socket. Full guidance on removing the speedo drive and advice on decoder installation are provided with the model. Sleeving to be used around a decoder is provided, as is usual Hornby practice these days.

The tender, correctly, is of the ex-streamlined type: 6248 exchanged hers with sister No.6247 *City of Liverpool* in 1944 and remained with that loco’s tender for life.

For 00

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE in text

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

BR Class 9F No.92220 *Evening Star* in 00 from Bachmann

A sample is to hand of the Bachmann 9F representing the final steam locomotive to be built for British Railways, No.92220 *Evening Star*.

Swindon Works staged the ceremony, on Friday 18 March 1960, where the nameplates and commemorative plaques were unveiled on the newly-completed 2-10-0. Resplendent in lined green livery, the machine was displayed in concert with older types such as *City of Truro*, and the then-modern diesel D818 *Glory*. In his speech, BTC Western Area Board Chairman R.F. Hanks acknowledged that the BR Standard locomotive was not of the GW bloodline, but nevertheless Swindon staff had done their best to make up for that by 'dollying her up in good old Western colours and conferring upon her the finest honour we can – the halo or crown of Swindon, the copper top to her chimney'.

Said halo is, naturally present on the model, along with finely finished BR lined green. The blue GW-style route restriction dots are present and correct, and the pipes to the clack valves are 'coppered'. (The mass of piping around and beneath the fireman's side of the cab is black on the model, Bachmann evidently considering that it would look overscale if coppered, as on older Hornby versions of No.92220. It's easy to add this effect if the purchaser so desires.)

The nameplates and plaques are crisply printed, and etched metal examples of all are supplied with the



packaging. Also in the box, as with earlier 'Nines' are the dummy screw coupling and brake pipes for the front bufferbeam – holes for the latter are provided in it – plus footsteps and cylinder drain pipes, to be added if curvature permits.

Performance is equally good as the plain-black No.92192, which we reviewed in the August issue. At slow speed, there's something almost mesmerizing about a big ten-coupled locomotive, even 76 times smaller than the real thing.

Although *Evening Star* is now inside the National Railway Museum, its travels far and wide in preservation ensure that the model can be justified on many layouts, set from 1960 to almost contemporary times. In short, she's splendid...

For 00

SAMPLE SUPPLIED BY
Bachmann Europe PLC, Moat Way,
Barwell, Leicestershire LE9 8EY

PRICE
ref.32-850 – £112.15.

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Hornby IC225 train pack honours 'Tam the Gun'

New to the Hornby fleet of train packs is the GNER set featuring Class 91 No.91 122 *Tam the Gun* (ref.R2602, £TBA). The other components of the set are standard class Mk.IV coaches Nos.11401 and 11417, and Driving Van Trailer No.82207. The sets are a

certified limited run of 500 units. Additional coaches, in the new 'Mallard' livery, are also available – see the August issue.

'Tam the Gun' was the affectionate nickname of the late Staff Sergeant Thomas McKay MBE, who fired the One

o'Clock Gun at Edinburgh Castle for over 28 years. Before that he was a restaurant car steward on the ECML, and remained a keen rail enthusiast up until his death from bowel cancer in November 2005. To aid the charity that supports people with the disease, a

donation from all the sets sold by Harburn Hobbies will be made to Bowel Cancer UK. Contact the shop at **67 Elm Row, Leith Walk, Edinburgh EH7 4AQ**.

The first of the 500 sets was presented to Tam's widow Joyce by Simon Kohler, Marketing Manager of Hornby, at a ceremony at Edinburgh Castle on 21 August.

For 00

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE
In text

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Latest Class 50 from GF in N

The latest version of the Graham Farish Class 50 represents No.50 037 *Illustrious* in early post-refurbishment condition, i.e. rail blue but with headlight etc. (ref.371-253, £73.95).

The livery has been executed very well, with excellently-printed ship's crests. The smooth, tried and trusted drivetrain ensures performance to match the finish.

SAMPLE SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE in text

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



Dellner coupler-fitted Class 57 'Thunderbird' in OO from Bachmann

Although built without them, the Virgin fleet of Class 57 'Thunderbird' locomotives was soon fitted with Dellner couplers, in order to haul Pendolino units when traction current is switched off, or when being worked to non-electrified places (e.g. Holyhead). The couplers pivot down from the stowed position in a recess in the cab front – where the route indicator panels once were on the Class 47s.

The Bachmann model is, sensibly, non-working. The device has been modelled very well, with the hydraulic rams, brake hoses and Scharfenberg-type 'cup-and-cone' coupler face crisply represented.

The identity for this variant is No.57 307 *Lady Penelope* (ref.32-760), and the etched metal nameplates have the characteristic pink background of the prototypes. A black surround is printed



on the bodyside to allow the purchaser to position the plates correctly.

In all other respects, the model is fully up to the standard of the previous example (see RM February 06), complete with fine detail, etched metal grilles, all-wheel drive and pickup, excellent printing and first-class performance.

For OO

SAMPLE SUPPLIED BY
Bachmann Europe PLC, Moat Way,
Barwell, Leicestershire LE9 8EY

PRICE
ref.32-760, £71.00

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Hornby OO Seacows with new fleet numbers



Three extra fleet numbers have been applied to the fine new Hornby Seacow ballast hoppers, which were reviewed in full in these pages in the February issue. EWS maroon vehicles are available pristine (ref.R6286D) and weathered (refs.R6286E&F), as are Mainline (refs.R6287D-F), and 'Dutch' (refs.R6288D-F) examples.

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES each version – £19.50.

Two new three-packs of tank wagons in OO from Bachmann

Two new three-packs of tank wagons in the Bachmann fleet have been issued, representing a trio in different Shell-BP liveries (ref.37-669, £23.95), and three weathered Esso-liveried examples (ref.37-666A, £23.95).

All have riveted-type bodies: No.3971 has no access platform and straight tiebars, and it carries a neatly-printed Chas. Roberts worksplate on the solebar. Three-hole disc wheels are fitted. No.5103 carries its fleet number

on the body only, which sports an access platform and different type of filler hole and vent. It too has straight tiebars, but its BP logo lacks the double quotation marks of No.3971. It too runs on disc wheels. Finally, No.A4282

has its fleet number on ends and around the filler hole, the lid to which is again different, as is the vent. No platform is provided, and the tiebars are looped around the superstructure. Like No.5103 it carries no worksplate but does feature an LMS registration plate. This wagon runs on split-spoke wheels. Slimline tension lock couplers are fitted into NEM pockets on swivelling mounts.

All the Esso wagons are on split-spoke wheels, and comprise Nos.2184 and 2338 with straight tiebars and access ladders/platforms to the filler lids, and No.1485 with tiebars looped around the platformless lid. This has a patch of gloss black paint surrounding it, to represent spillage of cargo. (All six wagons are for transporting Class B – non-flammable – liquids.)

The subtle variations in these fine models adds spice to an already-interesting couple of three-packs for the 'traditional' era freight train.

For OO

SAMPLES SUPPLIED BY
Bachmann Europe PLC, Moat Way,
Barwell, Leicestershire LE9 8EY

PRICES
In text

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Latest Class 08 shunters in 00 from Hornby



Hornby has released another two of its high-quality EE shunters, in weathered BR blue as 08 419 (ref.R2591) and in pristine Freightliner green as 08 530 (ref.R2592). The former, a Carlisle Kingmoor loco at the turn of the 1980s, is no longer with us but '530 certainly is, earning its keep at Coatbridge 'liner terminal in Glasgow.

The two models are top-notch, as with the first versions seen (see RM August 2005), so the full details need not be repeated. Painting and finishing are first class, the diagonal green/yellow border on the Freightliner 08 being a particularly fine piece of mass-production printing. Sprung cab doors, sprung buffers and scale metal cou-

plers fore and aft are other standard features.

Brake pipes and alternative working scale couplers are in the parts bag: the scale couplers fitted to the models are glued up to prevent them impeding the movement of the tension-lock coupler in its NEM pocket on a swivelling mount.

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE £57.99ea

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Weathered Bachmann 9F in 00 commissioned by ModelZone

Sadly, as we know so well the vast majority of 9Fs did not ply their short-lived trade in sparkling lined green as did *Evening Star* – most of the time. These heavy 2-10-0s were more often

than not in the condition seen by No.92240, weathered heavily by Bachmann as an exclusive run of 504 units for ModelZone.

The ashy overall weathering has

been enhanced further by representations of scaly water dribbling from the clacks and safety valves. Note too the areas around the number and BR crest, which have been kept black as if

the real thing had been wiped clean in these parts.

Happily the real No.92240 (Crewe Works, October 1958) survives in preservation on the Bluebell Railway, where its condition would most definitely not be allowed to return to the dreadful state in which the model is expertly presented!

For 00

AVAILABLE FROM
ModelZone, Unit 31, Centrale
Shopping Centre, North End,
Croydon, Surrey CR0 1TY

PRICE
ref.32-850Z, £124.99. Please add
£5.00 for UK postage & packing,
overseas at cost.

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Hornby issues de-named Class 56 in 00

In what appears to us to be a 'first' – certainly in recent memory, Hornby has released a model of a once-named locomotive that has been returned to the ranks of un-named machines.

The locomotive in question is No.56 063, the former *Bardon Hill*, in its plain unbranded freight grey. Photographs of the real thing show that Hornby has rendered the paler area around the number exactly, and the bodyside shows perfectly the evidence of paint lifting with the nameplates as the real things were removed.

Mechanically the model is uniform with its predecessors, and runs well.

It occurs to us that Hornby could extend this concept, perhaps with its



'Merchant Navy' sans the shipping company plates, or even its eagerly-awaited rebuilt Light Pacific with a back-plate for the nameplate, but no plate itself...

For 00

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE
ref.R2576, £58.99

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Thames Trains livery Class 166 DMU in OO from Bachmann

Bachmann has issued its model of the three-car Class 166 units in Thames Trains finish. The 166 fleet is the 90mph-capable version of the erstwhile 'Network Turbos' (the Class 165s), both units being built at York just prior to the breakup of BR. Thames Trains is now part of the Greater Western franchise, operated by First.

The model represents No.166 209 in Thames condition. The complex livery is well reproduced, especially in the access door area.

The centre car is powered by a twin-flywheel transmission driving all axles. The motor is mounted centrally, driving



the axles via cardan shafts and gear towers. No DCC socket is provided, but there's ample space for a decoder. Performance is very smooth.

For OO

SAMPLE SUPPLIED BY
Bachmann Europe PLC, Moat Way,
Barwell, Leicestershire LE9 8EY

PRICE ref.31-026, £96.80

WHEEL DATA

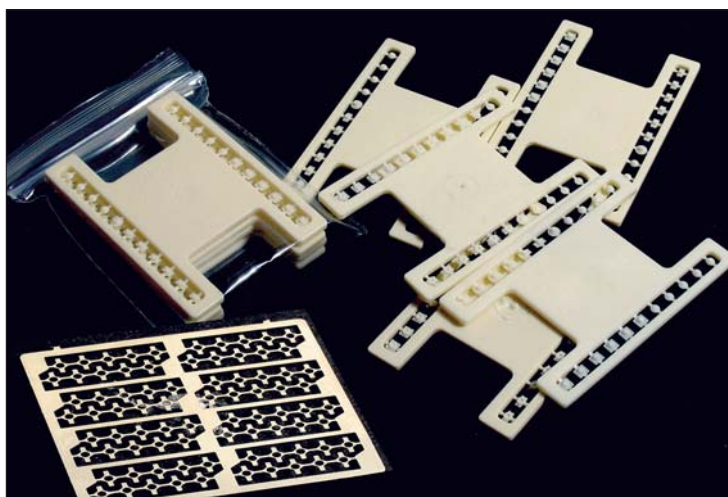
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Conductor rail equipment in 4mm scale for SR and LT modellers

The Scalefour Society has introduced a pack of conductor rail chairs for 4mm scale, which are available only to members, or visitors to Scalefour.

The components comprise crisply moulded bases and supports, plus etched metal cradles to hold the rail itself. The bases represent outside and centre London Transport types, plus Southern outside and ramp bases. Two types of support are provided, catering for LT/Southern outside, and LT centre. The etched cradles sit atop these, and directly on the ramp base for SR prototype. Full instructions are provided, which also guide the purchaser in the construction of a jig in order to fold up each cradle to the correct shape.

Each sprue contains 22 parts: three each of the LT bases (outside and centre), six SR bases and one SR ramp



base. There are three LT centre supports and six outside supports (which can be used in either an LT or SR setting). Each pack contains ten sprues, which is sufficient to cover around 2.3m of plain 3-rail track, or around half that distance for 4-rail line.

To accompany these components, scale 150lb/yd conductor rail is also available from the Society, as are the distinctive LT end-ramps.

For 4mm scale

AVAILABLE TO
Members of the Scalefour Society.
Membership Secretary Mr B.K.
Pearce, 5 Cedar Close, Teignmouth,
Devon TQ14 8UZ. www.scalefour.org

PRICE £4.50 per pack.

Worsley Works 4mm nameplates

Worsley Works has recently produced a small etched brass fret of nameplates to suit its 'scratch aid' body kits for the two former South African Funkey B-B diesels now working on the Welsh Highland and Ffestiniog railways, *Castell Caernarfon* and *Vale of Ffestiniog* respectively, the latter machine much modified.

As a bonus, the fret also includes plates for the FfR's *Criccieth Castle/Castell Criccieth*.

The fret offers exact 4mm scale representations of the plates, with beautifully reproduced lettering.

Worsley are offering the fret free to anyone who has already purchased one of the body kits; simply send a small stamped self-addressed envelope.

Otherwise the price is £4.00, again plus the SSAE.

Future batches of the loco kits will include the plates.

Worsley Works now has a wide range of 'scratch aid' kits in scales from 2mm to 16mm. 50p (in stamps) plus an A5 stamped self-addressed envelope will bring you a copy of the latest list: please indicate your area of interest.

For 4mm scale narrow gauge

MANUFACTURED BY
Allen Doherty, Worsley Works NG,
19 Douglas Road, Worsley, M28 2SR

PRICE
In text.



McK&H box



A new addition to the Hornby 'Skaledale' range of ready-finished structures is the 'Skaledale Junction' signal box. It represents what the Signalling Study Group has categorised as a Type 3 design from private contractors McKenzie & Holland, and is modelled on an example built for the GWR. Footprint is 96mm over steps x 52mm wide; it is 95mm tall.

For 4mm scale

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE ref.R8632, £11.75.

Carriage board frames & chocks

Precision Labels has added carriage titled trainboard frames and chocks in 4mm scales, intended for use with the PL magnetic printed boards. Frames are prototypically of different lengths: pack ref.R2 has two pairs of frames for 11' boards (SR & BR, £4.99); R3 has two pairs of frames for three 8' boards (LNER/ER, £4.99); R5 caters for one LMS round-end board (£4.99) and R7

a GW 17' board (£4.99). Roof chocks to suit any length board (R4, £3.99) come 24 in a pack in 4mm and 12 in 7mm (R7, £3.99).

Precision Labels items are available from outlets such as Frizinghall Models & Railways of Bradford and the Alton Model Centre.

AVAILABLE FROM/PRICES in text.



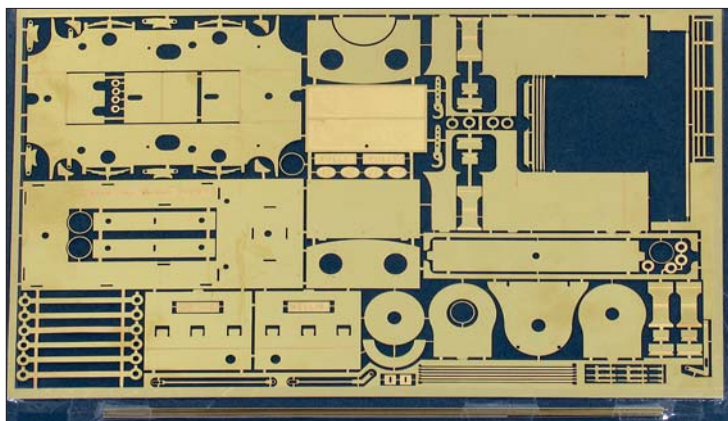
Starter loco kit in 7mm scale reintroduced by Connoisseur Models

Connoisseur Models first produced its 0 gauge 'starter kit' in 1989 as a basic set of components for established modellers who were interested in having a dabble in 0 gauge. The kit has been 'sleeping' in his range over the last few years.

Now Jim McGeown of Connoisseur has decided to rework the castings and instructions and present them as a suitable project loco for the newcomer to 0 gauge. By making the most economical use of the materials he has managed to place the basic kit in a similar price bracket to a coach or brake van kit in the hope that this will also encourage the newcomer to have a go without too much to lose.

The delightful little C14 tanks, built by the LSWR for railmotor trains and quayside shunting, inspired this generic little tank loco kit. It is intended to provide the newcomer to 0 gauge, or etched loco construction, with a set of components that will produce quickly and easily a first loco and fulfil the important requirements of getting something running to boost enthusiasm and provide a valuable foundation of experience for more ambitious projects.

The instructions provide a tutorial text and are very comprehensively illustrated with step-by-step constructional photographs. A significant proportion of the instructions is devoted to construction techniques and the tools



used and with a particular emphasis placed on the points in construction where things can go wrong.

The main body and chassis compo-

ponents are etched in brass with cast whitmetal fittings. The boiler is pre-rolled and there are cast components for a basic cab interior including loco

crew. Etched name and number plates for *Nellie* and *Polly* are included.

The kit requires wheels gears and motor to complete and full details of these are included in the instructions. It is practical to start construction of the body and then acquire the motor and gears as the project progresses.

A package of wheels, motor/gears etc can also be provided, and depending on the modeller's choice will place the total cost of a completed loco around the £100 mark.

For 7mm scale

AVAILABLE FROM
Connoisseur Models, 33 Grampian Road, Penfields, Stourbridge DY8 4UE

PRICE
£50.00, post free.



NER structures in N from Hornby

Hornby has duplicated its 4mm Skaledale suite of North Eastern Railway-derived structures in N scale, for its 'Lyddle End' series of ready-to-plant buildings.

The full story of the 4mm buildings was given in the May issue, so need not be repeated here. The selection of samples received is as follows:

<i>description</i>	<i>ref.</i>	<i>price</i>
station building	N8080	£9.99
toilet block	N8081	£3.75
extension building	N8082	£3.75
covered coal shed	N8084	£7.99
open coal deposit	N8085	£6.75
goods shed	N8086	£11.99
engine shed	N8087	£11.99
platform shelter	N8088	£3.85
water tower	N8089	£4.65
water crane	N8090	£2.55

Also to come are a signal box (ref.N8083, £6.99) – in the manner of the 4mm one seen elsewhere in these

pages, and not the low Goathland type seen in the May issue – and a foot-bridge in NER fashion, as seen in 4mm scale in the August issue (ref.N8091, £TBA).

The finely-finished models share some of their larger stablemates, such as poseable doors on the goods shed (which need fixing in position ideally). It is perhaps a pity that the opening doors on the engine shed have very prominent hinges and fixings, which mar an otherwise neat and well-presented little building.

For N

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood, Margate, Kent CT9 4JX

PRICES
In text.



Upgraded three-link couplings from Roger Smith for 4mm scale

Roger Smith has released updated versions of his three-link couplings in 4mm scale, the artwork for the hooks of which date to 1979!

Illustrated are standard three-link (left picture, ref.LP1) and three-link Instanter (right picture, ref.LP2). Four pairs of couplings are supplied unassembled price £3.99 per pack.

To cater for modellers who use mag-



netic coupling poles, Roger has pack ref.LP3, 20 steel links price £1.95.

For 4mm scale

AVAILABLE FROM
Roger Smith, 121 Wellsford Avenue, Solihull, West Midlands B92 8HB

PRICES in text.

New freight stock in N from GF



The TOPS-coded VGA long-wheelbase vans, early samples of which were seen at Warley last year, are now available. Initial releases are in Railfreight Speedlink (ref.373-601) and Railfreight Distribution (ref.373-602) liveries, with EWS available too.

The VGAs date from the mid-1980s, and are sliding sidewall vans on a 29'6" wheelbase. The doors (two per side) are 20'8 1/2" long, giving access to half the length of the vehicle at a time. Carrying capacity is a maximum 29 tonnes – at which rating the wagon is limited to 60mph – but if the load is restricted to 24 tonnes the VGA can run at 75mph. The aluminium bodysides were left unpainted, with Railfreight brandings applied: ends were Flame Red, later yellow on securitisation. Many are still active today.

The models boast fine ribbing and excellent end detail. Wire handrails are fitted at the corners. Painting and lettering are very good, the door opening instructions being legible with a glass. The Speedlink-era van carries placard boards, representative of a handful so fitted, but most VGAs had the name and BR logo on the bodysides proper.

The models are supplied with tiny brake pipes for the purchaser to fit if

desired or curvature permits: also supplied are alternative couplings of the standard N gauge type, to be used if the van is to be worked round curves tighter than 15'. (The quoted minimum radius is 12", due to the long fixed wheelbase.)

Also new to the GF range are three new identities for the popular PGA hopper, namely ARC (ref.373-037A), ECC Quarries (ref.373-031) and, for the contemporary modeller, wagon lessor VTG (ref.373-032). All are very finely finished and printed, with inscriptions and instructions legible under magnification.

For N

SAMPLES SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE19 8EY

PRICES

VGAs – £8.00ea
PGAs ECC & VTG – £7.00ea
PGA ARC – £6.80ea

WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



Book Reviews

Riddles Class 6/7 Standard Pacifics

Locomotives in detail – 5

David Clarke
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.

254mm x 185mm 96pp
Hardback £16.99
ISBN 0711031770

This is the latest volume in the meticulous *Locomotives in Detail* series. It deals with the 'Britannias', 'Clans' and the solitary *Duke of Gloucester*.

Designed and organized like its predecessors in the series, the combination of 4mm scale drawings by Mike Peascod and close-up photographs of specific details makes the book an essential acquisition for anyone contemplating building or detailing one of these locomotives.

The close-up photographs, especially those in colour, are truly enlightening, for example the shot showing the structure of a driving wheel balance weight before the addition of the molten lead to the empty 'pocket'. As with the previous volumes, there are also good photographs of nameplates and livery and detail variations between class members. The colour photographs and annotated diagram of the cab interior and firebox backhead leave modellers with little excuse for omissions.

The captions in the main seem informative and reliable although, on p.23, No.70037 was actually leaving *London* Liverpool Street with the down 'Norfolkman', not Lime Street, Liverpool.

Individual chapters are devoted to Design, Construction, Liveries and names, the locomotives In Service, the 'Clans' and Preservation. Overall, the book provides a compact reference work for modellers on all three Standard Pacific classes.

Scottish Region 1948-1967

Brian J. Dickson
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.

280mm x 215mm 96pp
Paperback £12.99
ISBN 0711031762

This attractive album of archive photographs is in the publisher's *British Railway Pictorial* series. In it, Brian Dickson has drawn upon the work of some of the best known names in railway photography to capture the atmosphere of the first two decades of the BR era in Scotland.

It goes without saying that the variety of lines, rolling stock and scenery portrayed could hardly be excelled, from the intensive suburban services around Glasgow to rural and highly scenic branches such as that from The Mound to Dornoch.

The period set by the dates in the title is a particularly useful and interesting one, encompassing the introduc-

tion of BR Standard steam locomotives, the appearance of DMUs and diesel locomotives, the 'Blue Train' electrification and the end of main line steam. Even the diesels which took over tended to be of types not often seen south of the border, maintaining the separate identity of the ScR in matters of motive power at least.

The photographs are well chosen and reproduced and the captions concise and informative.

Atlas of Train Operating Companies

Second edition

Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.

235mm x 172mm 96pp
Hardback £14.99
ISBN 071103138X

The original edition of this book, published in 2000, was the first railway atlas to illustrate the complexity of the inter-relationship between the various TOCs. Inevitably the continuing changes in the railway industry over the past six years have already rendered that first edition out of date and have led to the publication of this second and fully revised edition which reflects the state of the railway industry as it exists in mid-2006.

A notable improvement in the light of comments received following publication of the first edition is the more accurate delineation of stations served by several TOCs, and Maidenhead Cartographic Services deserves credit for what must have been a complex task. The result has been legible and colourful maps which, with the aid of the Key and Index, impart the required information without too much effort on the part of the seeker. The prime user or manager of each station recorded is listed within the Index. Only the feeling that the whole work will be out of date in a short time spoils the experience of using it.

Frequencies with which operators use individual stations are not given. Useful as that information might be, it would undoubtedly further complicate the already complex cartography.

It does occur to us that for those who stay at home or go by car, this atlas could provide a vivid 'in a nutshell' revelation of what railway privatization has been about.

Orion, Darroch and the 'Alfreds'

R.A.S. Hennessey
The Stephenson Locomotive Society.
210mm x 147mm 15pp
Paperback £2.99 post free
ISBN 0903881055

This booklet tells the story of *Orion*, a 9 1/2" gauge one-sixth scale live steam miniature of a Crewe-built Webb four-cylinder compound 4-4-0. It too was built at Crewe by Richard Darroch, a charismatic premium apprentice apparently of independent means.



Left: a London landmark seen from an elevated position, if not from an aircraft – an Electrostar pairing crosses the Thames on Grosvenor Bridge, at the approaches to Victoria station on 30 April 2001.

Photograph: Phil Caley.

After describing the variants of the prototypes, namely the 'Alfred the Greats', 'Jubilees', 'Benbows' and 'Renowns', the author discusses Darroch's use of a 'Precursor'-type boiler in the model which caused him to adjust the frames away from a scale replication of the 'Alfred' originals.

As a miniature steam locomotive, *Orion* appears to have been successful and Darroch built a line (seemingly with scale track!) in the garden of his house in Crewe where he steamed it on occasion and entertained friends, colleagues and enthusiasts.

But as Darroch grew older, steamings became fewer, and on his death in 1959 *Orion* and accessories were bequeathed to the Stephenson Locomotive Society. After some years of storage under the watchful eye of Harold Bowtell at different sites including Tywyn and Penrhyn Castle, assistance was obtained from the Heritage Lottery Fund to put the little locomotive back into steam and public circulation. HLF and SLS each paid half of the restoration costs.

The restoration was carried out by John Ellis of Brierley Hill and now *Orion* is on display at 'Locomotion', the NRM at Shildon. It is intended to put it in steam there from time to time and to exhibit it at various railway events around the country.

Front and rear covers carry good colour photographs of *Orion* in her splendid LNWR lined black livery. Inside there are captioned archive photos of prototypes and the model in its early days, including one of Richard Darroch himself.

The booklet can be obtained from; Reg Carter, 46 Mill Street, Kingston-upon-Thames KT1 2RF. Funds from its sale will go towards keeping *Orion* steamworthy.

London's Railways from the air

Aerofilms
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.
298mm x 220mm 255pp
Hardback £35.00
ISBN 0711031444

While aerial photographs of railway installations are undoubtedly of considerable value to layout designers and modellers generally, they are also, if viewed in company, great conversa-

tion pieces, especially when the location is known to all parties.

This new collection of photographs from the library of the near 90-year-old firm of Aerofilms was taken over the greater London area at dates ranging from the 1920s to 1970s. The locations range from the 'inner city' e.g. Kings Cross, St Pancras, Euston, through suburban Ealing Broadway, Clapham Junction, to outer and developing suburban Grove Park, Morden, Epping etc. The book contains more than 125 images of the oblique rather than vertical or survey type which means that buildings, and sometimes even rolling stock are recognizable, although obtaining dimensions should only be carried out with caution.

During a long perusal of this fascinating volume we encountered a few seemingly familiar shots, so if you already have a similar volume on your bookshelf, it might be as well to expect the odd duplication.

Class 40

Diesels in Depth

David Clarke
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley, Leics.
LE10 3EY.
255mm x 185mm 96pp
Hardback £16.99
ISBN 0711031665

This is the first volume in the publisher's new *Diesels in Depth* series which will follow a similar format to the *Locomotives in Detail* series on steamers, the latest of which is reviewed this month. Therefore this book provides a reference work for modellers and historians on the popular Class 40 'Whistler' 1Co-Co1 diesel electrics.

4mm scale drawings by the late Russell Carter are supported by a comprehensive selection of colour and mono photographs illustrating the variety of liveries carried by these locomotives and showing details of cab and engine room interiors, internal walkways, bodyside and underframe details, nameplates etc. Most of the modern closeups are of one 40, so they may not be truly representative of the class as a whole.

When dealing with a subject where detail is so important, it is also a pity that the book's designer has allowed the author's picture of the 40-hauled special on the Settle & Carlisle (page 87) to be 'flipped'.

The Speyside line

The railway from Craigellachie to Boat of Garten

Dick Jackson
GNRSA Sales, 7 Sutors Park,
Nairn, Scotland IV12 5BQ.
210mm x 145mm 60pp
Softback £4.95 plus 75p P&P
ISBN 0902343173

This is a new and updated edition of the Great North of Scotland Railway Association's attractive booklet about a line which was always associated with both tourism and the whisky industry.

During the years since the first edition was published, more information about the railway itself has come to light and there have been changes affecting the old formation. All of this has been included in this new edition, in order to bring the story up to date.

The well chosen and reproduced photographs range in time from pre-Group to diesel locos and railbuses, and there is a four-page colour section and colour covers. A map of the route which includes neighbouring lines, county boundary etc, is particularly useful for those unfamiliar with this beautiful part of Scotland.

The well written text covers a description of the route, train services, locomotives, the personnel, whisky, timber, signalling, preservation at Duffown and Boat of Garten, and what remains to be seen of the railway in general.

OS map extracts showing Craigellachie, Aberlour, Carron, Knockando, Blackboat, Ballindalloch, Advie, Cromdale, Grantown Nethybridge and Boat of Garten are of great interest.

This is a welcome revision of an important booklet in the Scottish railway literature.

Yeovil to Taunton

via Martock, Langport West & Durston

Derek Phillips
Footplate Publishing, 4 White
Mead, Yeovil, Somerset BA21
3RX.
295mm x 205mm 144pp
Softback £17.99
ISBN 0955333407

Local knowledge helps when reviewing a book such as this which is based upon the personal recollections of a footplate man based in Somerset.

The transcribed narrative of several railway staff members sits well

amongst the amply captioned photographs, many of which are reproduced to a very high standard. Others are equally interesting, relying on their historic content for their well-justified space. The overall quality and feel is commendable, especially for a self-published, soft-back work.

The obvious affection with which author Derek Phillips writes is endearing. The text follows the line from end to end and each section recounts daily activities at the halts and stations. Close insights into railway practice show a side of working life that may be unfamiliar to many readers. Such a different era of life and industry could seem like a museum piece, stuffy and old-fashioned, but the collective effect of the Somerset geography, the personal reminiscences and the solid factual content creates a palatable recipe.

The eagle-eyed sub-editor or proof-reader would notice a few points of order in the text, but this does not detract from the publication as a whole.

It is a well constructed reference book with plenty of character. A track map before the Contents page locates the centres of activity, but maybe a look at a current area map would be useful. It doubles as a work-day diary with entries written by those who were there at the time; an engaging read.

Mountain Ash to Neath

Including the Merthyr Branch

Vic Mitchell and Keith Smith
Middleton Press, Easebourne
Lane, Midhurst, West Sussex,
GU29 9AZ.
240mm x 170mm 96pp
Hardback £14.95
ISBN 1904474802

This is the latest addition to the *Welsh Valleys* sub-series.

The Vale of Neath Railway (opened 1851) was a broad gauge line, mixed from 1863 and standard gauge only after 1872. There are no pictures from broad gauge days in this collection, but several quite modern shots reveal the line's broad beginnings by the tell-tale wide 'six-foot'.

As one might expect, the route is of a mountainous nature, climbing steadily from Mountain Ash to the summit at Hirwaun Pond and with the Merthyr branch being in tunnel for 1½ of its 7½ mile length. As usual with the Middleton series, OS map extracts, timetables, route plan and gradient profile support the captioned photographs and combine to paint a portrait of the line as it has been at different times in its existence. The maps are particularly useful in clarifying for the reader the complicated arrangements at Aberdare. Associated collieries are also mentioned, including those at Wenallt, Resolven (Glyncastle, Dan-y-rhiw), Tower, Tanybryn, Deep Duffryn, Aberpergwm and numerous others. The period of the photographs stretches from that of Panniers and Prairies to Class 37s, a 143 'Pacer' and a Class 60.

It is good to note that a significant part of the railway mileage described here is operational today.

Hornby rebuilt 'West Country' is near!



The eagerly-awaited Hornby model of the Bulleid rebuilt Light Pacific in 00 has come a step closer: the firm has released press shots showing No.34003 *Plymouth* in its finery. Production versions, delivery of which is anticipated in the fourth quarter, will be weathered, and will trail the 9' + 9' wheelbase tender. Sister No.34045 *Ottery St Mary* will be pristine.

Versions in the 'Battle of Britain' series are slated to be No.34053 *Sir Keith Park* and No.34062 *17 Squadron*, both of which will be pristine.

All will have five-pole skew-wound motors driving the coupled wheels, and will be DCC-ready. Sprung buffers and fine detail will be present.

Hornby Hobbies Ltd., Westwood, Margate, Kent CT9 4JX.

Warley countdown

The show goes on! The 39th annual Warley National Model Railway Exhibition will be held over the weekend of December 2 and 3. The cast features the highest standard of layouts, traders, society exhibitors and demonstrators. Hall 1 of the NEC is the venue.

This will be the last show for the popular 0 gauge layout *Holiday Haunts*, but five layouts from outside the UK will be welcomed. The visitors are from France, Holland and Ireland.

There will be a celebration of 25 years of the German Railway Society featuring working model railways and displays, all with a German theme. In addition, there will be the German Modellers' Christmas Market following its successful introduction last year.

Modern image enthusiasts will enjoy a special feature incorporating a 'Deltic' cab unit with simulation.

Trade representation will include around 130 traders, the largest model railway trade gathering in the UK. The sponsors, namely Bachmann Europe, Graham Farish, Digitrax, Midland Counties Publications and Peco are joined by Hornby, Dapol, Fleischmann and Heljan plus many specialist manufacturers and suppliers to the hobby.

Advanced tickets: the arrangements organised for advanced tickets are again in place this year. Advance ticket holders will benefit from 09.30 access on both days of the show, half

an hour earlier than the main entry time. Applications for advance tickets must arrive by November 15; the forms are available from **Advance Ticket Sales, 52 Calverley Road, Birmingham B38 8PW**. Include a large SAE. Alternatively, book by credit card using the **NEC Box Office**, telephone number **0121 767 4099**; a booking fee will be charged.

Squires Model and Craft Tools have again agreed to act as agents for advanced tickets. Telephone **01243 842424**. There will be no booking fee and you will receive a free Squires catalogue.

Advance ticket prices:

Adult, one-day £8.00
Adult, two-day £15.00
Child/Senior Citizen, one-day £5.50
Child/Senior Citizen, two-day £10.00
Family (2+3), one-day £23.00.

Advance copy of show guide £5.00 including p+p.

On-the-door ticket prices:

Adult, one-day £9.50
Adult, two-day £17.00
Child/Senior Citizen, one-day £6.50
Child/Senior Citizen, two-day £11.50
Family (2+3), one-day £28.00.

Tickets may be purchased on the door using a credit card, with facilities provided by Squires Model and Craft Tools.

More details of the Warley Show will follow as show time approaches.

Bratchell Models Class 318

A 4mm scale Class 318 three-car EMU kit has been announced by Bratchell Models. The firm already produces multiple units in the Class 150/2 to Class 456 range, all in high quality ABS plastic. The kits have injection moulded bogies and flush-fit glazing. Romford brass wheels and bearings are also available.

The official launch will be at the Warley show, but Bratchell Models is accepting pre-launch orders. The EM and P4 versions are £99.00 and the 00 version is £117.00. The livery options will be announced nearer the launch time.

Contact: **Bratchell Models, PO Box 22, Watford, WD17 3WA.**

0 gauge Brinklow at Blackburn

An accurate 0 gauge model of Brinklow on the West Coast Main Line is booked to appear at the Blackburn & East Lancs MRS show on October 20-22 at King George's Hall, Northgate, Blackburn, Lancashire. This will be the 41st show at the same venue.

The layout is set in the late LMS/early BR period and is approximately 40' x 22'.

There are 36 sets of electrically-

operated turnouts with fully operational hand-built semaphore signals. Five controllers are used for the three running roads and fiddle-yard which can store up to 48 trains. The longest train length is 26'!

A correctly modelled *Mid-Day Scot* with 14 coaches and 'Duchess' or rebuilt 'Royal Scot' haulage will feature.

See *Societies & Clubs* pages for full details, or visit **www.belmrs.co.uk**



Tower Brass 'King'

The latest addition to the ready-to-run 0 gauge Tower Brass range is a GWR/BR 'King' Class 4-6-0 and tender.

The model will be 99% fully assembled in unpainted brass. Owing to the large number of changes that occurred during the lifetime of the prototype, a range of parts is supplied for the customer to fit. These include the option of three chimneys, two sets of steam pipes, two types of inside cylinder covers, two cab roof vents, a plate piece to fit above the inside cylinders and even a bell, as fitted to No.6000 *King George V*.

Excellent detail is depicted through-

out. Power is supplied by a Mabuchi motor with a fitted flywheel. The wheels are silversteel.

The 'King' is supplied with a sand-blasted finish for ease of painting. It can be dismantled by undoing a few screws. Unpainted, the model will be £799.99 and will be available in November. Fully painted to the customer's choice of livery, a charge of £300.00 is applied. Only 150 'Kings' will be manufactured.

Contact: **Tower Models & Co., 44 Cookson Street, Blackpool, Lancs FY1 3ED. Telephone 01253 623797 or 623799.**



SHOP NEWS

OPEN

White Rose Modelworks, Bedale

A new model business has opened in the old goods yard at Bedale. The North Yorkshire town is also now served by the Wensleydale Railway. For shop proprietor Harold Cabourn, this is quite a change from his previous career in civil engineering.

Since April, White Rose Modelworks has concentrated on

baseboards, helixes and display cabinets. Ranges of 00 and N gauge track also form a significant part of the business.

Support for new shops is vital, so enjoy a visit to **White Rose Modelworks, Unit 10, Bedale Station, The Bridge, Bedale, North Yorkshire DL8 1BZ. Telephone 01677 422444.**

Salisbury Model Centre, Wiltshire

Simon Glanvill took over a fading shop last November and has completely re-established it on a very firm footing.

With more than 50% more stock and an up-to-date attitude, Salisbury Model Shop now stocks a growing range of DCC equipment and is always in front to

receive the new releases from the major manufacturers.

Diecast and plastic kits complement the expanding range of train goods.

Salisbury Model Centre, 37 Fisherton Street, Salisbury, Wiltshire SP2 7SU. Telephone 01722 334757.

Mid Hants Railway, Alresford

Alresford has one of three shops on this preserved line. It is a part of the old goods shed and has been developed with the help of a Lottery grant in 2001.

Dealerships are in place for Hornby, Dapol and now Peco. Limited edition Dapol wagons in N and 00 are issued each year.

Books and DVDs are plentiful and younger visitors can enjoy Thomas events. The attraction is open every week with parking for 200 cars. Why not visit the line?

Mid Hants Railway, The Railway Station, Alresford, Hampshire SO24 9JG. Telephone 01962 733810.

Expo Narrow Gauge 2006

Saturday October 28 at the White Oak Leisure Centre, Hilda May Avenue, Swanley, Kent is the place to be for Expo Narrow Gauge – ExpoNG as it is usually known.

Visitors from across the globe will be at this premier show to see around 65 stands including 14-15 layouts in all the major scales and narrow gauges. Traders and manufacturers will attend together with societies and displays of

modelling techniques. The show will be open from 10.30 until 17.30.

Admission is: adults £6.00, 009 Society, 7mm Narrow Gauge Association, GEMME members and senior citizens £5.00, accompanied children (6-16) £1.00.

Visit the website www.expong.org and www.gdngrs.com or telephone **020 8654 5755.**

Full details in *Societies & Clubs*.

DCC Forum in North Yorkshire

Harold Cabourn informs us that the Northern Counties European and American Modellers will hold a Digital Forum at Hampsthwaite Memorial Hall, Hampsthwaite, Nr. Harrogate on Sunday October 1.

All are welcome and a small charge will be levied.

The NCE&AM meets each first Sunday of the month: for details contact Harold at the White Rose Modelworks address as above.

ACE Products A4

ACE Products, in association with ACE Trains, now offers a 7mm scale model of the Gresley streamlined A4 to add to its extensive range of former LNER and Southern Railway kits in 0 gauge.

The kit uses the ACE Trains casting for the streamlined body. ACE Products supplies a scale chassis with the kit. A 28thou nickel silver mirror-imaged chassis is specified to include details such as the valve gear, motion bracket, brake gear, balance weights,

springs and ashpan.

The choice of motor, gears or wheels is left to the modeller, but cab detail, loco and tender parts are included. The tender is etched 20thou brass and can be either corridor or non-corridor.

The kit is £249.99, but ready-to-run models are available. Contact **W. Ascough, 7 Ringley Park Road, Reigate, Surrey RH2 7BJ. Telephone 01737 248540.**

Bachmann LMS 4-6-0 upgrade

Bachmann Europe plc announced at its Annual Trade Open Day that it is to upgrade its range of LMS 4-6-0 locomotives. Over the next year, Bachmann will introduce new body tooling and a new chassis to accommodate DCC sockets.

The range, which currently includes members of the 'Jubilee', 'Patriot' and 'Royal Scot' classes, was originally inherited from the former Mainline range produced by Bachmann's parent company Kader. The tooling for

these locomotives is between 25 and 30 years old, so these favourites can be retired gracefully.

At the same time, Bachmann intends to add parallel-boiler 'Patriots' to its range.

Work on the upgrade has begun with the drawing work now underway. The new models will be gradually introduced into the range.

Further details of these models will be released at the London Toy Fair in January 2007.

70th Manchester MRS exhibition

There will be some special attractions at the 70th show of the Manchester Model Railway Society, to be held from 29 September to 1 October.

For this year only, the editor of *The Link*, the Society's monthly journal, has challenged members to a micro-layout building competition. Several entries are already booked in to the show in addition to the usual number of layouts from around the UK. Continuing the 70s theme, it will be the first showing of *Dewsbury Midland* at its own show, operating in the blue diesel era.

Bachmann is joining forces with the Manchester MRS as sponsors of the show. Look out for the new on-board

digital sound locomotives.

Alan Catlow's 4mm scale model of the Isle of Man Railway station at Ramsey will appear; this features as Railway of the Month in this issue.

You can order tickets for the show on-line via the website www.mrms.co.uk. Advance tickets can also be obtained – but hurry, closing date September 23 – by sending a cheque in the post to: **Robert Fysh, 'The Oaks', 57 Moss Lane, Timperley, Altrincham, Cheshire WA15 6LQ;** enclose an SAE. Advance ticket prices are: adult £5.00, pensioner £4.00, junior £2.50 and family (2+2) £12.50.

Full details in *Societies & Clubs*.

Model Masters after all!

In the September issue we included details of some changes occurring at Model Masters of Weston-super-Mare, Somerset. The letter implied that the company would be changing its name to Model Railway Specialists. Evidently, this is not the case. The

name of Model Masters still stands as does the level of service and expertise to those who visit.

Model Masters, International House, Clifton Road, Weston-super-Mare, Somerset BS23 1BW. Telephone 01934 629717.

Boiler completed for new A1 Tornado

The A1 Steam Locomotive Trust has announced that the completed boiler for the new Peppercorn A1 No.60163 *Tornado* was unloaded in Darlington on Sunday July 16 following its journey from Germany.

The boiler, pictured below in Meiningen Works, has passed its hydraulic test and will be mounted on the frames during April next year. It is built to a modified version of the original LNER Diagram 118 design, but incorporates modern materials, weld-

ed construction and a steel, rather than a copper firebox. The boiler is the single most expensive component of *Tornado* and its completion is the last major hurdle in the construction programme. The loco is now 75% complete and is expected to be certified for main line use by May 2008.

Tornado is the first new main line steam locomotive in Britain for over forty years. It will be used on charter trains operating on Network Rail.

See www.a1steam.com for more.



B.O.B. coaling stage and sand store



The latest garden scale item from British Outline Buildings is a coaling stage. This highly detailed and realistic model is based on those found at engine depots serving narrow gauge, branch and main lines; great for G-scale, Gauge 3 and 16mm.

The wooden coal stage can be given footplate height by a stone wall mounting or used at ground level. The sleeper walls are movable and the sand heap with its tarpaulin covering, bucket and sand can be used elsewhere as required.

The price is £39.48 by mail order, shows and from **J.A.Replicas**, telephone **01895 824060**.

www.railsidemodels.co.uk

For a free colour brochure, call **01983 875202**.

3mm scale ready-to-run again?

Commercially-produced 3mm models might be reintroduced again. Following interest within the 3mm Society, a Chinese factory has agreed to produce models to the same standard that 2mm and 4mm scale modellers enjoy.

A Class 47 should be available early

next year for around £100.00 in two-tone green or BR blue.

If the project is successful, BR Mk.1 and freight rolling stock will follow on, plus further locomotives.

If you would like to have further details, contact:

<mailto:paul.furner1@btinternet.com>

PO wagon article

In a letter arising from recent correspondence on PO wagon liveries, Tony East informs us that his article *Painting Victorian Trains* appears in *Rail Archive No.5* (Lightmoor Press, 120 Farmers Close, Witney, Oxfordshire OX28 1NR). This article examines exactly what colours and pigments would have been available to the painter and signwriter in Victorian times.

Bressingham show

In *Societies & Clubs* last month, we mentioned that the Bressingham show (24 September) co-incident with the Roydon (sic) MRC show, information which was taken verbatim from the Museum's website. In fact the Roydon MRC show is on the same day as the Bressingham Museum Toy Fair, namely Saturday October 28.

Handy converter

Handy Converter For Model Railroaders is a PC software CD that enables modellers to convert and calculate all sorts of dimensions applicable to the hobby.

The program is organised as a series of sixteen tabs that provide access to the converters. This latest version has a History feature which can be viewed or printed at any time. Measurements, speeds, temperatures and electrical calculations are only a few clicks away. The new *Ohm's Law* tab provides an easy way to get answers to voltage, current, resistance and power calculations.

The program's typesize can be changed for ease of vision and the program is intuitive to use.

The converter can be downloaded or bought on CD. For more details, visit www.stanstrains.com/software.htm

G Scale Open Day at Twickenham

In conjunction with the West London Area Group of the G Scale Society, The Twickenham & District Model Railway Club will host its Open Day on Saturday October 14. The venue is Kerswell Hall, Wills Crescent, Hounslow, Middlesex TW3 2JF.

The Club's new G scale running track will be shown for the first time. Also on display will be *Rica Luno*, the

fully sceniced G scale layout, plus at least one more layout under construction. Another attraction will be the Bring and Buy stand.

There will be live running in the grounds of the clubhouse and the tea bar will provide light refreshments.

See *Societies & Clubs* pages for full details, visit www.tdmrc.org.uk, or telephone **020 8560 4966**.

Wilmington charity exhibition

The Wilmington, Dartford model railway exhibition is one of the most successful fund-raisers for children's charities. To date £42,000 has been raised.

During the weekend of October 7 and 8, the 10th Anniversary show will be at St.Michael & All Angels Church Hall, Church Hill, Wilmington, Dartford, Kent. Full details in *Societies & Clubs*.

This year, the organisers, led by Reverend Richard Arding, have a target of £10,000 for The Railway Children charity, Demelza House Children's Hospice and Cherished Memories, plus the church's own youth worker fund.

Last year, the attendance was 1500; access is easy from M25 and A2.

New railway at Buckfastleigh

The trackbed for a new garden railway has been built on the site of the former miniature golf course behind the Lee Moor loco shed, Buckfastleigh; it is installed over the tracks of the 7 1/4" railway.

For the past twenty-plus years, south west members of The Association of 16mm Narrow Gauge Modellers have held regular 'steam ups' on their own garden railways. Six years ago, however, it was decided to organise and run an indoor show with exhibition layouts and traders. It took place in October at St.Peter's School, Exeter.

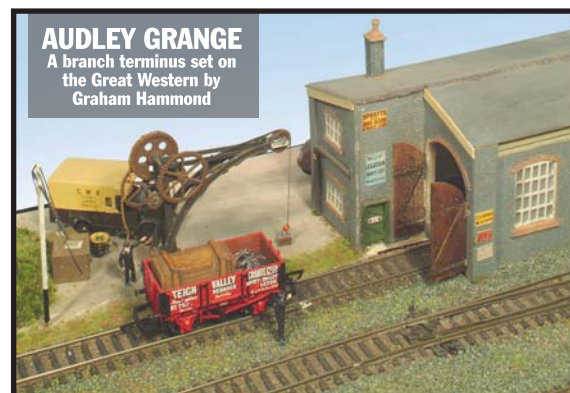
Since 1999, the show has raised

nearly £8,000 for the Devon Air Ambulance.

The Southern Devon Garden Railway Group, as it is now known, is delighted that The South Devon Railway agreed to let it build on the present site.

When the SDR has special events, it is planned to have 32mm and 45mm running displays. The proposed name of the railway is *The Southmoor and Dartbridge Railway*.

If you would like more information about future plans and events, call Graham Wilkins, Chairman, on **01803 863429** or David Lemar, Secretary, on **01803 326329**.



AUDLEY GRANGE
A branch terminus set on the Great Western by Graham Hammond



LMS 3F in 7mm scale
Kingsley Robinson adds a Tower Brass 'Jinty' to his fleet

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1980s operations in 4mm scale, by Richard Timms

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- **IoMR No.17 VIKING** Drawn by Andrew Beard, modelled by Robin Winter
- **RAMSEY-2** More of Alan Catlow's 4mm Isle of Man Railway terminus

plus all the regular features

November Issue - Out Thursday 19 October

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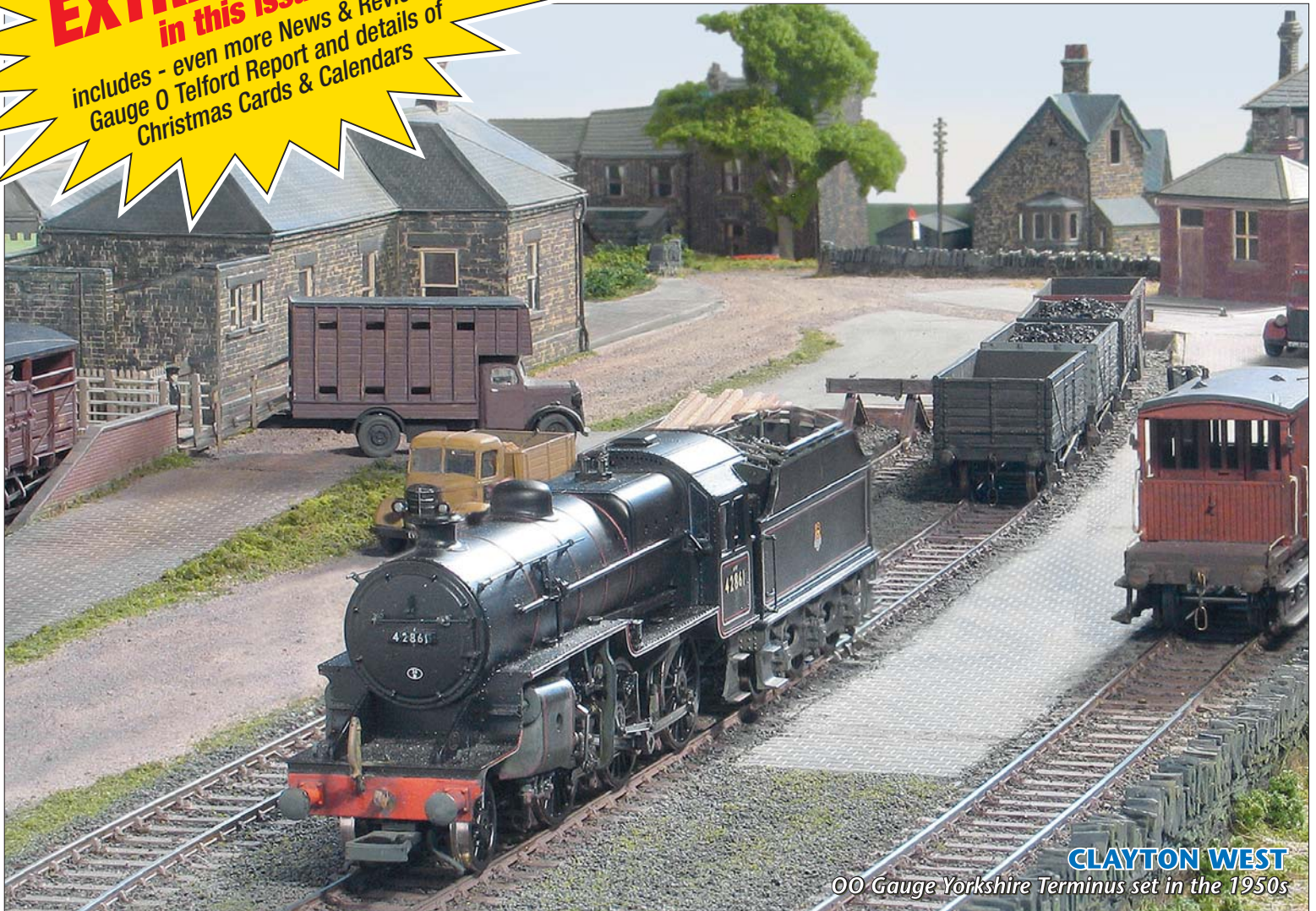
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1:64 Scale Exhibition Layout



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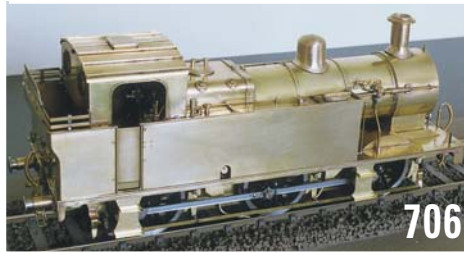
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 Published on the second Thursday of the preceding month.

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RAILWAY MODELLER

Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

General & Advertisement Manager JOHN KING

Advertisement Assistant SUE DAVIS

Classified Advertisements NICOLE CHARLTON

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Editorial Director C. M. PRITCHARD



Return of the 7

The headline review in this month's issue is of the new Hornby Drummond M7 0-4-4T – just what we wanted!

It's not the first time a four-coupled four-axle tank has featured in the Hornby range, but given that it's such an improved item it's tempting to treat it as such. Might the return of

this type of locomotive to the Hornby range start a trend? We would like to hope so. Consider the many other types of 0-4-4T that would be worthy of attention from the manufacturers' CAD-jockeys. The long-lived and attractive McIntosh type for the 'Caley' for a start, plus the Wainwright H Class for the South Eastern (as if we Southern fans had not had enough on our plate!), the numerous Worsdell G5s of the North Eastern, and the dainty Johnson 1P fleet for Midland followers, perhaps? Economics will probably rule out the two former Highlanders retained for the Dornoch branch, plus the seven 0-4-4Ts, from the Barry, Cambrian and M&SWJ, that entered Great Western ledgers, but they all merit a mention in RM!

You wait ages for one...

By one of those co-incidences which permeate this pastime, Gordon Bulmer's article on his Sunderland tram layout arrived in the RM Office around the same time that we were checking the proofs of George Wilkinson's article (July issue) – on Sunderland trams! Mr Bulmer's article is featured herein, to maintain momentum on this interesting topic.

PPM50 Competition – the deadline looms!

When this issue appears there will be only a few days before our end-of-October deadline for completion of your PPM50 railcar, in the 'construct one' competition we announced in our June issue.

Now is the opportunity to send photographs to our office for consideration for the next round. Pictures can be 'traditional' prints, or we can accept prints from a digital camera, but unmanipulated please: we wish to see your modelling skills, not your mousework! Entrants qualifying for Round 2 will be notified in due course: if you wish your prints to be returned please enclose an SAE with them.

News – read all about it!

Notwithstanding the slightly over-commonly used term 'bumper' issue, the magazine which you are now holding has increased significantly its 'four-column' content. The news pages are bursting at the binding with, *inter alia*, a three-and-a-half-pager on the Gauge 0 Guild Convention at Telford, which took place in early September. The 7mm scale scene is a justly popular one, with much being produced and proposed: the report begins on page 738, and includes contact details at the conclusion.

In addition, we review a selection of Christmas cards and calendars on pages 732-733. It might be thought a little early to do so – although at the time of writing there is tinsel in the shops...in September! – but our reasoning is that a roundup in the November issue gives ample time for readers to source the cards and calendars of their choice as presents.

As well as these, our four-column section boasts six pages of reviews, three pages of book and video reviews, four-and-a-half pages of news, and an unbeatable *six* pages devoted to the thriving exhibition scene. If it's on, it's in THE MODELLER!

Awa' to the hills...

In the book reviews section of this issue is a mention of the new volume on modelling the railways of Scotland by Ian Futers. Ian, as is well known, is a long-time fan of the country's rail system – in particular the Borders region, and the West Highland line – so is amply qualified to encourage modellers to look north when planning their next layout project.

Supporting this, we have one of his popular West Highland Wanderings features, this time taking in Tulloch, in this issue. It will be found on pages 712-715, and includes a 'what-if?' suggestion based upon the proposed diversion of the West Highland to the former Highland main line, a suggestion which is amplified in the book under the name of *Kinlochlaggan*. It would be worth planning, plywooding and producing for the title alone!

Cover: Long-term resident at Huddersfield Hillhouse shed, Hughes/Fowler 'Crab' No.42861 shunts in the goods yard. The farmer has arrived with his cattle truck to collect the cows from the dock.

Photograph: Steve Flint, Peco Studio.

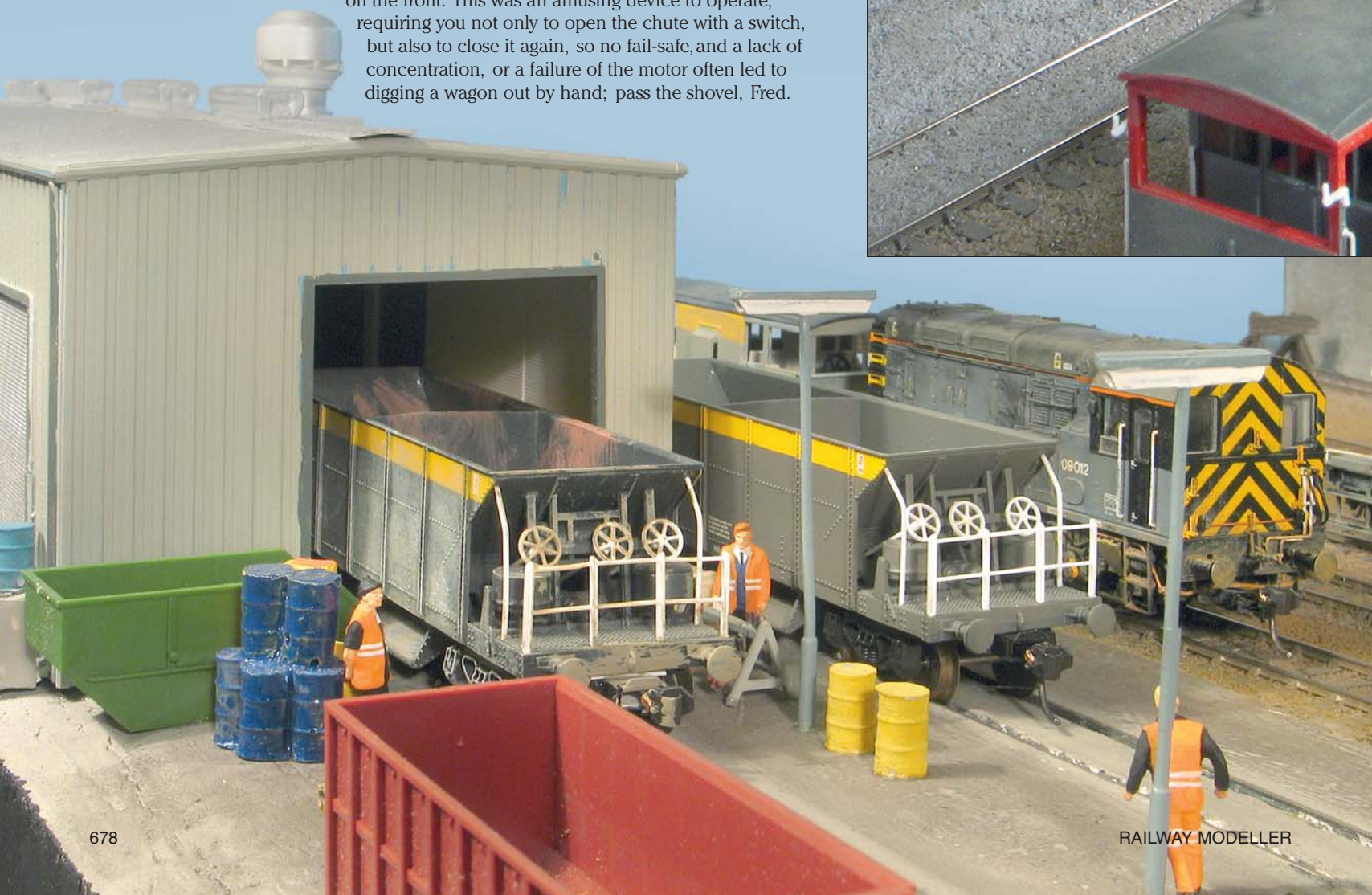
Linfit West CCE Sidings

A 1980/90s-BR layout in 4 mm scale

A joint effort by **RICHARD TIMMS, STEVE HITCHCOCK**
and **ANDY & IAN MORRIS, LEEDS MRS.**

Linfit West dates from the mid-1980s in terms of its concept and construction. It was originally built as a 15' long end-to-end layout with one hidden fiddle-yard and a mechanical motor-driven stone loader on the centre front of the scenic section. Passengers were catered for by a small two-bay platform station with goods facilities comprising a shed and yard depicting a rural station in the 1950s/60s with late BR steam and green diesels.

A later-built 5' extension added further sidings and a hand-operated, i.e. chute and spoon-fed, stone loader which replaced the somewhat unreliable motor-powered bunker on the front. This was an amusing device to operate, requiring you not only to open the chute with a switch, but also to close it again, so no fail-safe, and a lack of concentration, or a failure of the motor often led to digging a wagon out by hand; pass the shovel, Fred.



The modelled period remained the same and the layout was exhibited at several shows from 1988 until 1996, including Barrow-in-Furness, York, Warley and of course Leeds. Since that time the layout has stood idle and stored at the clubrooms as its original builder, Andy Morris, has moved on with other projects of a North American nature.

Rather than see the reasonably tidy layout scrapped, I arranged in 2002 to purchase it as it stood along with the power and control system. A further spell of storage then followed until 2004 when the layout was exhumed from its domicile in the clubroom store and set up. Surprisingly it worked, albeit somewhat erratically and after some track cleaning and baseboard alignments one or two items were run up and down it. This

◀ **Seacows undergo maintenance in the shed.**

Photographs by Steve Flint, Peco Studio.

served to prove that some electrical work and some trackwork would need to be done to make it more in keeping with what was planned for it.

Resurrection and renewal

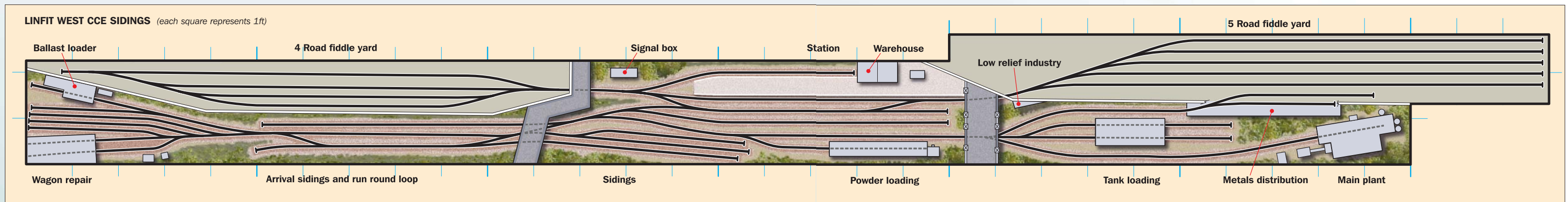
As the layout had a planned exhibition date of Easter 2005 at Barrow-in-Furness, a start was made on replacing several point motors and a full rewiring. This would also involve replacing the old control panels with new ones that would incorporate the planned 10' extension to the station end of the boards.

A change of era was also planned, moving the scene forwards in time by some quarter of a century to the late 80s/early 90s, a colourful and interesting period now well catered for by manufacturers. The stone loader was to remain, albeit in a rebuilt and slightly larger form and would be joined by a wagon repair depot, servicing the yellow and grey fleet of the civil engineers' department. The station

▲ **Ballast trains are prepared for the local engineering possessions.**

was to lose its stone buildings in favour of a 'bus shelter' for its passengers, the stone-flagged platform surface was replaced by Tarmac and the site of the station building sold off for a warehouse or supermarket. That's typical 1980s progress for you! However it did gain a through platform road as the extension allowed for a second fiddle-yard. This new extension was to feature two large industries, a chemical works and steel stockholders for added traffic value.

The station area had an altered layout, with a single bay platform as before but now with one bi-directional through platform. This retained a short run-round from its days as a bay and also allowed trains to pass in the station area. Apart from the large steel shed on the site of the former station building, further additions to the area included a



▲ A quiet moment at Linfit as a Class 150 awaits the right away. Is the Defender driver a gricer?

powder unloading facility linked to the main chemical works which straddles the former goods shed track. This takes traffic in the form of Presflos and vee-tanks as well as Cargowaggons for palletized and bagged products. That completes the tour of Linfit station and its surrounding area.

Construction

As the layout has been built over some time, the style of baseboard construction has varied somewhat. The original 15' and the subsequent 5' extension are built in the time-

honoured but now-superseded way using 3" x 1" timber frames and chipboard tops. These were well enough built to remain square and true and I think that after 20 years or so, they are not going to warp or move at all.

To create some uniformity a ply fascia has been added along the front of the original sections to blend in with the new. The new boards are constructed of 9mm plywood. In this case, rather than use screws, the sections, once cut out, were glued together and then a pneumatic nailgun used to staple all parts together, a simple and very quick method. Despite both new boards being some 6" wider than the originals to allow for a second fiddle-yard behind the scenic section, they are in fact lighter. Further strength and stiffness has been added to all boards by the fitting of a 9mm plywood backscene along the layout which also gives the operators something to lean on that is stronger than the hardboard original.

The layout stands on traditional fold-up legs, hinged to the baseboards, with the centre board having two sets as the main board from which the others are hung. A final addition to the layout is a 3' fiddle-yard extension which is non-scenic, set behind the chemical works end. This gives an 8' five-road yard at one end, supplementing the original 6' four-road yard behind the hill at the loader end of the layout.



▲ A bogie tank is propelled into the chemical works sidings, past the pork plant, sadly no longer rail served.

Electrics and control

The original wiring and control was, although functional, old and tired, and of course no diagrams existed for it which makes fault finding so much harder. So it was all cut back to leave wire 'tails' from each rail or section and then mostly discarded, apart from the power box which was retained and rebuilt to modern standards, and some connectors which have been re-used elsewhere.

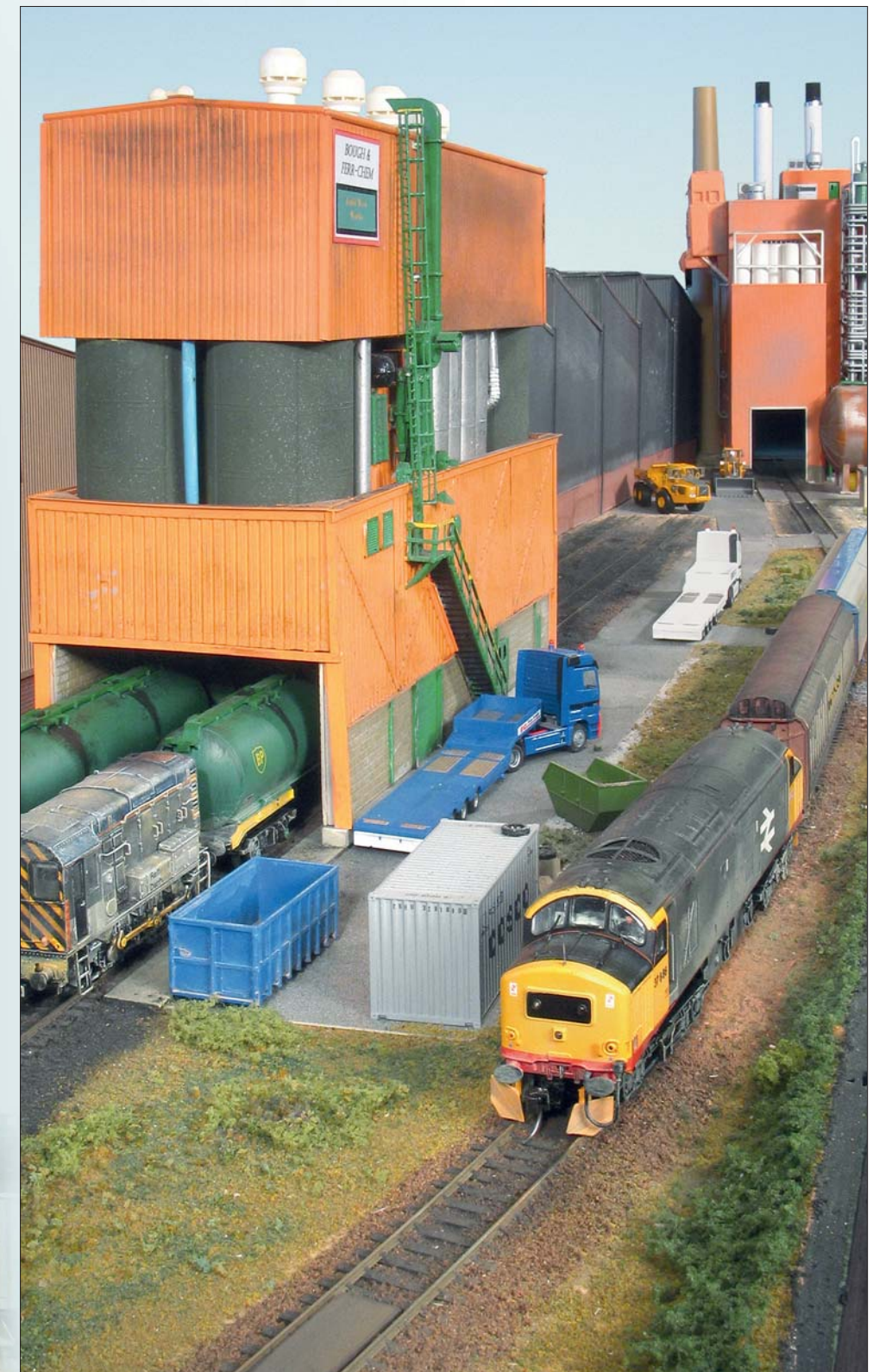
All cross-board connections were made with 25- or 12-way 'D' plugs and sockets and all point motors were refurbished or replaced. The hardest piece of pointwork to do was the double slip, at the main entrance to the civil engineers' sidings, where two very old chunky motors operated four tiebars, and although they worked, any adjustment would involve hacking away at the scenery as the actuation arms were buried under a hill. These were



▲ The main processing plant looms large over the site, a wide range of vehicles enters and leaves here with all manner of products, not all of them harmless!

An overall view of the Bough and Ferr-chem works, with tanks and palletized goods on the move.

A work-stained 31 arrives with more empties, why can't the civils' dept. keep anything clean?





▲ More passenger activity, as a 150 waits in the bay while a 'Metro'-liveried 155 departs for points west. Class 47 powered freight waits in the sidings.

therefore disconnected and removed and a set of four SEEP motors placed to operate the crossing.

Two new panels were made to work the layout. The main station area has control of all bar the civil engineers' sidings. A changeover switch, located on the main panel, allows movement from one panel's area of control to the other's, whereby the civils' sidings operator can access two of the main panel sections to drive a train into or out of the sidings. Once in the changeover road, then the main line operator can send the train on its way.

The civil engineers' sidings comprise the three-road fan opposite the signal cabin and the two outermost roads with the run-round in front of the rockface, as well as all the sidings in the loader and wagon repair depot. These are represented on the loader panel.

The main line panel has all the remainder of the layout, station and chemical works and also the inner road in front of the rockface, this being the station area headshunt. The layout features full cab control, sections being placed from experience to aid operations. Isolating sections allow for loco stabling.

The main panel has two controllers, one for working back and forth traffic, the other would normally be used for shunting around the works or station yard. The loader and civils' sidings panel has one controller which cannot drive the main line or station/works



areas apart from, as already mentioned, on to or off from the changeover road which is in front of the main platform road in the station.

The controllers are to Leeds MRS standards, and are built from component parts by Steve, who has also built controls not only for the 'Quarry' but for other club layouts as well. Steve also did most of the re-wiring of the layout as I still know only two things about electrics, one of them being nothing.

So why not DCC then? I hear asked. Well, seen it, tried it, don't like it, can't afford it, don't trust it for many reasons. I accept that I am a Luddite when it comes to DCC. It involves computers and chips and when these fail, that's usually it. I have had my home and work PC crash on me, so I wouldn't want any electronic system doing that on the Saturday morning of a show. That's one of the reasons, but come and talk to Steve or me and we will tell you of other valid arguments against and maybe dissuade you too.

▲ Second generation units predominate on Linfit West although the odd loco-hauled service still passes whilst older 'first-gen' units substitute.

▶ A grimy Class 37 awaits its next duty by the wagon depot.

Scenery and greenery

As has been mentioned, the original section was quite tidy despite a long time in store. It was crated up and stood away from sunlight, which helped keep dust at bay and stopped any fading. The loader end of the layout features a rock face, carved from polystyrene blocks and treated with plaster finishes. This was done by Ian Morris, the original builder's brother, who is an accomplished scenic modeller, having had a hand in the greenery of many Leeds members' layouts.

Moving into the station area, a low hill behind the bay platform is again poly blocks with plaster finish. These are painted and covered with a mixture of textures from Woodland Scenics and latterly Green Scene origins.

The remainder of the layout is either flat ground with grass and scrub or is tracked, with finescale ballast from various sources, including some natural material from near the original builder's home! Some trees and bushes are yet to be added to the road embankment and a few more bits and pieces will be added later.

Structures on the layout, starting at the loader end, comprise kit-built, kitbashed and scratchbuilt buildings. The wagon repair shed is a modified Pikestuff building and only just fits in its location. Notice that the baseboard edging is a little thicker here. The loader on the hill behind is built over a ply structure and uses the nice (but pricey!) Evergreen sheet materials. Contained within is the chute allowing stone ballast to be loaded manually into wagons beneath which is a much smaller operation than on our other layout, *R&M Quarries*, which featured in RM in both 1994 – in its original guise of *GCS Quarry* – and September and October 1999 and is also due soon for an extension. Engineers' wagons here are shunted around in ones and twos with small trains made up for departure rather than the long rakes to be seen on the *Quarry*.

Down into the station area and passing the Knightwing Portakabin signal box, the main building on the station is a warehouse, again a simple Pikestuff building in this case built 'as is' with no modification, mainly because it was scrounged off a display board for intermodal operations made by one of our members for EW&S Railways. The station facilities feature a

post box, telephone kiosk and a bus passenger shelter, all surprisingly un-vandalised as yet, and a rather scruffy re-cycling area with bottle banks and a collection of discarded household objects including the ubiquitous sofa and fridge, these being from Signs of the Times.

Opposite the station's main platform is the chemical works powder facility. This again is a kit combination, comprising two Pikestuff loco sheds and a Walthers Cornerstone pellet transfer silo. These are built onto a plasticard plinth and conjoined by pipework leading to the loading/unloading roads within the shed. The whole structure is weathered down and again only just fits, the baseboard edge here being widened as before for safety.

Proceeding under the roadbrige, the sides of which are from the Wills range, leads to the first main structure in the works yard. This is a kitbashed and scratchbuilt structure which again was sourced from another layout. Its exact origins are unknown but it is now clad in Pikestuff sheeting and uses some Walthers components as well as lots of details and other bits and bobs from the scrap box.

Running along the backscene are low relief building flats using Wills, Pikestuff and Evergreen sheet materials. Check out some of the traders' names here for a smile or two. The main structure of the works end is the chemical plant itself which used a Walthers power station as the main structure with added parts from the Walthers refinery kits, lots of tanks and pipes from Pikestuff, Knightwing and Rix products ranges as well as many details from various companies, the scrapbox and other plastic kit spare bits. I never throw any interesting shapes away. Some vents are the tops from J20 bottles, and the pressure tanks on the powder facility are vodka shot test-tubes from a nightclub bar! Look carefully and you might see recognisable parts from Tamiya tanks, Italeri trucks and Airfix kits.

Apart from these, there are many small details all across the layout, and more will be added as time permits to create that scruffy cluttered look so prevalent around railways and industry. For example, the small substation near the road bridge has a Hornby Skaledale transformer, but the actual building

is a plastic ring box which, as I have said before, was too nice a shape to throw away. Now clad in brick-finish card and painted up, it looks the part nicely. Look out for Dr Who's Tardis too, it is lurking around the layout somewhere!

Operations

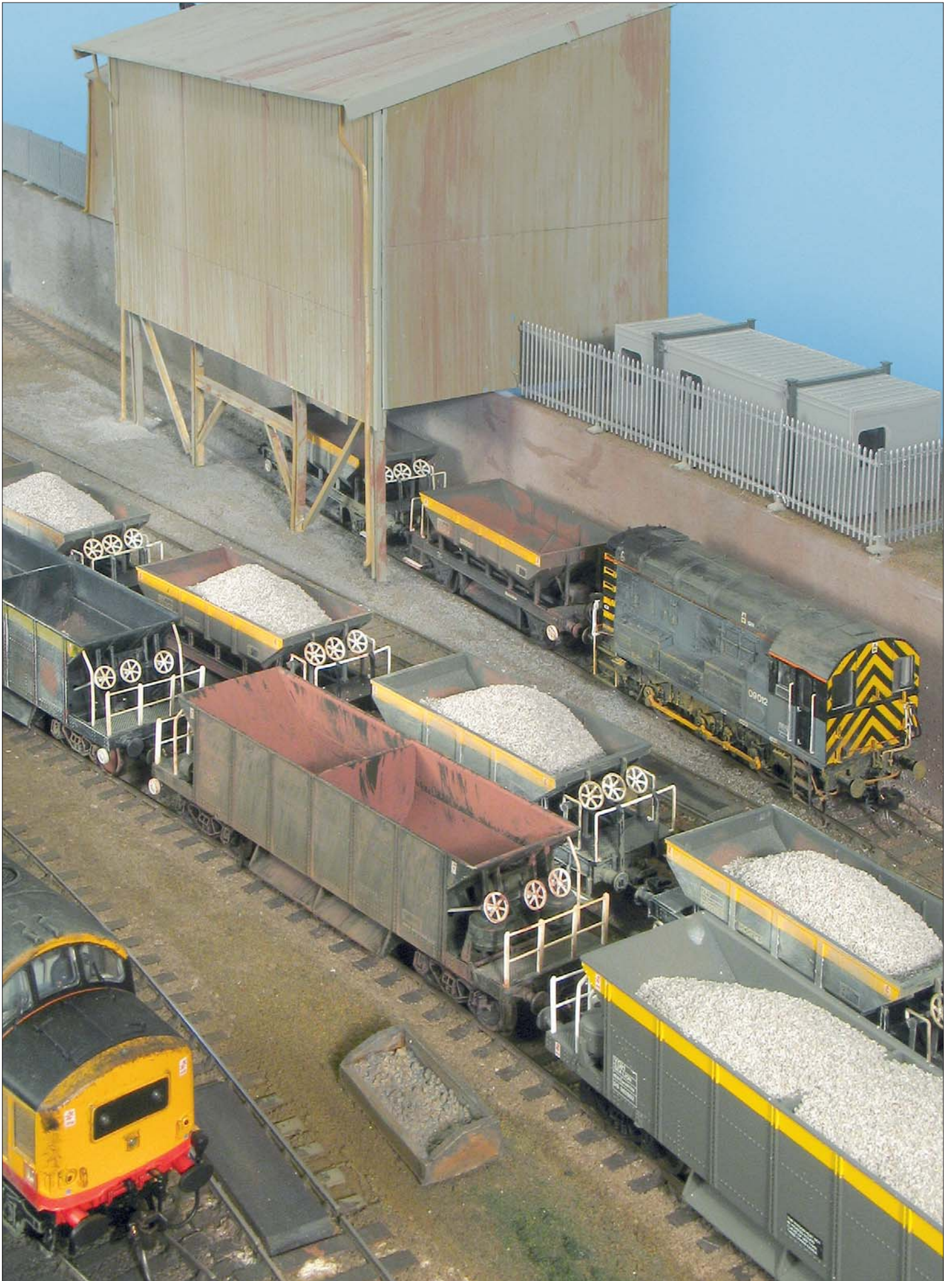
As can be seen, the track plan is bi-directional and somewhat restrictive, although this adds to the operations by making things slower and operators need to think ahead or else tie themselves up with too many trains or too long a train. The layout's location is also somewhat vague. Allowing for the 'Metro'-liveried units it must be somewhere in or near Yorkshire, especially as the buses are Yorkshire Rider-liveried, and telephone numbers use the old Leeds code, so it is somewhere in the Leeds/Sheffield/Manchester triangle. As the entry for the exhibition guide says, it is somewhere that the government of the day has missed as it is still busy with rail traffic and industry but its actual location will always remain a little vague, which means that it can also be changed, both location and era-wise.

So to summarise, basically all passenger work is handled by DMUs which shuttle back and forth from one end to the other and also into the bay platform. These units currently comprise classes 142, 150 155, 156 and 158 from Hornby, Bachmann, Dapol and Lima. Some older first-generation units will be acquired as they are released.

Occasional loco-hauled trains may appear from time to time, once I have some Mk. IIs and a 31/4 that is. There is also the occasional mail train, with 47 and vans. The freight traffic is extensive, and many short workings exist. Through traffic is coal, steel, scrap metal and general rail freight. Traffic to and from the works is made up of tankers, Cargowaggons, powder tanks and various vans. The steel stockholders' site sees ferrywagons, sliding hood carriers and flats, while the powder loading plant sees tanks and CDA hoppers bringing in and taking out products for the works.

The other main source of traffic is of course the civil engineers' sidings where a range of ballast hoppers ranging from Mermaids to





Seacows can be found. Thanks to Heljan for the Dogfish, and to Cambrian for Sharks, Catfish and Turbots, and Parkside Dundas for the nice Rudds and Clams. Despite Hornby's new and very nice Seacows, we are still using the old Lima ones, re-wheeled of course. More odd-ball engineers' stock will also be added, as time permits, though as this is a ballast loader, some of the more unusual stuff would not normally be seen. I suppose I should build a couple of Grampus wagons and leave them rusting around the sidings, half-full of muck and weeds, as this was a common sight around the rail network at this time and I imagine a few are still rusted to the rails in faraway places.

Thankfully we now have a much better range of locomotives from which to choose and *Linfit West* sees all classes from work-worn Class 20s up to brand-new Class 60s on test. Much traffic though is hauled by classes 31, 37 and 47, with the odd 56 from time to time. Liveries vary from BR blue to Railfreight triple-grey sub-sectors but mostly the plain Railfreight grey and red stripe variations are seen around the late 80s and early 90s and of course the 'Dutch' civil engineers' livery.

Locomotives are from the following sources. The 20s and 37s from Bachmann, 31s and 56s from Hornby and Heljan provides the 47s, although no doubt a Bachmann 47 will be compared as they become available. If the 57 is anything to go by, no worries. All I could do with really is a 56 and 58 to the same standards as the rest of the fleet. Time will tell whether Hornby will update the two.

So far the shunters are a mix of Hornby or Bachmann. I can't decide which is best overall yet. The Hornby looks better, but isn't as powerful, the Bachmann runs better but is hell to keep clean, though having seven for the *Quarry* means we are quite adept at removing wheels to access the pick-ups. I

◀ **A Class 08 spots some hoppers for loading.**

A Metro Class 155 Sprinter arrives at Linfit Station.



haven't squeezed lead shot into all the nooks and crannies on the Hornby one yet.

Unfortunately, Lima locos don't run on *Linfit*, not unless re-wheeled, and as my Lima fleet is now down to two 47s and a handful of 59s, and with the former being available from Heljan and the latter not suitable for the area or traffic, there is no real problem with that. Even if the layout was moved 'north of the border' Heljan have 26s and 27s on the 'to do' list. I have even been tempted by the Heljan Class 33 in 'Dutch'. So no Lima locos; they are even sparse on the *Quarry* now. It will be interesting to see what Hornby does with those Lima models that it intends to re-release. Hopefully some improvement in standards please.

Rolling stock is an eclectic mix of all main suppliers, some old, some new. Lima stock has been re-wheeled as has some older Hornby. All the ballast hoppers, apart from the Seacows and Dogfish, are kits from Cambrian and Parkside Dundas. They have been weighted slightly to aid running, and as we use live loads, all are empty. A lot of continental wagons turn up around *Linfit West*, all bound for Europe via the train ferry, and we are looking forward to the proposed ferrywagon from Heljan.

The locomotives and all stock are fitted for Kadee® operation with magnets strategically placed in sidings. This is normal practice for me as all of my rolling stock for the *Quarry* is so fitted and the simple fact is that for a shunting layout, it works reliably. If you want to know about Kadees®, please ask and we can talk you into using them and at the same time, talk you out of DCC. This is best done over a pint or two at the show bar.

One final thing with regard to vehicles on the layout. Although I now have suitable stock and locomotives, finding the right road vehicles is difficult. Yes I have some suitable buses, and a couple of old Land Rovers, from Original Omnibus, EFE and Cararama respectively, but this era could do with some input in the form of Sierras, Cavaliers, Transits, Ford Cargo trucks and the like. There's a lot of nice new up to date cars out there, ideal for a modern layout, and also some older vintage ones too. However, apart from the odd Land

Rover, early Transit and a Capri, there's nothing much so far, certainly in the truck area. Everything seems ten years too old, or ten years too new.

In conclusion

Like our other layout, *R&M Quarries, Linfit West CCE Sidings* has been saved from the recycle bin and scrap man. Although there has been a lot of work done to it, most of the structure and scenery was in good condition and needed little work. With the extensions now in place and the variety of traffic on the layout we hope that it will entertain the modeller, the show visiting public and us, the operators. It has already been 'out on test', having been to the Barrow show last Easter, in its first phase of extension, where it was well received and proved reliable. We had one or two mistakes all down to either operator unfamiliarity or confusion and only one or two mechanical failures, mainly down to rolling stock and wheels out of gauge.

We still have a bit to learn on the operations front, but I am assured that the civils' sidings are fun to operate, they must be because I couldn't get a go on them at Barrow! And the main line always has something to do, so you don't get bored or complacent running things round and round.

The layout is next out at Leeds this October, and then at the Wigan Show in December and may well have had more details added by then. There are always bits that need adding to, and new items that would look just right there. As any modeller knows, layouts swallow detail like nothing else and there is always another item that can be added here and there to improve the look.

Finally many thanks to Steve for the electrics, Nigel for his input and woodwork assistance, and of course both Ian and Andy Morris who built and worked on *Linfit* all those years ago.

Visit www.lmrs.co.uk for details of *Linfit West CCE Sidings*, *R&M Quarries* and all the Leeds Club layouts, future plans, exhibition details and contacts.

***Linfit West CCE Sidings* is booked to appear at Leeds on 28 & 29 October. Details in Societies & Clubs.**

Clayton West

A mining village station modelled in 00 gauge

DAVID GARNER describes his ex-L&Y layout set in 1950s Yorkshire.

Clayton West terminus served a small village situated approximately halfway between Huddersfield and Wakefield. It was a mining village albeit set in rural surroundings. The railways first came to Clayton West in 1879, after quite a number of years of haggling and politics between the various railway companies of the time. The Lancashire & Yorkshire Railway eventually built a four-mile branch line off the Huddersfield and Penistone line from Shelley.

Midway along the branch was a station at Skelmanthorpe, with only a modest single platform, but the main purpose was to provide fairly extensive sidings as a railhead for Emley Moor colliery.

Clayton West also had a substantial number of sidings serving Park Mill colliery as well as passenger facilities and a goods yard. The latter consisted of a cattle dock, substantial goods shed and general sidings.

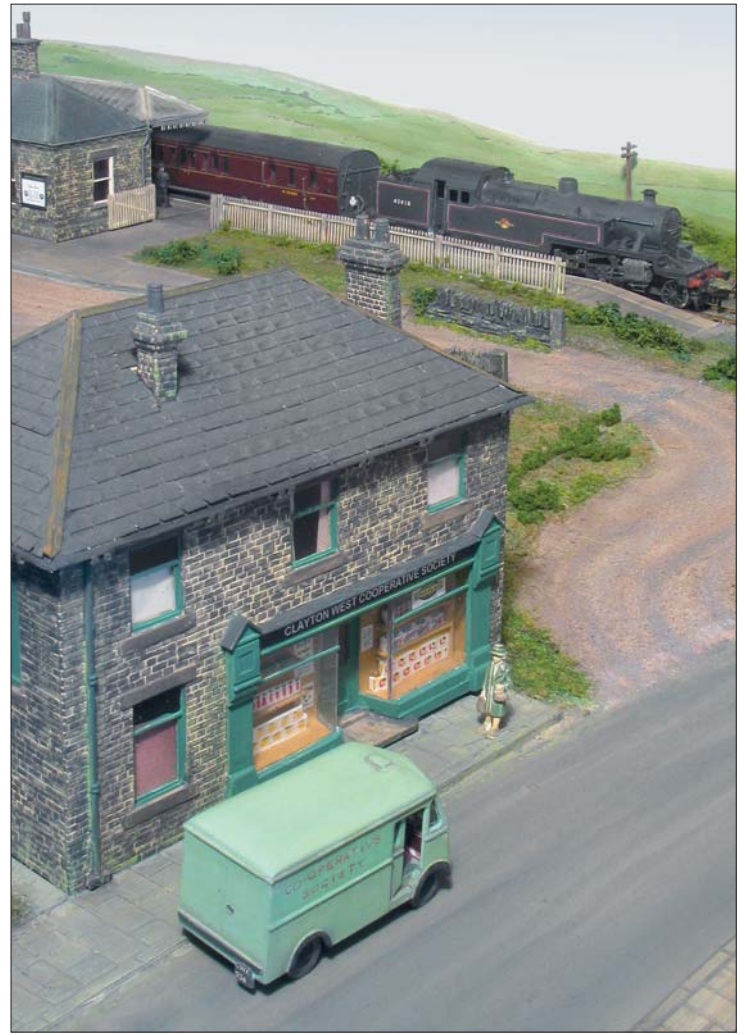
When the branch was built plans were proposed to continue the line through to Darton, giving direct access to Barnsley, but these never came to fruition. Evidence of these ambitions were a station built as a through one rather than a terminus, with the line continuing past the platform on to an embankment, which was subsequently used as a head-shunt and engine run-round.



Traffic on the line consisted of a passenger service to Huddersfield, which generally continued on to Halifax and Bradford, pick-up

goods trains and regular deliveries of empty wagons to the colliery and removal of full ones. Passenger trains usually consisted of two





or three non-corridor coaches powered over the years by Aspinall 2-4-2Ts and Fowler 2-6-4Ts until the early 1960s when diesel multiple units took over. Goods traffic attracted Aspinall Class 27 0-6-0s, Fowler 7F 0-8-0s, Hughes/Fowler 'Crab' 2-6-0s and latterly 2-8-0 Austerities.

The branch had quite a long life, surviving the Beeching axe. Passenger services lasted until the late 1970s and coal traffic until the closure of the mines in the 1980s.

Above left: the local coal merchant fills coal bags ready for delivery to local domestic users, as a Scammell parcels van winds its way up the station approach road.

Left: general view of Clayton West station where Fowler tank No.42412 has just arrived.

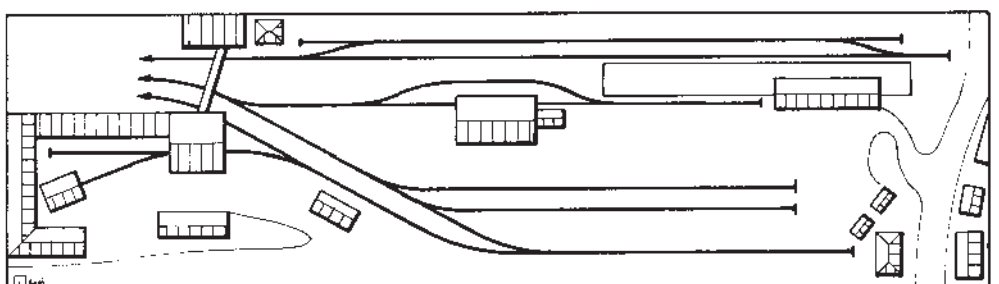
Top: Aspinall Class 25 0-6-0 No.52186 shunts building materials for the local contractor. Fowler 2-6-4T No.42412 moves onto its train ready for departure.

Above: bit of action at the goods shed as ex-Lancashire & Yorkshire 0-6-0ST No.51408 manoeuvres wagons. The coal board loco trundles empty coal wagons to the colliery.

Top far right: Scott Hall Road, Clayton West with the local Co-operative Society stores. Fowler 2-6-4 tank No.42412 waits in the station before its return to Huddersfield.

Above right: passengers wait patiently for the bus to Barnsley as coal board loco *Samson* takes a breather.

Photographs by Steve Flint, Peco Studio.





Left: Austerity 2-8-0 No.90332 gets ready to depart with a loaded coal train. This would probably only go down the branch to the sorting sidings at Clayton West Junction, where they would be sorted according to their destination.

Below: more empty wagons arrive behind Austerity 2-8-0 No.90332, while the NCB 0-4-0 saddle tank goes to clear full wagons from the loading screens.

Right: ex-Lancashire & Yorkshire Radial tank No.50762 arrives, greeted by the signalman. These 2-4-2 tank locos were the main source of power on the branch up to the early 1950s when they were superseded by the newer Fowler tanks. Many were renumbered after nationalisation but retained their previous owner's insignia until they were scrapped.

Centre right: shift change at the pit, time for two miners to have a chat. An internal use only NCB wagon emerges from the washing plant.

Below right: new competition for railways came in the 1960s in the form of bulk transport of coal by road. The lorry of one pioneering local haulier, Peter Slater, emerges from the loading screens.

The only remaining building is the goods shed used by a private business, although on my last visit it was rapidly being surrounded by modern industrial units. The track bed and site of the original station building has now been replaced by the 15" gauge 4mile-long Kirklees Light Railway.

The layout

The station area is based on the 1950s track plan of Clayton West, slightly condensed in length as a scale reproduction of the real thing would have produced a layout of excessive length with wide open spaces of nothing much. The coal mine was adjacent to the sta-



tion, but if faithfully reproduced would have resulted in an awkward triangular-shaped layout, so modellers' licence came about once again and the colliery buildings were moved through 180 degrees to produce a more balanced layout.

The station buildings, goods shed and signal box are as reasonable copies of the actual buildings as the few photographs I could find would allow. Photographs of the colliery buildings were even rarer, although one I found showed them to be typical buildings of the postwar coal industry modernisation program, that is steel girder frameworks filled in with red brickwork and a corrugated asbestos roof. I came across an article in a magazine about Fryston pit at Castleford so they are more inspired by the photographs of that coal mine.

The public house, local Co-op stores and the Lodge gate house can still be found in the Clayton West area. Arkwright's shop is a result of watching too much UKTV Gold.

Baseboards

The layout is built on three 4' x 2' baseboards, constructed with 12mm plywood frames and a 6mm plywood top. The aim was to create a lighter layout than previous ones built on more substantial boards i.e. chipboard and 12mm plywood which finished up weighing a ton! Both materials gave trouble swelling at the edges and warping, but so far the new lightweight boards seem perfectly adequate with no distortions

Trackwork

The layout is to 4mm scale, 16.5mm gauge and the trackwork is by SMP. Points are homemade using code 80 rail and copperclad sleepers and are controlled by piano wire inside a plastic tube, connected from underneath the base boards with a switch for changing polarity.

Buildings

Buildings were constructed using plasticard. The larger structures have a plywood framework to prevent any distortion by the polystyrene warping. The plastic is fixed to the wood using impact adhesive (sparingly!) and allowing it to become tacky before pressing on the embossed plastic.

Scenery

Greenery was produced using dyed carpet underlay as a base, then mainly assorted Woodland Scenics materials were added and fixed with diluted PVA glue. Cut grass was reproduced using dyed lint. Trees and bushes were made from twisted wire (old bits of electrical cable) and foliage was then stuck on using impact adhesive to give the basic structure followed by adding various scatters and fixed by spraying with cheap hair lacquer.

The layout is booked to appear at the Huddersfield Railway Modellers' Exhibition at Holmfirth Civic Hall on Saturday & Sunday October 28/29. See Societies & Clubs pages for full details.



IoMR diesel No.17 *Viking*

A modeller's inspiration from the 3' gauge Isle of Man Railway

In the seventh of his occasional series, enthusiast and modeller **ROBIN WINTER** takes a look at this German diesel locomotive, and the 4mm scale 'scratch-aid' etched kit from Worsley Works.

When one thinks of the Isle of Man Railway, the first thought is not of diesels but the wonderful fleet of Beyer, Peacock locomotives. The exceptions are the well-known railcars Nos.19 and 20, purchased in 1960 from the County Donegal Railways Joint Committee after the closure of that concern.

The IoMR up to that time had been operated by the fleet of fifteen Beyer, Peacock 2-4-0 side tank locomotives and a sole Dübs 0-6-0T.

The slump in tourism on the island after World War Two, due to the increasingly popular foreign holiday destinations and the increasing cost of crossing the Irish Sea, led to fewer passengers on the IoMR. Locos were wearing out and budget for parts and repair of these sixteen engines was becoming a severe problem. Parts donation from sister engines was common, and two locomotives fell foul of this policy and were completely dismantled. By the late 1950s the situation had worsened. The closure of Beyer, Peacock in the 1960s added to the already desperate problems.

So it was as far back as this that the railway started to look around for newer, cheaper, forms of traction.

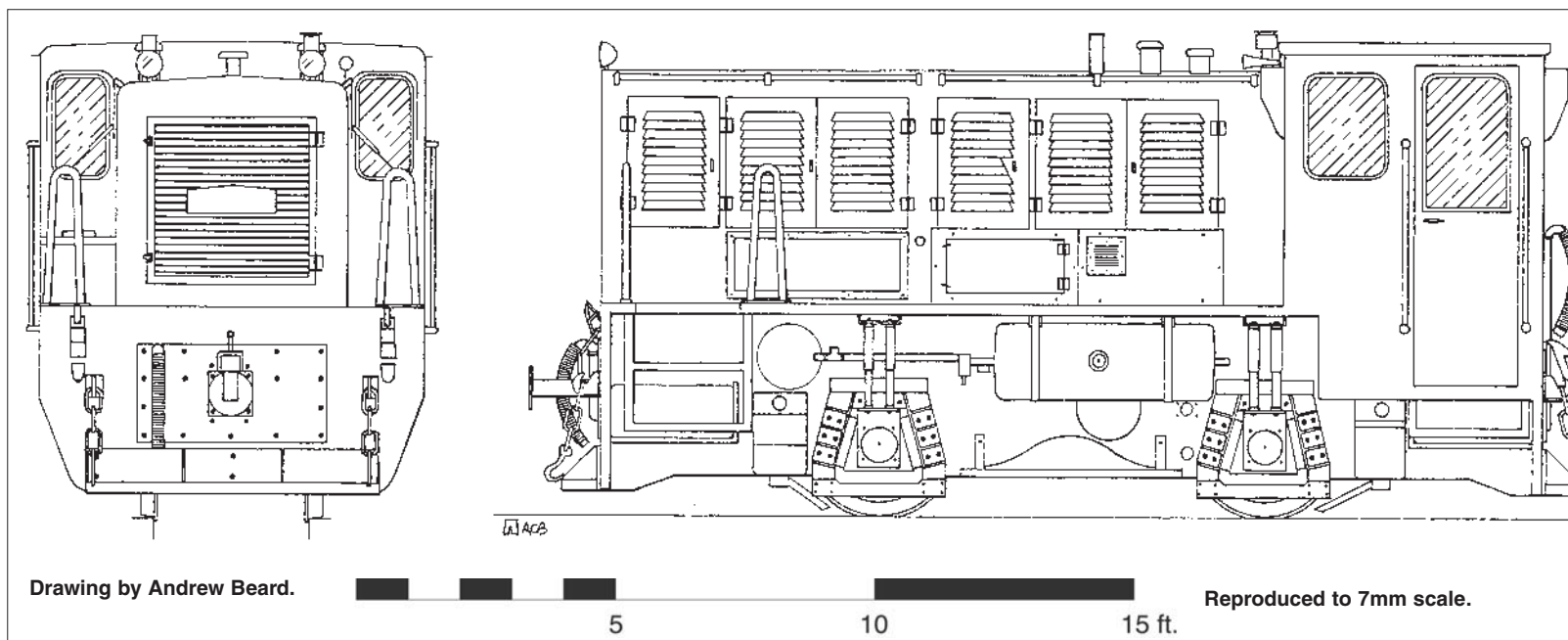
The Irish 3' gauge railways were also going through their own bad times. The history of the



Above: No.17 *Viking* outside the running shed at Douglas in July 1998 in the Brunswick green with which it was initially painted following delivery to the island in 1992.

Opposite page: *Viking* in the spring of 2003. The large steel backplates behind the chopper couplings are an IoMR addition to strengthen this area. Other additions include side chains and vacuum brakes. Note too the changed arrangement of brake reservoir cylinders.

All photographs by the author.



Drawing by Andrew Beard.

Reproduced to 7mm scale.



County Donegal is well known. However, the West Clare had modernised and dieselised in the mid-1950s and on closure of this line in 1960, the IoMR made enquiries to the CIE about the possible purchase of the three Walker bogie diesels, but a deal never came to fruition as agreement could not be reached on the price.

The IoMR soldiered on with what remained of its serviceable steam locos. Finding spare engines for emergency use and out of season permanent way trains caused economic and other operational problems which continued until 1992.

After some 40 years of sporadic searching, the IoMR eventually purchased its first diesel locomotive secondhand in 1992. Its arrival meant that the use for permanent way work of the railcars, which by now had quite a historic value, could cease.

The locomotive was built at the Christoph Schöttler Maschinenfabrik (Schöma) works in Diepholz, near Bremen in northern Germany, and completed on 17th June 1958 as works number 2066.

The 24 ton loco has a 200hp V12 diesel engine powering all four wheels through hydraulic transmission.

Wheelbase is 7'2½" (2,200mm) and overall length 17'8½" (not including the chopper couplings); width is 7'2½" with a total height of 8'10".

Built for 900mm gauge, the loco was delivered new to R.Petersen & Co. in Hamburg, where it was given the fleet number 208 and put to use at the Grube Treue coal mine near Alversdorf until 1988. Its history between then and 1992 is unclear and it is assumed that the loco was in store.

On the island, it was adjusted to 3' gauge and outshopped in lined Brunswick green, reminiscent of the original 1873 livery, but retaining the red chassis with which it arrived. The necessary chopper couplings were fitted and, to satisfy the Railway Inspectorate, side chains and vacuum brakes were added.

It was given the IoMR running number 17 to follow on from the steam fleet, and in 1993 it was named *Viking*, which was the name originally intended for No.3 *Pender* of 1873, which was named after Sir John Pender, one of the original members of the Isle of Man Railway Board of Directors. The name was chosen by a competition held in local schools. The Isle of Man has a historical connection with the Norse people as it was the Vikings who set up the Manx parliament over 1,000 years ago.

No.17 was not cleaned and cherished quite as much as the steam fleet, and consequently it constantly looked shabby.

In the spring of 2003 it was given a facelift to smarten it up and painted in a lighter green (Thorpe green) with white/black/white lining. This seems to be a shade darker than the 1960s livery. The loco retains the red chassis - I

am sure it would look smarter if it were black!

The original German builder's plates are still on the loco. The nameplate is cast in aluminium and not brass as for the steam locos.

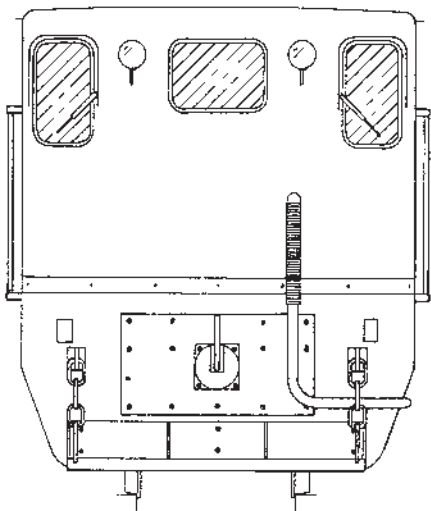
The first time I saw No.17, in 1992, I was horrified: I found it ugly, out of place, and out of character; the Brunswick green and bright red livery did nothing to enhance its appeal.

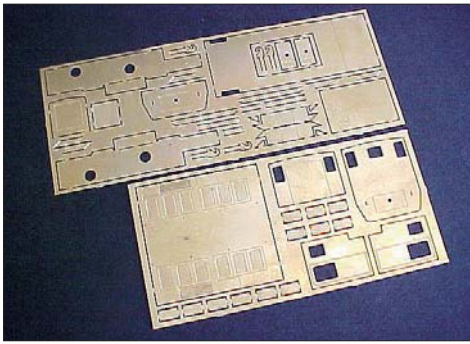
But on a damp day in May 2003, I had a meeting with David Howard, then Director of Transport on the island. He took me down to the workshops where No.17 *Viking* had just had a repaint, in an 'Ailsa' lookalike apple green livery. I was certainly impressed by the significant change in appearance. My opinion was changed about *Viking*: perhaps it was something to do with the 'Ailsa' green, but I had to have one!

With assistance from the staff in the workshops, the loco was moved outside and I was able to photograph the whole thing in detail, with the hope of getting enough information to make a model.

The model

Photographs and drawings were sent to Allen Doherty of Worsley Works who produced the etchings required for a basic 4mm scale kit in his 'scratch aid' series. Drawings and photographs are essential to complete the kit, although the etchings could be put together without much more research. However, the details not included in the kit will need some homework and time. Like the magnificent steam fleet, this loco has had some significant changes made even in the comparatively short time it has been working on the IoMR.





With the Worsley Works 'scratch aid' kits you do not get instructions, wheels, motor, handrails and all the other essential details that make a finished model of the prototype. All that is up to you, which I think adds to the enjoyment of building the kits.

Worsley have made etchings for me before and they have always been of good quality, but this set for No.17 *Viking* has been designed and etched beyond expectation. The design has been very well thought out, with half etched lines on each side of the fret for folding, and details such as the ventilation grilles and footstep grips. The engine housing needs a crease in the centre of the roof panel and rolled tops on the side panels; all have been neatly etched both sides for ease of bending.

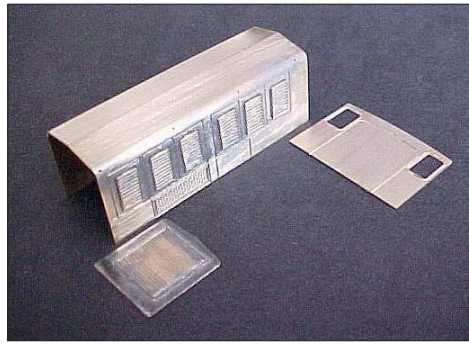
One note of interest is that the simple chassis sides with no spacers could very well be gauged for use on OO9 as well as OO_n3.

If, like me, you are no wizard when it comes to electrical items or building motorising units, time should be spent considering how you will power the locomotive before too much construction takes place, especially as far as the chassis is concerned. The wheelbase of 29mm is not too much of a problem but with only 15.5mm clearance within the engine housing it might be! My solution was to install a ready motorised unit, of which more anon.

The first soldering task is to fit all the add-on ventilation grilles which I must admit I thought twice about fitting. Etched grilles exist on the engine housing already, including the radiator cover. However, the overlays were added in case the bases were lost in painting.

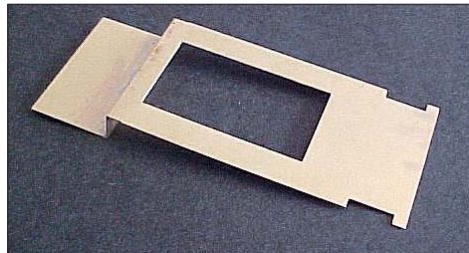
The reinforced coupling plates which were added by Isle of Man Railways to the original buffer beams were also applied. These were wafer thin so solder paint was used.

Once fixed in place and cleaned, the next stage is to do the only serious bending required on the whole loco, the engine housing. This has been neatly designed with etched marks on both sides, detail outside and inside



Above left: the Worsley Works 'scratch aid' kit as it comes.

Above: the folded engine housing, which was much easier to do than expected - the fine etched lines made it very simple - with the addition of a line of solder to fix it in place.

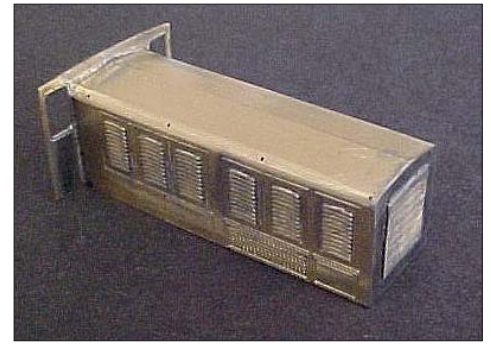


for folding and rolling. I prepared myself with cocktail sticks and other tools for the tight outer corners but in the event the whole thing rolled and folded in all the right directions on its own without difficulty.

Soldering and positioning the engine housing to the cab was made easy by an etched groove provided in the cab front plate. I found fitting the radiator sheeting and grille more difficult as the pitch at the top of the etch was not the same as the pitch on the engine housing: I expect it was a fault in the bending or folding. Having checked all was fine, a fillet of solder was added and filed away smooth.

The cab is on a lower footplate than the running boards and this requires the complete running board and footplate part to be folded next, and the angle reinforced by soldering. It is very obvious which end is which, but it is essential to ensure the footstep cutout is at the front of the engine and the fold done the right direction. An adequate cutout for the motor is provided and it is not critical to open or cut this to any other size or shape at this stage.

The other three sides to form the cab are next, but as the rear cab plate also forms one of the two large buffer beams, I decided to work on this area whilst it was flat on the



Above: the completed engine and radiator assembly. A fillet of solder was needed to fill a small gap at the top of the front radiator panel.

Below left: the running board and footplate folded showing the cutout for the motor. The cutouts at the front are for the front steps.

Bottom left: the rear cab sheet and both buffer beams were worked on before being soldered to the main assembly.

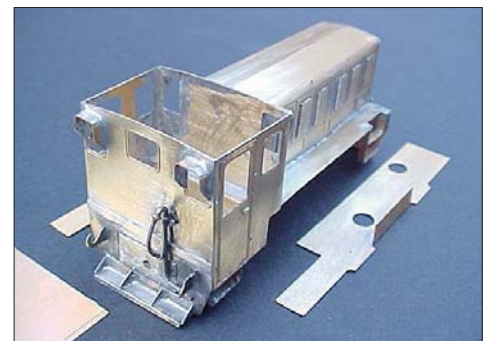
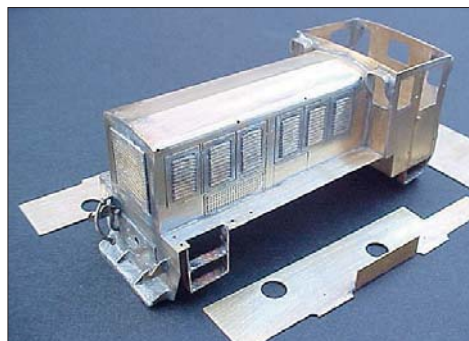
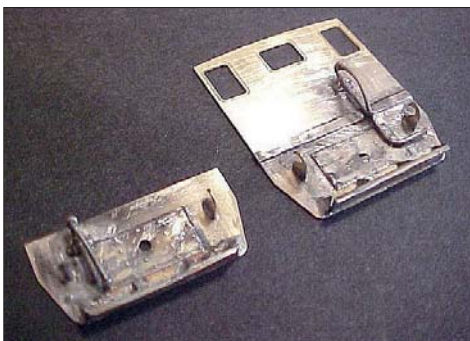
Below: the completed 'scratch aid' kit as supplied - the rest is up to the modeller to complete and detail. The roof will not be attached until after painting and fitting glazing. The plain etched pieces by the body are all that is provided for the chassis - the folded 'shelf' is to support the brake reservoir cylinders.

bench. The front beam was also done at the same time. Chain hooks and cowcatchers (which were not fun to solder due to the very fine triangular braces) come as part of the kit, as do the shaped metal cab window visors.

The pipes for the vacuum brakes which were fitted by the IoMR were added at this point from my spares box; you will note that the rear pipe ends suddenly on the buffer beam. This pipe will eventually extend round under the cab floor when all the bits are put together.

The temptation to fit couplings at this stage was resisted just in case of any slight measurement problems with the height.

To ensure that the engine housing and cab sit in the correct position, it is necessary at this point to fix the front buffer beam to the running board, as the radiator grille must be flush with the buffer beam, almost to the extent that only a fine join is seen between the radiator and buffer beam. This in turn will give the correct position for the engine housing and cab front. The engine housing cannot be soldered on the inside and quite a time was spent carefully carrying out this task so as not to destroy any etch lines or the fine grilles. A word of warning here: the opening in the footplate for



the motor is marginally wider than the engine housing, so a fillet of solder had to be put in the gap.

The footboards can now be folded and soldered into position.

The cab is very straightforward; drilling out the handrail holes before construction is advisable. As the cab has an integral floor, the roof, once rolled to shape, is not glued on until after glazing and any required cab details are fitted. It is definitely worth pointing out that the fold lines on the roof are to roll the edges down and not up. There are no drip strips on this roof!

There were clear plastic wraps above the doors when the loco was initially purchased by the Isle of Man Railways, but these have now been removed.

The simple chassis consisting only of side plates cannot be fitted until the motor and gearbox has been chosen, measured, and assembled. Spacers will have to be made to suit your requirements.

Note the two 'flaps' on the chassis side plates need to be folded outward to hold the half round brake reservoir tanks; they are not meant to fold inward to support the motor.

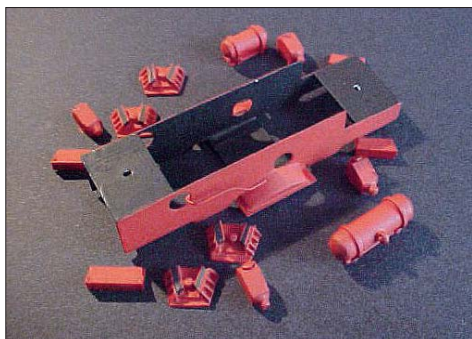
Wheel centres have been etched at 29mm and the holes can be further opened up to take bearings if required.

So as far as the 'scratch aid' kit is concerned, that is it!

The task now is to complete the motorising so the chassis can be finished. I am certainly not qualified to give any compulsory instructions for this as everybody will have their own ideas. For my model I have chosen a self-contained motorised bogie. Here some problems were encountered because of the limited width of just 15.5mm inside the body shell. Many powered bogie units are made for standard gauge models and I am indebted to Andrew Mullins (Branchlines) and Dave Hammersley (Roxey Mouldings) for their advice. However, Mike Chinery came up trumps and constructed a unit especially to fit No.17.

Below: the completed chassis frame with soldered brass spacers to make the gauge and hold the motor. The chassis exterior details were made or carved from styrene sheet or off-the-shelf extrusions.

Below right: the finished chassis assembly complete with Mike Chinery's drive unit. This was really designed as a bogie for use with the Anbrico kits for the County Donegal railcars Nos.19 and 20. With a change of wheels and omission of the coupling rods it suits the chassis very well.



The chassis was then built around the power bogie and attached to the body.

The top handrail holes have been etched as on the drawing I received from Isle of Man Railways; this originated from the manufacturers, Schöma, in Germany. In fact, as the loco runs now it is incorrect - it should have six brackets, not four, so a certain amount of filling and drilling has to take place.

So we have all the basics required now in one piece and what you add now is up to you.

Since 1992, a number of details have changed, including livery, removal of the plastic window and door wraps, oil filler, and the second small vacuum cylinder on the nearside.

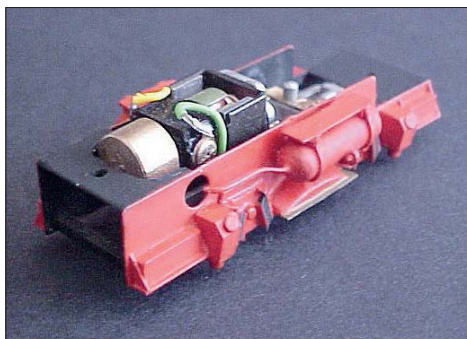
To be added are the tool box, axleboxes and dampers, brake reservoir cylinders (three in 1992, two by 2003), sandboxes, lamps back and front, cab handrails, engine roof vents, exhausts, couplings, coupling chains, and - last but not least - builder's plates and nameplates. The prototype plates are aluminium, so brass - as used for the rest of the IoMR fleet - is out of the question. Trying to find someone who could etch these at moderate cost became a project on its own! The nameplates were eventually produced at a late stage in the project, again etched by Allen Doherty.

The spares box always comes in handy for these 'scratch aid' kits, and many items left over from other models might find a use. The long toolbox was constructed out of two loco tool boxes left over from a Branchlines Beyer, Peacock tank. The exhausts were carved from whitemetal roof vents from the Roxey Cleminson coach, and the lamps out of wheel bearings. Many detail parts are simply constructed from styrene sheet.

Livery

The period I generally model is 1960 to 1970, with steam locos in either Indian red or 'Ailsa' green, so it was difficult to make a decision about the livery. As it arrived or as it is were the only two viable choices.

I found the 1992 Brunswick green very drab. If you do wish to reproduce this livery, I think Humbrol No.3 is the best option; it can be



used straight from the pot. Lining should be vermilion-black-vermilion.

So the 2003 green it had to be for my model. The photos taken in May 2003 show the loco in 'Thorpe' green which is available from professional paint suppliers but is very expensive, and there were no small sample pots on offer!

A colour sample was sent to me by the kind gentlemen of the Douglas paint shop. It was going to have to be a mixing job, one of those little irritations the modeller of independent railways has to endure. The finish on the model was made up from Revell ref.364, Humbrol 'Lemon Yellow', and a very small amount of Precision Paints 'LNER Doncaster Green', matched up to the colour sample.

Between 1992 and 2003 when in Brunswick green ex-works condition, the loco chassis had a bright red underframe and buffer beams. During its 2003 repaint only the buffer beams were treated, so the rest has been left to weather to a pink-red. For this I have used Humbrol No.60 but I have not faded it.

I am not sure why I have finished it so clean and short of oil and dirt! Perhaps I wanted to give it an appearance that was just that little bit newer than the steam fleet. The cowcatchers appear only ever to catch gravel and ballast; I have never seen these fittings without some sort of muck or dirt being carried around on them - a must for the model!

My only regret is that I wish I had never started hand lining my stock with a brush - there are too many straight lines on this one!

Acknowledgments

Andrew Beard, for the drawings accompanying this article: these are far superior to those I had to work with at the start of this project.

Marcus Mandelartz of Schöma Lokomotiven www.schoema-locos.de

David Howard,

Director of Public Transport, Isle of Man

Paul Ogden,

Isle of Man Railways workshop staff, Douglas

Isle of Man Steam Railway Supporters Assoc.

Special thanks to Allen Doherty (etchings) and Mike Chinery (drive unit) for their help.

Worsley Works NG

19 Douglas Road, Worsley, M28 2SR.

www.worsleyworks.co.uk

Mike Chinery

'Pennant', Upper Downing Road, Whitford, Holywell, Flintshire, CH8 9AJ. 01745 560442.

Both are mail order only but can occasionally be found at selected exhibitions.

No.17 *Viking* can be seen in action on the *Port Foxdale* layout at the High Wycombe & District club show on Saturday 4th November. More information in *Societies and Clubs*.

North Staffs in N

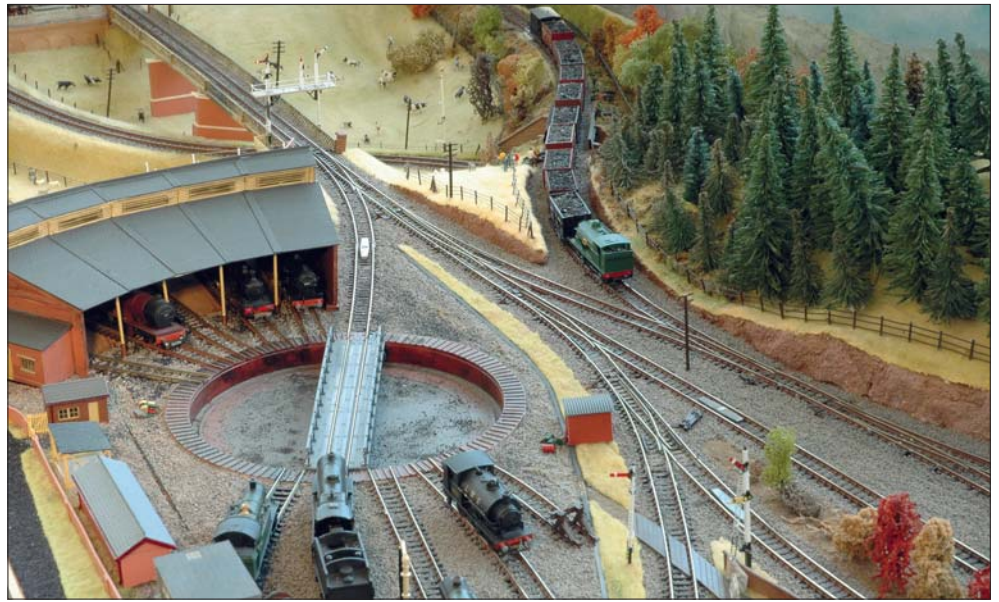
Modelling the 'Knotty' in 1:148 scale

R. YOUNG rebuilt a smaller version of a previous North Staffordshire layout in its new location.

The original layout was started about 25 years ago, and was based on the Churnet Valley line of the NSR, running between Macclesfield and Uttoxeter. The period chosen was the 1930s, and the section from Leek to Oakamoor was featured on the model. I lived in the Churnet Valley, about 1/2 mile from the line and can still remember the sand trains running to Oakamoor, although I left the area before the preservation society took over the line. The layout was in a very large upstairs room, and included Leek and Leekbrook, together with the triangular junction to Waterhouses and the mental asylum branch. A long scenic run down the branch from Consall Forge to Oakamoor, together with Bolton's Copperworks then followed, plus a large fiddle-yard, representing Uttoxeter, again with a triangular junction.

Rolling stock, both RTR and kits, had been kitbashed where necessary, repainted and relettered to represent the traffic of the area. All rolling stock was fitted with slightly modified MBM couplings, uncoupling being by electro-magnetic ramps.

Then came a major domestic upheaval, and the layout had to be dismantled. I salvaged what I could from Leek, Leekbrook and Uttoxeter, and a friend with spare attic space



stored the many cardboard boxes. The long scenic run (about 25' in all) was given to the North Staffs area group of the N Gauge Society, and there it all rested for about seven years, to be followed by another dramatic change in lifestyle – I moved to southern Spain, and the possibility of rebuilding the layout became a

reality. However, the space available was about a quarter of the original, and it would have to be end-to-end rather than the previous continuous run. Although still representing the NSR, the new layout is based on a fictitious location in the N. Staffs. and Buxton area.

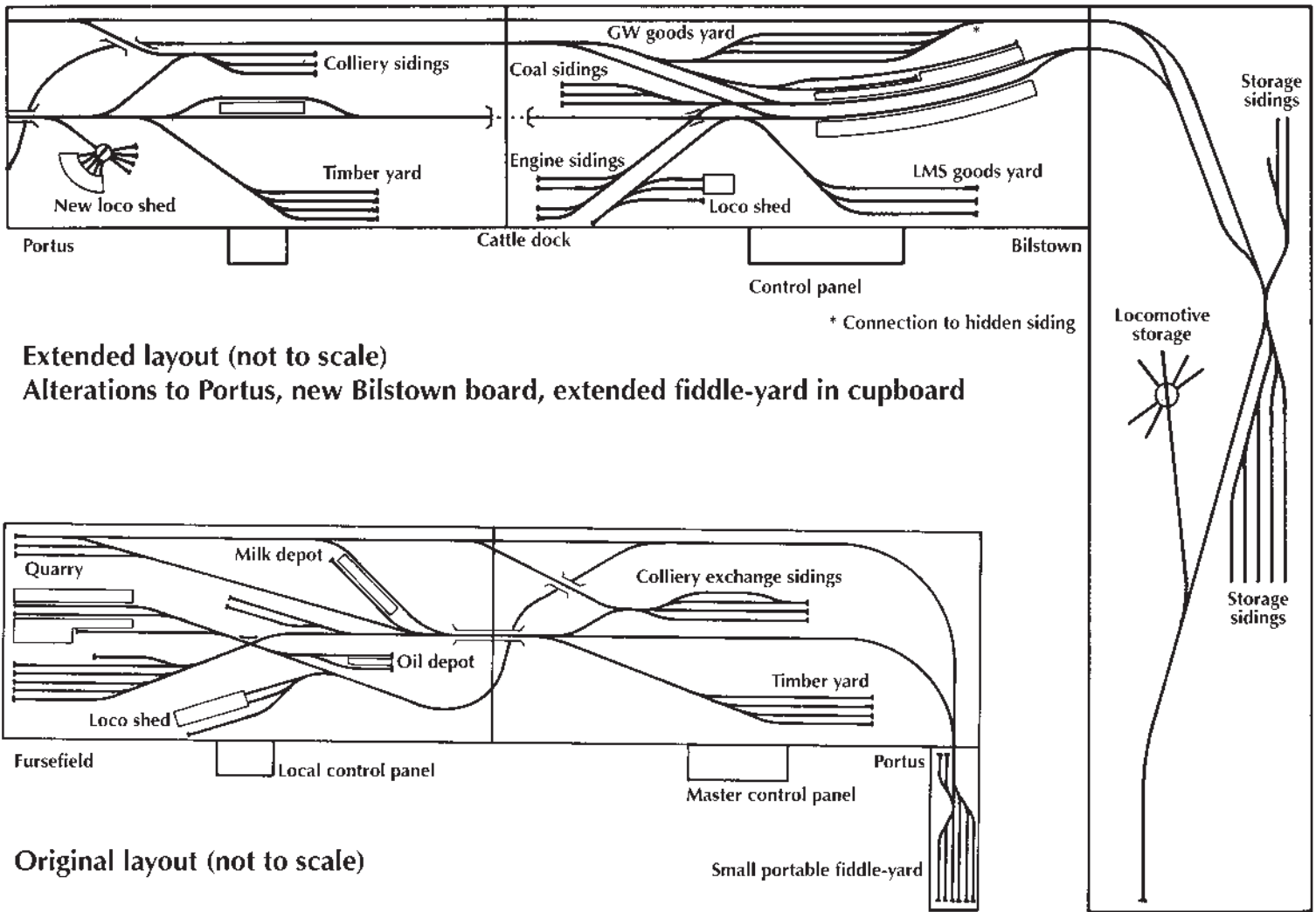
The baseboard is a fairly conventional construction, consisting of a 3" x 1" framework, braced at intervals, and fitted with a 6mm plywood top. Peco track, points and fittings have been used throughout. Basic scenery is either polystyrene or a light wooden framework covered with *papier-mâché* and finished with surgical lint, dyed various shades of green to represent grass. The layout was in two sections, located with hinges front and back, fitted with removable pins. Originally, the track was soldered to small screws either side of the joint, but over a period the boards moved slightly, and I was getting a lot of derailments. This was possibly because of the very high temperatures in southern Spain in the summer. So the screws were removed and all the joints connected with fishplates, which has solved the running problem. Fortunately, I have not had to



Above: the repositioned shed at Fursefield. *Jill* approaches the colliery exchange sidings with a train of full coal wagons.

Left: a Large Prairie sets off from Bilston with a branch pick-up. The two gunpowder wagons are from N Gauge Society kits.

Photographs by Peter Still.



Extended layout (not to scale)
Alterations to Portus, new Bilstown board, extended fiddle-yard in cupboard

Original layout (not to scale)

separate the boards since assembling them, but should this be necessary, I shall just have to do a bit of reballasting after putting them back together again.

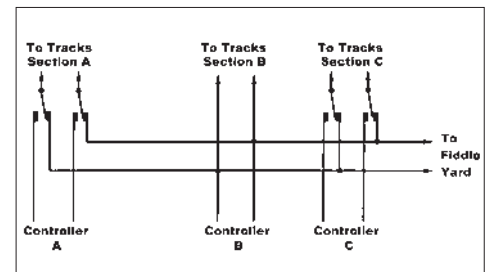
The one somewhat unusual feature is that the boards sit on a solid storage unit running the full length of the room, so that there is no access to the underside. This means that I either have to pull the boards forward onto a trestle, clear of the unit, and then lie on the floor and work from underneath – very uncomfortable – or remove all the stock, isolate the board and stand it on its side; an exercise I hope not to do too often.

Having laid the track, made the electrical connections to it and installed the uncouplers, I connected all the points via push-rods guided through screw eyes fixed to the under-

side of the baseboard to the front of the layout. The final connection to the points, through the baseboard, is by 1mm copper wire soldered to the top of the push-rod. The point motors were then mounted on the front of the boards and connected by a soldered joint to the rods, thus giving a little adjustment. This arrangement makes wiring very easy, and on the rare occasion when a motor or change-over contact needs attention, no access under the layout is needed.

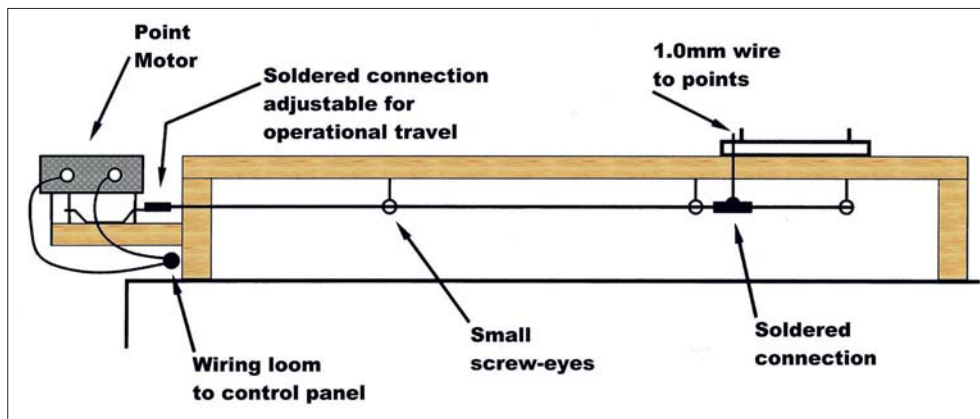
The push rods are old lengths of 00 rail that I was given, or 2.5mm solid copper wire salvaged from old electric cable. So far, for the seven years that the layout has been in operation, this system has been trouble-free. I am now in the process of boxing in the point motors with an easily removable top, and

blending this into the foreground scenery. Some of the photographs show the motors in their original state.



As built, the layout was 14'6" long x 1'10" wide, with two boards forming the fiddle-yard which could be attached to the right-hand end. This worked reasonably well, the main problem being that, with the fiddle-yard in place, the only access to our storage cupboard was by crawling underneath, passing out the wanted article, and then crawling out again.

In order to make operating as realistic as possible, a hidden siding runs the full length of the layout at the back behind the scenery. Empties can then be shunted into the quarry and colliery exchange sidings from the main line, removed via the hidden siding, and replaced by full wagons, ready for the outward journey on the main line. The quarry wagons are replaced by any handy loco, but the colliery has its own 0-6-0ST, named after Jill, without whose understanding the layout would





Left: the relaid shed at Bilston, but still with the original building which will be lengthened when time permits.

Below left: general view of the approach to Fursefield terminus. The main line crosses the viaduct on the right, with the heavily-graded branch dropping down to go under the viaduct at the right of the layout. Note the point motors at the front, which have now been boxed in and incorporated into the foreground scenery.

Right: the original extension under construction. Pointwork has been laid out to check alignment prior to cutting slots for point motor connections, wiring up and pinning down.

Far right: Portus timber yard, with the colliery exchange sidings in the background. The colliery has since acquired 0-6-0ST *Jill*.

Below right: ex-NSR 0-6-0ST No.1601 approaches the oil depot at Fursefield.

Below far right: ex-NSR 0-6-2T No.2270 about to depart from Fursefield. At the time the photo was taken, the white area behind the train was awaiting its background scenery, which has now been installed.

still be in a friend's loft. This may sound a little complicated, but my interests are in operating as closely as possible to the conditions of the 1930s, when freight trains trundled between goods yards, shunting at each one, and milk vans and parcel vehicles were attached and detached at junction stations all across the country. One daily NSR working involved milk traffic in churns, from the narrow gauge Leek & Manifold Valley Light Railway. This was transferred to standard gauge at Waterhouses and worked to Leek. The vans were then transferred to a Stoke-on-Trent train, transferred again at Stoke to a working to Stafford, and finally to a train to London, with the empties making their return journey by the same route. All very time-consuming, complicated and, dare one say, rather inefficient, but that's the way it was.

Having just about completed the ballasting, sorted out the electrics, unpacked and cleaned the motive power and rolling stock

after its seven years of inactivity, and started preparing a timetable, we decided to have an extension to the room, and another 8'6" became available. This was getting to be a serious layout. What improvements could be made? First, rearrange the shelving in the storage cupboard, and build the fiddle-yard into it. As it is fitted with sliding doors, access would be no problem, and I would no longer have to crawl underneath. Secondly, I now had room for a new junction station (Bilston). This gives main line operation from fiddle-yard through Bilston to the terminus (Fursefield), and with a branch from the junction.

This would allow for a routine shuttle service between Fursefield and Bilston Junction, with through workings to the distant city (fiddle-yard) during the morning and evening rush hours, plus plenty of opportunity to transfer vans and goods wagons between main line and branch. In addition, I gave the branch line some severe gradients at the junction end,

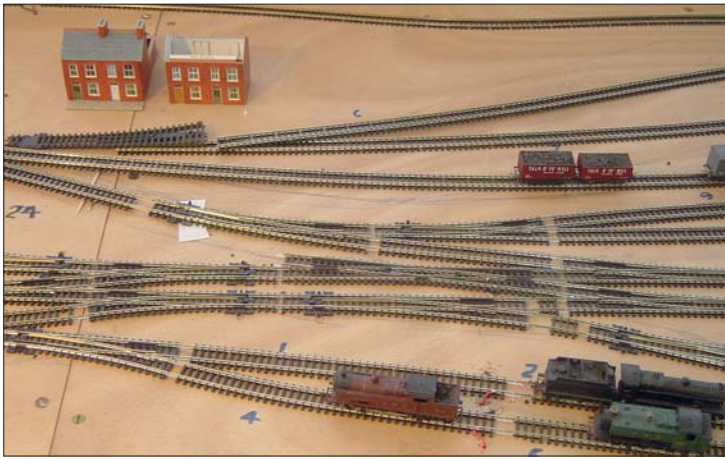
which calls for a certain amount of double-heading or banking of the heavier goods trains, plus any diverted main line workings due to engineering. To cope with this, a two-road sub-shed, having a 4P-rated 4-4-0 and a couple of tank locomotives, was added at the junction.

The final alteration was to move the locomotive shed from Fursefield to a larger site on the middle board. Over the years, my loco fleet had increased by an LMS 4F/a 'Crab' and a second ex-NSR 0-6-2T, and the storage space was reaching bursting point. The move increased stabling from 8 to 14 locos, and the original shed space was turned into a parcels depot. And yes, there is a precedent for this; the NSR did it when the branch to Waterhouses was built, the shed being moved from Leek to Leekbrook Junction, about two miles away, and Leek goods yard greatly expanded.

In order to improve running, all track joints (other than insulated ones), were bonded by short lengths of wire soldered to the track and run under the plywood top. Also, all point blades are fed via a Peco PL-13 switch mounted on the point motor, rather than simply relying on the blades making contact with the running rail. To assist with cleaning and maintenance, all signal posts and telegraph poles are removable. When their positions had been ascertained, holes were drilled through the baseboard and short lengths of small diameter copper tube were cemented in flush with the top. The ends of the fittings were then filed to be a good push fit into the tubes, and inserted. Larger buildings such as factories and engine sheds do not sit on the ground, but have been slightly sunk into it, which keeps them in place, adds realism, but allows for easy removal.

The short island platform on the model at Portus has been added for the exclusive use of staff at the new shed, with a limited number of passenger trains calling each day. The hidden siding was also extended and connected to the scrapyards and factory sidings at the junc-





tion, thus continuing the empties in/full out theme.

The original layout had no turntables, as all locos were turned via the two triangles, but now these would be required; one at Fursefield and one at the fiddle-yard. Motorising them has always seemed a challenge and, although not perfect, what I have done may be of interest. I purchased two Peco turntables and two 6v motors with gearboxes. These were mounted under the baseboard and connected to the turntable through a 3:1 reduction crown and pinion wheel (both second-hand Meccano), and driven by a standard Gaugemaster controller. Alignment is by eye, rather than automatically, but with so much rotational speed reduction, together with extremely slow turning via the controller, they can be very accurately lined up with the track and, obviously, will turn in either direction.

Operating is, as far as I am concerned, what the layout is all about. A timetable is in use, starting with early morning passenger and newspaper trains, through the morning rush hour, then milk, coal, pick-up, limestone, petrol and goods, on both main line and branch, the afternoon rush hour, and a quiet rundown in the evening, with each loco returning to its shed. Each loco has a roster for the day. It's quite a challenge to ensure that, at the end of the day, everything is in its correct location ready for the start up next day. However, due to practicalities, such as how much time I can spend on the layout during the day, my timetable may take me up to a week to work through. I do not work to a clock, but simply restart operations when time permits. When in

operation the whole layout can be controlled from a panel mounted on section two of the layout, but each section can be controlled from its own panel for shunting and local movements.

I know that the NSR is far from being everyone's choice, so I was very lucky that, during the time the original layout was in operation, a small firm called Planet Engineering brought out some limited runs of NSR stock. It produced an 0-6-4T, the New Class C, an 0-6-2T, the New Class L, a set of loop line six-wheeled coaches, and a 6-wheeled milk van, these last two items in etched brass. Needless to say, at least one of each was purchased. All this stock passed into the hands of the LMS at the grouping, and was still running in the 1930s (some of the milk vans lasted into BR days), so I have a good range of rolling stock.

In addition, two GEM L&Y 0-6-0ST kits have been converted to give a fair representation of the pair of saddle tanks constructed by the NSR. The company also built a wide variety of passenger bogie coaches, all 49' long over body, and a selection of Graham Farish suburban coaches has been shortened and modified to give a good representation of these, giving me three 3-coach sets.

Over the years, the branch has tended to acquire a GWR image, with the far goods yard serving the branch, and the near one the main NSR line. This gives scope for regular exchange traffic, as certain workings, such as the private owner scrapyard wagons, or the tar tankers to the asphalt plant at the quarry at Fursefield are always worked over the branch to and from the junction, and then via the main line

to the fiddle-yard. In order to work this traffic, two GWR pannier tanks were purchased, and shedded at the junction.

The breakdown crane is a whitmetal kit and very heavy, but by building a match truck on which to locate the jib, and then carefully balancing the body of the crane on the upturned head of a pin attached to the underside, the whole crane pivots slightly on its chassis. This allows it to be worked over the main line by one of the heavier locomotives, usually an 0-6-4T built from a whitmetal kit. It is, however, banned from the branch as it is so heavy that it needs four locomotives to get it up the steep gradients!

At this stage the story should be drawing to a close but then Dapol came on the scene with its release of the GWR siphons. With the branch developing its GW image, a couple were purchased, together with two Chivers Finelines MOGOs, in order to run suitable parcel trains. Then Dapol announced the 14xx 0-4-2T and autotrailer, to be followed by a prairie. A long hard look at Bilstown Junction! No! The sub-shed, designed for four locos, already housed six, which often meant keeping a visiting loco in the goods yard for lack of space. I had enough locos. I did not need any more. I resisted. Some scenic bits and a pair of points were needed, so during a short return to England, I visited a local model shop, and there in the display case was the 0-4-2T and autotrailer which I did not need and had no room for.

When I got home and unpacked them, I was very impressed with the quality of detail, but where could I put them? The only solution was





Above: the cause of all the recent upheaval. 14xx 0-4-2T No.1425 departs Bilston Junction, with autotrailer and milk tanker.

Below: 87xx 0-6-0PT shunting the GW yard at Bilston. Wynn's scrapyards is in the background, and the approach to the new shed layout is in the foreground.

a rebuild of the front half of the extension board, part of which was still awaiting its scenery. This is because I prefer to start at the

back of the board and work forward, so as not to damage anything by having to lean over to work at the rear. The whole of the loco shed and small engines' yard would have to be cleared and rebuilt, so everything moveable was moved and the board disconnected from the layout, and removed from the storage unit.

Right from the start, all electrical connections between boards and control panels had been made by plug and socket, so this was fairly straightforward. The two shed roads were

lengthened to hold an extra loco each, and three new sidings added, holding five locos and the breakdown crane. This now gave me storage for eleven locos – space for all the motive power, including the prairie, which will have been purchased by the time this is published. The rebuilding also allows room for three more locos, should someone produce something more that I do not need, and have no intention of buying!

All three control panels plug into the main boards, sitting on removable brackets, so if Jill wants to hold a party, they can be removed to give a clear space. A further turntable had been purchased and installed alongside the junction control panel, to serve the new enlarged shed. This is a push fit via two wooden rods with the electrical supply via sliding contacts, so is also instantly removable.

A new access to the engineers' yard has been put in via a double slip but, as the space is limited, a couple of 3-way points would have been really useful. Some final testing, and the board will be ready for installation, and new workings for the prairie and autotrailer incorporated into the timetable. Then will come the completion of the scenery, including an extended loco shed to get the new work to look like a railway. Also needed is the finishing off of some of the Planet kits, and the carrying out of routine maintenance enough to keep me busy for some time.

Thanks to Jenny Wynn for the background scenery, and thank goodness for N gauge!



Golden Arrow luggage truck

The formation of the train did not include a Pullman brake

Described and modelled in 4mm scale by **NICHOLAS ROTHON.**

The *Golden Arrow* has always fascinated me. As a boy, the best moment of a morning spent at Orpington station was the high-speed passage of the 'Arrow'. In 1950, the normal engine was the West Country Pacific *Bere Alston*, which at that time was only a few months old. In later years, I had an opportunity to travel on the famous train. After a long absence abroad, it was wonderful to enjoy an old-fashioned English tea on the way to London and on a summer evening to see Canterbury Cathedral from the train and a cricket match in progress.

The formation of the train did not include a Pullman brake. Normally there was a utility van at the front of the train and a further utility van at the rear together with a special wagon to carry the containers of registered luggage. Adjoining the entrance to the old platform 8 at Victoria was an office where luggage could be registered through to Paris. Railway staff were joined by Customs Officers who chalked their markings on the suitcases. The luggage was then placed in sealed containers on the special wagon. At Dover, the wagon was detached from the train and shunted round to the dockside so that the containers could be winched on to the *Invicta*, the *Golden Arrow* boat. Similar wagons were used to convey the containers from Calais to the Gare du Nord.

The luggage wagon does not appear in many photographs. The majority of the pictures of the *Golden Arrow* were taken in the morning and show the down service with the wagon at the rear. There are relatively few photos of the up service, when the wagon would have been at the front of the formation for unloading at Victoria. In the last few years of the 'Arrow', the wagon was no longer used. There were some problems with the derailment of four-wheel wagons operating at speed in the late 1950s. This applied particularly to the cement wagons but an edict from the Railways Board prohibited the use of four-wheelers on express trains.

My layout might just qualify for the *Right Away* section but it provides me with a great deal of enjoyment in operating typical Southern services of the 1950s. I was delighted to acquire Mr. Riley's book *The Heyday of Stewarts Lane and its locomotives* as it includes a reasonably clear picture of the luggage wagon with the *Golden Arrow* stock being prepared for the down service. The problem was how to work out the scale of the wagon. John Sagar's Book *Steam in action: Bulleid Pacifics* includes a picture from the National Railway Museum collection showing the up service passing along an embankment in the Kent countryside, showing both the luggage wagon and a four-wheel *GUV* in profile.



The Oakwood Press book on Southern Passenger vans includes a scale drawing of a *GUV* with a 21' wheelbase. Using the photo as a template, I calculated that the wagon would have a wheelbase of 17' and an overall length of 28'.

My modelling skills are limited to the conversion of kits rather than accurate scratch-building. The spares cupboard produced an ancient Airfix kit for a tank wagon and I was pleased to find that with a little licence, the underframe provided an ideal chassis for the luggage wagon. After assembling the underframe, it was necessary to clear the top of protrusions and construct a simple floor and a one-plank side from plasticard.

The wagon carried four containers. At first I tried four separate boxes made from card, but they did not look correct. I then made one long box, scoring the side to represent the four boxes. Bolts and hinges were made from bristles from a broom and the domed roofs were

shaped from balsa. I used a piece of jewellery chain which was chopped up to represent the fastenings. The luggage boxes and underframe were painted matt black but the sides of the wagon were painted in Southern carriage green. The number is shown in white in Mr. Riley's photo but I could not decipher it and used an imaginary number.

The research for this project has given me a great deal of pleasure and the resulting model is an interesting addition to my stock.

And so Mr Syd Norman and his team have been hard at work from early morning polishing *William Shakespeare* to perfection. Driver Sam Gingell has arrived and in his quiet but most competent way has boarded his locomotive. The pilot engine has backed on to the rear of the cars. Mr Richard Hardy has collected his famous trilby hat from his office and has come out to inspect the locomotive, and all is well with the world.

Photographs by Jim Harris.

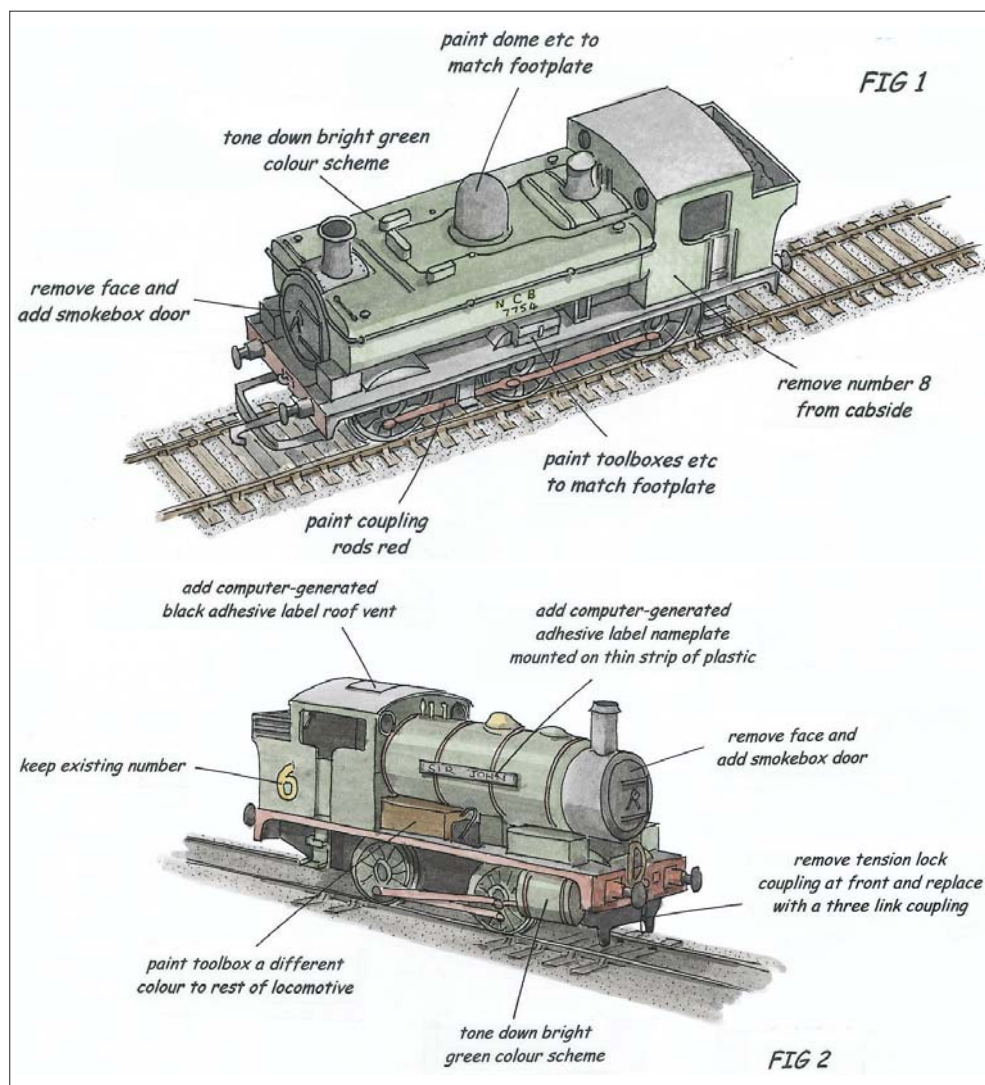




Instant industrials

Moving on from 'Thomas' – 1

PAUL A. LUNN presents some conversion projects for this well-known fleet of toy trains.



There's always going to be a time when a youngster feels they have outgrown their Hornby 'Thomas the Tank Engine' collection and having bought the newest catalogues, or read articles in one of the model railway magazines, will hope for equipment that's more 'grown-up'. I wonder too how many adults, some who are perhaps the real railway modeller in the family, have been left with 'Thomas' items long after a child has quit railways for another hobby.

Rather than sell up and start again, which can be costly, can 'Thomas' products be used, with simple modification in a different way? The answer is certainly 'yes' and indeed some items lend themselves more readily to this process than others.

Industrial steam railways have become more popular in recent years and whilst now part of our history are still represented at most of the preserved tourist lines even if not all in working order! The great thing about an industrial line is that it can be modelled in a small space and would consist of grimy, battered wagons being shunted around a number of sidings almost certainly by a bright-liveried, boldly-lettered and often named small tank engine. It's here the 'Thomas' link becomes obvious for this description surely fits *Thomas*, *Percy*, *Duck*, *Bill* and *Ben* from the Hornby range: whilst they will need some modification there's nothing that can't be undertaken by an entry level modeller of any age, though the very young might need some adult help.

So, where do you start? Well I have listed a couple of books at the end and these will give you lots of ideas. They're filled with high quality photographs to fuel your imagination. Don't

Far left: this attractive Berry Wiggins and Co. Ltd. 0-4-0ST industrial loco is preserved at Snibston Discovery Park. Besides an indoor collection the site has a preserved railway following industrial practice. It's well worth a visit to take in the atmosphere and in particular to look at the wonderful collection of rusting and battered old wagons.

Left: Peak Rail in Derbyshire is host to this Robert Stephenson & Hawthorns Ltd. Austerity 0-6-0ST, No.7136, built in 1944. The locomotive is great fun to drive but you have to imagine what it must have been like to shunt wagons around an industrial site.

Photographs and artwork by the author.

worry if you can't get hold of copies as here are my own thoughts on how to industrialise your 'Thomas' models:

- Remove the faces and replace with homemade basic smokebox doors (see Fig.5) Part E should really be concave (similar shape to a drawing-pin head, only larger) as on the prototype, however I have kept this flat for entry level modellers. Alternately you may wish to add scale smokebox doors from a model railway supplier. In either case the outer diameter of the back part of your smokebox door, part G if homemade, needs to match the boiler diameter of your chosen locomotive.
- Change part or all of the locomotive colour or weather heavily using Humbrol, RailMatch or similar acrylic paints.
- Add computer made labels to increase detail/accuracy especially for names and numbers.
- Add manufacturers' detailing parts.
- Add items made from scrap/waste materials.

Whilst these are general suggestions I include four illustrations, Figs.1 to 4, of 'Thomas' models based around refs.R382 Duck, R350 Percy the saddle tank engine, R351 Thomas the tank engine and R9048 Ben (or R9047 Bill, not illustrated) The illustrations show modified colour schemes and added parts. Further information is provided below.

Fig.1 is inspired by ex-GWR pannier tank No.7754 in NCB livery which can be found on page 11 of *Industrial Steam*. It appears in grimy condition in the days before preservation at the Llangollen Railway. You might find it easier to make a body-coloured label with NCB 7754 in yellow, sufficiently long and deep enough to cover the whole of the pannier tank side below the long handrail.

Fig.2 is inspired by *Sir John*; see page 12 of *Industrial Steam*. If any of your locos only pull wagons from the rear it is possible to remove the unrealistic-looking front tension-lock coupling as illustrated here. Furthermore it is possible to add a scale 3-link coupling, although this is a task with which junior modellers may need to seek adult help.

Fig.3 is inspired by NCB No.9, seen on page 56 of *Industrial Railways In Colour* albeit in a different livery. Again the most difficult task is probably generating the new tankside label, which might best be made to cover the whole area in blue with red lining and yellow text.

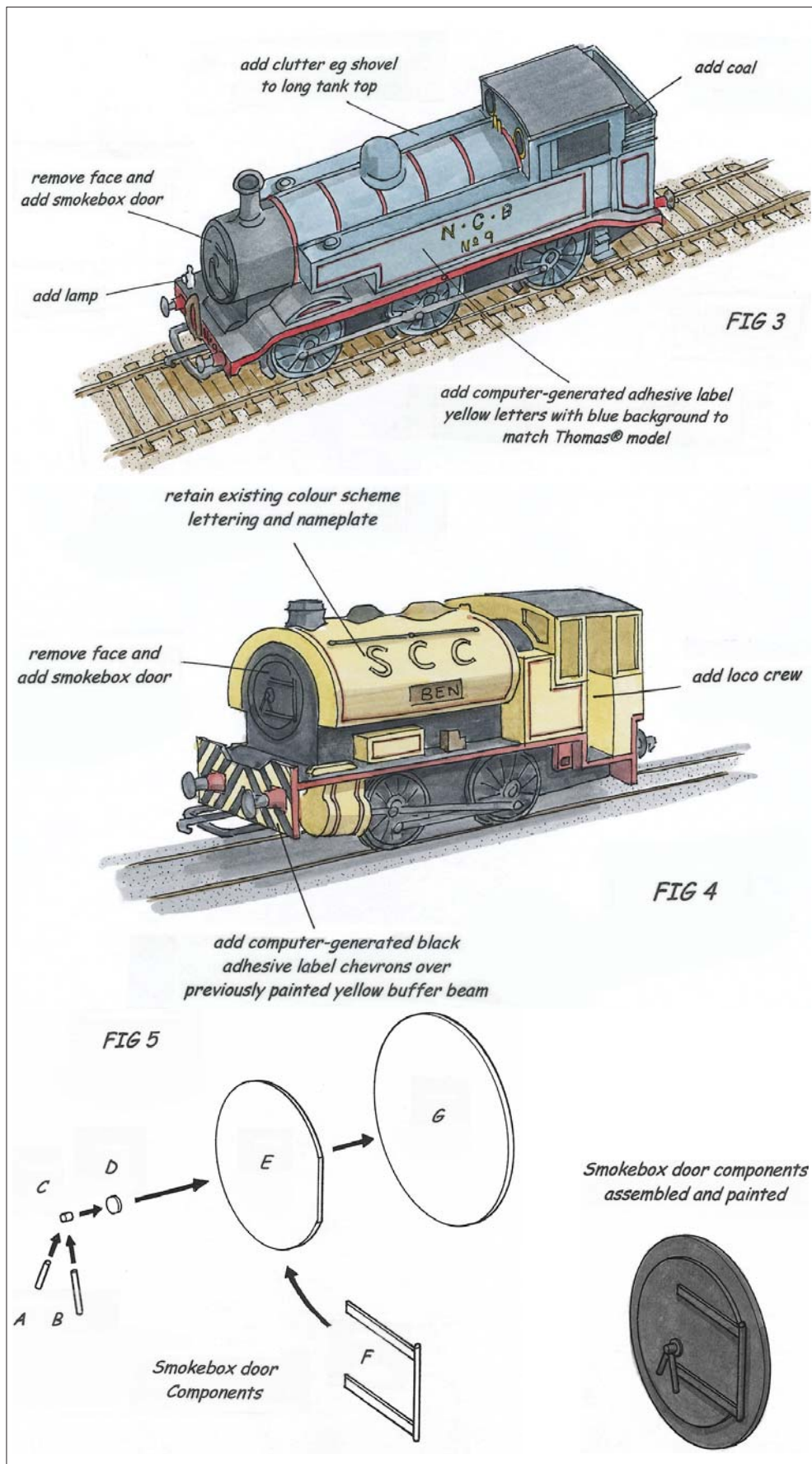
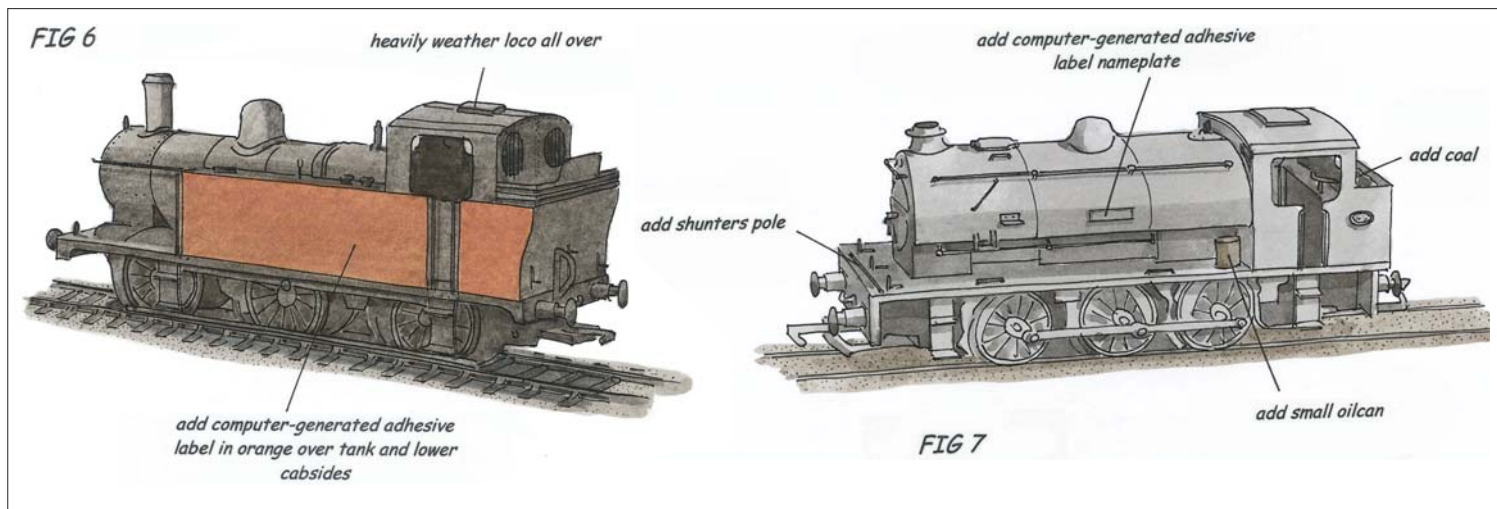


Fig.4's colour scheme, though not loco type, was inspired by page 60 of *Industrial Railways In Colour*. I've suggested little change to the main livery and lettering of this loco given that the large SCC could stand for a colliery name. The only major change is to both buffer beams which I suggest be painted overall yellow with thin strips of computer-generated

black adhesive label stuck on to make the chevrons.

Fig.5 shows the basic smokebox door assembly. Parts A and B will need to be chamfered near the top and glued together before sticking to part C. Part C needs to be glued centrally to part D, and part D glued centrally to part E. The hinge and strapping, part F, are



made from Microrod and Microstrip respectively. Part E needs to be glued centrally to part G. All parts are illustrated assembled and painted. Again this is not a very simple task for junior modellers and will involve using a knife for some aspects of the work. If you are unsure it is important that you seek the help of an adult.

Having converted your 'Thomas' engines into industrial locos you're now in a position to add to your collection from the main manufacturers. Several mainline locos found their way into industrial use either on loan or by sale. Two types, the J94 0-6-0ST modelled by Hornby and the BR (ex-LMS) 3F 0-6-0T also by Hornby and more recently by Bachmann, are particular favourites of mine. Again I have illustrated these two examples and whilst they need nothing like the work done to the 'Thomas' models there is scope to industrialise in a simple way.

Fig.6 is based on 3F 0-6-0T No.47445, which was sold by British Railways to Hargreaves and located at British Oak Disposal Point, Crigglestone, West Yorkshire. The loco sides were painted in company colours of bright orange which in reality might have been slightly redder than the illustration suggests. This loco found its way into preservation.

Fig.7 is inspired by Austerity 0-6-0 saddle-tank No.3302 *Stanley*; see page 51 of *Industrial Railways In Colour*. On bright sunny days weatherworn locos could appear quite grey in colour.

There are no particularly difficult modifications required but using N gauge oilcans or cases to represent small containers is a neat trick.

A few words about acrylic paints. Like all things to do with railway modelling, there are several golden rules:

- Mistakes on your model can be avoided by trying your paint on a piece of scrap first to ensure that colour and thickness are correct.
- Avoid paint/water coming into contact with moving and electrical parts especially on wheel treads where electrical current is picked up from the track.
- Make sure you work in a clean, dry area and that you cover your work surface before starting to paint.



Above: the Hornby J94 has been issued in several guises to represent engines in NCB service. Peter represented the type in the firm's 2003 programme.

Photograph: Peco Studio.

Where flat colour is needed, for example the yellow background of the buffer beams in Fig.4, you can use the colour more or less straight from the container, thinned if necessary with water. Where you need to weather or tone down, this can be done in an appropriate colour, dirty green for locos in Figs.1 and 2 and rust or one of the grimy shades for the chassis. However, in these cases it's not straight from the pot. You might wish to mix a shade from more than one colour and it will need to be applied as a wash (well watered down). When dry, rust, rain and oil stains etc. can be added using thicker paint and a small brush.

These comments are just to get you started with acrylics. There are several good books which cover the topic in greater detail and written by those with far more experience than I. Feel free to ask for advice at your local model shop, model railway club and exhibition.

Soon you'll have a whole fleet of locos for your industrial layout, safe in the knowledge that quite a cost saving has been made and that 'Thomas' items – once very much a toy – now appear as a more accurate model.

Editor's note. In addition to the sources of information given by Paul below, there is also the Industrial Railway Society, full details of which can be obtained by sending two first class stamps to Bernard Mettam, Industrial Railway Society, 27 Glenfield Crescent, Newbold, Chesterfield S41 8SF

Books

Industrial Steam, Ian Allan Publishing, ISBN 0711022305.

Industrial Railways in Colour – A Railway Bylines Special, Booth A., Irwell Press, ISBN 1903266149.

Some preserved lines/collections worth a visit

Foxfield Steam Railway
www.foxfieldrailway.co.uk
 Tanfield Railway www.tanfield-railway.co.uk
 Snibston Discovery Park
www.leics.gov.uk/museums/snibston
 Peak Rail www.peakrail.co.uk
 Bowes Railway www.bowesrailway.co.uk
 Derwent Valley Light Railway www.dvlr.org.uk

Some suppliers

Buffers Model Railways Ltd, Colston Cross, Axminster, Devon, EX13 7NF
 Tel: 01297 35557,
 Email: info@buffersmodelrailways.com
www.buffersmodelrailways.com
 Mainly Trains, 1C South Road Workshops, Watchet, Somerset, TA23 0HF
 Tel: 01984 634543, Fax 01984 633776.
 Email: rm@mainlytrains.co.uk
www.mainlytrains.com

Howes, 12 Banbury Road, Kidlington, Oxon, OX5 2BT.
 Tel: 01865 848000.
www.howesmodels.co.uk

Useful components

Hornby R573 Locomotive super detail pack.
 Coopercraft 2007 Platelayers tools (2 sets).
 Dart Castings RP21 Loco fire irons.
 Jackson, Smiths, Slater's or Wheelappers 3-link couplings.
 Knightwing A28a N gauge crates, boxes, barrels and oil drums (use as small containers).
 Springside Models head and tail lamps, pack of 5 and 10 in different types.
 Smokebox door handles, via Mainly Trains (an alternative to parts A to D in Fig.5).
 Springside Models or modified Dapol loco crew.
 RailMatch acrylic paints (particularly useful colours are 2402 frame dirt, 2403 roof dirt, 2404 light rust, 2405 dark rust, 2406 sleeper grime, 2412 weathered black, 2415 oily steel, 2416 brake dust plus varnish, primer and thinners).

Audley Grange

GWR branch terminus in 00

This layout is the result of a change-up in modelling scale by **GRAHAM HAMMOND**.

It all started in 1998 when, one club night, a fellow member of the Basildon Model Railway Club approached me and asked if he could buy, together with all my stock, my N gauge exhibition layout *Hartlybrook*. At that time I was contemplating building a new layout but felt, due to a slight deterioration in my eyesight, that I couldn't achieve the same standard in N gauge any more. By selling *Hartlybrook* I could go up a scale and build an exhibition layout in 00, and so *Audley Grange* was born.

The layout

The name was decided upon whilst I was sitting in our car with my wife at a set of traffic lights, when we spotted two workmen erecting a sign advertising a private property building development in our local area. The name sounded just right for a GWR branch line terminus set in and around the Cotswolds where we had just spent our summer holiday.

Audley Grange is a small country station providing a connection to the fictitious Cotswold Valley Railway. The sleepy hamlet is situated in the rolling hills of Gloucestershire and Warwickshire. The station has a single line with run-round loop and bay platform providing a limited passenger service to the main line. The twice weekly markets ensure a steady stream of cattle and livestock to the area, farming being the main industry. Daily goods trains and occasional coal trains provide a quite busy timetable.

The first constructional project would be the baseboards and the obvious person to help me was my fellow club member and



friend Brian 'Wheels' Stubbles who was also a qualified carpenter before his disablement and whose layout *Hollies End* appeared as Railway of the Month for July 2004.

Baseboards

We made the baseboards to the honeycomb principle consisting of 1/4" marine ply laminated onto 2" x 1" blocks and evenly placed along the length of the board. Each board measures 3'6" x 2' making the total length of the three boards 10'6". Two boards make 7' of viewing area and the remaining board is a cas-

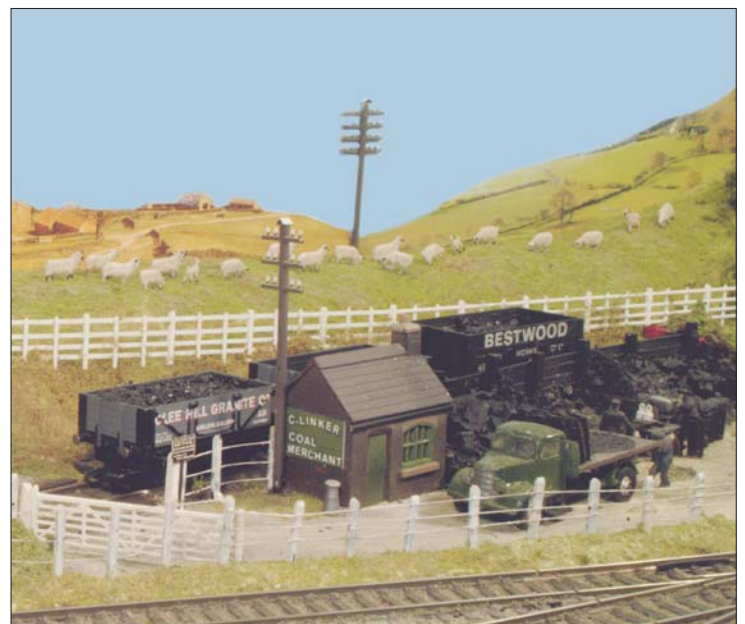
sette-orientated fiddle-yard. The boards are joined together by brass alignment dowels and bolts with 'T' nuts embedded into 3" x 1" timber ends.

Above: a 'Dean Goods' preparing to run round clerestory coaching stock.

Below left: a mechanical horse backs on to the loading bay.

Below: it seems that the coal yard has a captive audience.

Photographs by Len Weal.





The layout surface is constructed with 1/4" marine ply glued and screwed to the honeycomb frames. The board depth is 6" all round to incorporate the 2" x 1" legs that are installed internally and make setting up at shows easy and quick. The depth also allows for Velcro to be positioned near the surface of the layout giving a neat appearance. We have fixed 4" clear Perspex all along the front viewing area to avoid accidental damage to the layout at exhibitions. We have made two lighting brackets which secure to the back of the layout board by bolts and 'T' nuts, and secured to these brackets is a nameplate fascia with positionable spot lamps to illuminate and enhance the layout when at shows.

All bare timber is varnished and sealed with numerous coats of yacht varnish to preserve it and make it pleasing to look at.

Wiring and trackwork

Peco code 100 track and points are used throughout, pinned to 1/8" cork which is glued using PVA wood glue and then ironed flat giving a perfect surface on which to work.

When completed, my brother-in-law, Paul Harman, an IT consultant, was asked if he would kindly wire up the layout for me as my knowledge of electronics is limited to wiring up a three pin plug – and that's only by following the instructions!

Wiring

There are several requirements on the wiring of an exhibition layout which don't always occur on a normal layout.

1. Must be simple to maintain without reference to extensive diagrams.
2. Must be robust and reliable.
3. Must allow sufficient flexibility so that all required movements can be accommodated without contention, allowing maximum 'movement' on the layout.
4. Must be intuitive and simple to operate.

Conventional wiring has been used identical to the method used very successfully on my earlier N gauge layout *Hartlybrook*.

The wiring on *Audley Grange* is basically common return. I say 'basically' because all the isolating sections are in the 'return' rail rather than the 'feed' in order to simplify the wiring.

This results in just running a common connection to all the isolating switches on the control panel and a single wire to each isolated section rather than the two wires (some across baseboard joins) that would normally be required.

All points are Peco code 100 live frog, which appears to go against the idea of simplicity, but is essential for good running. In order to keep it simple a double-pole switch (in this case the double-pole slide switch that is used as an actuator to operate the point manually via wire in tube) has been used. One pole is used to switch the frog, and the other to switch the feed.

In order to be intuitive, setting the points for a route also sets all the power feeds (via the point switches) across the visible part of the layout. This prevents any chance of a sudden stop/reverse/acceleration that might occur if a

section has been incorrectly switched to the wrong controller (a very embarrassing but common problem on some exhibition layouts).

While a small rural branch line station of the size of *Audley Grange* would be likely to see two trains a day each way and be operated by the 'one engine in steam' principle, for exhibition purposes a realistic timetable has to go out the window to be replaced by one more suited to Bristol Temple Meads. For *Audley Grange* the requirement is for one train to be moving at all times with a second moving most of the time. In order to achieve this, instead of just putting in a main feed at the station throat and operating with one controller, feeds have been put in all the parallel loops and bay platform, as well as the fiddle-yard. This again goes against simplicity but is required to allow operational flexibility.

On *Audley Grange* it is possible to see a goods train arrive in the goods yard, a passenger train leaving the bay platform and the loco that pulled it in leaving almost straight behind giving the impression that three trains are running simultaneously. Each section has a two-way switch on the control panel with centre-off which can be switched to either of the controllers. Additionally the fiddle-yard can be switched to a controller, isolated or switched to the station throat to allow a single operator to operate a more limited service during breaks.

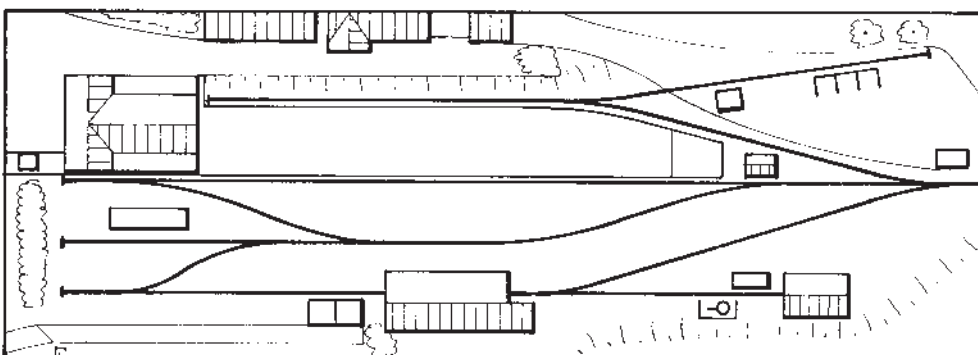
Hand-held walkabout controllers, supplied by Kent Panel Controls, are used to prevent the operators colliding in the control panel area which is located centrally. Both controllers have a Relco track cleaner, another essential on an exhibition layout. It is important to realise that the Relco keeps the locos clean as well as the track. While a quick run round the track with a rubber might only take a few minutes, properly cleaning a loco will take about half an hour, time that is not available during an exhibition.

After an accident at an exhibition, when I caught a baseboard that I was carrying on a trolley in a pothole in the car park, smashing one of the early plastic type connecting plugs to pieces, a fellow member and friend Robert Woodhouse (whose layout *Anderson Lock* appeared in the Feb 2005 issue) came over to my house one Saturday with some 25-pin computer connecting plugs which he gave me and fitted. These have proved to be ideal as they are small and fit to the side of the baseboards using Velcro, cheers Rob.

Ballasting

With the wiring completed and thoroughly tested, the next stage was to ballast the trackwork. This was done using a mix of four parts 4mm fine scale ballast by Green Scene and one part Extramite powdered resin wood glue mixed together dry. The method I used is quite simple, but if done properly gives a very pleasing final effect.

A small open wagon is placed on the trackwork with a pencil taped onto both sides. When pushed along the track it leaves a pencil mark on the cork over the end of each



Left: 14xx-hauled auto train glides into the bay platform.

Right: station scene from the buffer stops.

Below right: The 'Fireman's Shovel' Hotel.

Bottom left: the station pilot takes on fuel.

Bottom right: the backscene blends in well.

sleeper. Masking tape is laid and cut to this contour and the dried powder is then laid between the sleepers and brushed with a fine paint brush to the edge of the masking tape. A fine spray of hot water in a garden plant spray is used to cover the whole area. When dry, remove the masking tape and you should be left with the track ballasted and a nice neat shoulder as well, making a very neat appearance.

Buildings, scenics and future plans

Hillsides on the layout were made using 1/8" plywood formers and polystyrene blocks cut to the same shape, covered with plaster impregnated bandage brushed wet and left to dry. Woodland Scenics flock powder of various tones and colours was then added, sprinkled over a coating of PVA glue and finally sprayed with a cheap hair spray.

Most buildings on the layout are scratch-built using Slater's plain and embossed Plastikard. The thatched roofs on the cottages and corner shop are made using plumbers' hemp, put on 'Pendon style'. This method is very time consuming and costly as I blunted my wife's best dressmaking scissors!

Various people and vehicles are placed around the layout to try and form a diorama effect, so even if there is not a train waiting in the station there is something to look at. This is the most important part of an exhibition layout, trying to build in miniature as it would be in real life. Attention to detail can bring a model very favourable comments from the public, which is what we are trying to achieve.

I intend to build an extension to my layout,



from the other side of the bridge, moving the fiddle-yard back by 3'. This will incorporate a small stream and bridge, a woodcutter's hut and another signal box with working level crossing gates. I also hope to fit Sprat & Winkle couplings to all my stock so that I can operate 'hands off' at all times.

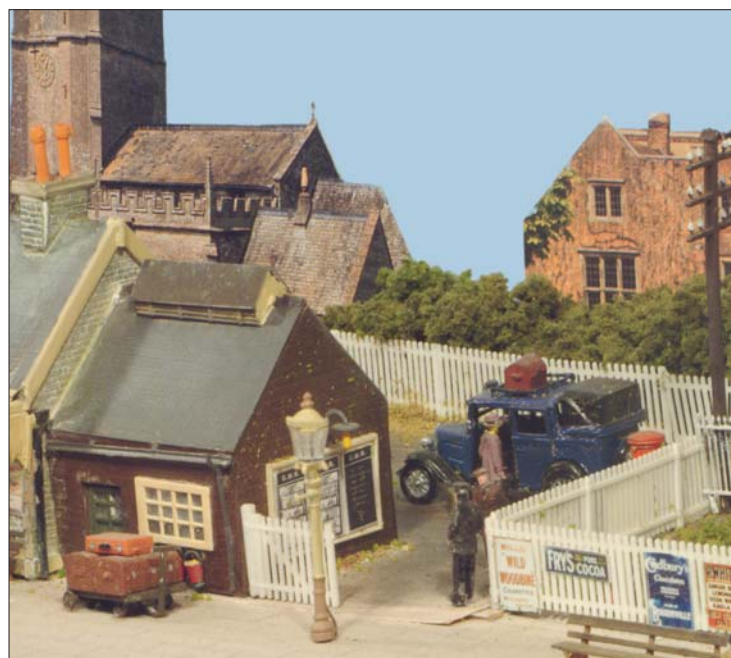
Acknowledgments

Thanks must go to my fellow operator and clubmate, Roy Emery, as being a non-driver myself, he has transported me and the layout to numerous exhibitions. He is a very good operator and we always get on well together. The layout fits nicely into the back of his car like a jigsaw puzzle. All the pieces fit in place perfectly and we have both now got it down to a fine art.

The biggest thanks of all must go to Brian & Robert for encouraging me to write an article.

A special thank you must go to Dennis Weller, our extra operator at exhibitions and last but not least to my wife Pauline for putting up with all the banter and wisecracks from the members of the BMRC, for all the lovely cakes she makes for us to take to exhibitions, and for allowing me to play trains!

Audley Grange is booked to appear at the Letchworth MRS exhibition at Arlesey on 25 November. See Societies & Clubs.



Tower Models' brass 'Jinty'

Painting and finishing the 0 gauge ready-to-run 0-6-0T

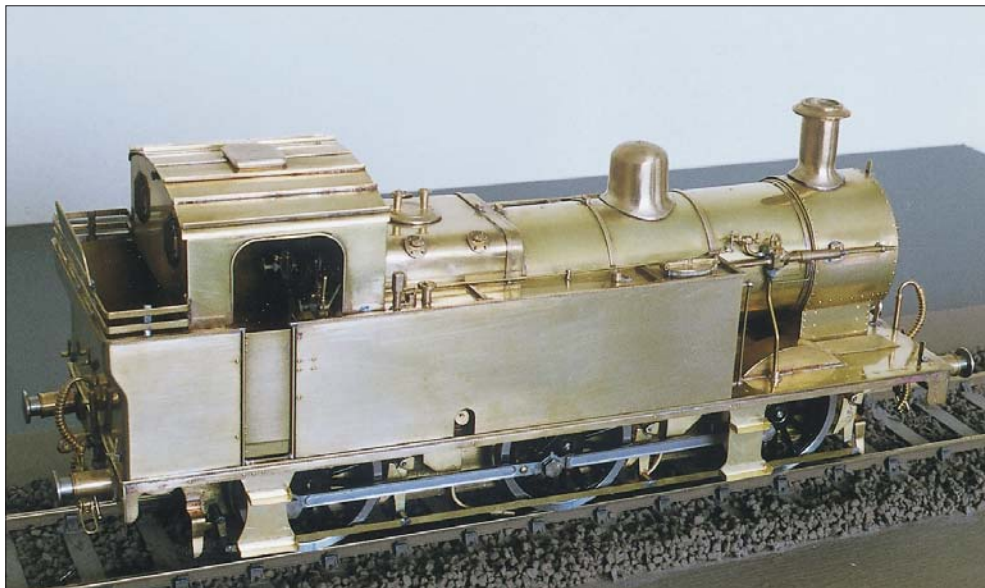
KINGSLEY ROBINSON completed a brass model of the Fowler 3F six-coupled tanks in 7mm.

The notice and review of this model appeared in the April 2006 issue, together with an illustration of the unpainted, but finished all-brass model. It looked so good that an urgent review of the bank statement was required. The unpainted version could be afforded, but the fully finished item would be difficult.

A phone call to Tower Models and a critical look at its excellent website reassured me that I should be able to dismantle the model, paint and finish it, then re-assemble it to the original standard. It is supplied with a protective polish to prevent tarnishing, which must be removed before painting.

The DHL delivery was rapid and a dark red box was removed from the packaging: inside this the model is enclosed in polythene bag, within a close fitting foam case, sandwiched between two foam sheets. Removing the top layer and turning the box on its side – so that a flat hand rests on the model when the box is inverted – gravity eases the model on to the hand, the bag can be removed and the model placed on the track.

The A4 instruction sheet enclosed with the model is very detailed. It emphasises that the model must be run for a full test, before any dismantling is attempted. At this point uncertainty became uppermost in my mind. It is a shame to paint it. It looks so good as it is. What happens if you can't put it together again? I put it back in the packaging to think about this dilemma. One week later it was taken out again. This time slight stains on the tank sides were apparent, where it had been touched with bare fingers...not mine. This resolved the



matter. If it were to be kept as a brass masterpiece, it would have to be polished and lacquered, which would be more difficult than painting it. Tower Models recommended that Halfords cellulose thinners could be used to soak the dismantled brass component parts, to remove the protective polish, then soaking in warm detergent solution and rinsing to eliminate any residual flux. However at this point close examination of the model showed that the removable parts were secured with tiny crossheaded screws. Fortunately I had a set of precision crosshead screwdrivers, sizes 0-4, 0-3, and 0-2, being needed. These are obtainable

from Squires of Bognor. The only other tool needed was the smallest-size Antec soldering iron.

The construction is very clever, allowing the body to separate from the footplate, the chassis to separate from the footplate then the motor/gearbox and middle axle to lift from the chassis, once the retaining plates and springs are removed, to allow the front and rear axles to be lifted from the chassis. Unfortunately it is not as simple as that!

The dismantling

The sequence is detailed in the instruction sheet. First four screws that hold the chassis in place, are removed – not easy as they are very tight and only one replacement is provided. To lose a screw would be a problem, so each screw removed was secured by Sellotape to a diagram on a sheet of card. In this way every screw was saved for the re-assembly.

The footplate was separated from the main body – the tanks, cab, boiler and bunker forming the body unit. This involved eight screws, the front two being longer to reach the smokebox. The cab roof is held in place by one very small screw, in the middle at the front and rear.

The roof lifts off, to give access to the cab interior. Attention was turned to the chassis, to allow the motor and wheels to be removed. The current pickups must be disconnected from the motor, which necessitates the de-soldering of the wires from each twin unit. In order to obtain access to the rear pickup, it is necessary to remove the chassis baseplate, invert the chassis and remove eight screws to free the plate. It is then easy to de-solder the rear pickup connection.



Left: Tower Models 0 gauge brass model as received and unwrapped.

Below left: Fowler 'Jinty' 0-6-0T coming on to the running line of the Midland Railway Centre at Butterley, Derbyshire.

Right: low oblique view for comparison with illustration below left.

Below: desktop view of the chassis inverted after removal from the footplate and brass body. The mini-screwdrivers are shown, the felt-tip pen marks the orientation of the parts, while the screws are preserved under the Sellotape.

Below right: the baseplate is removed from the inverted chassis to reveal the pickup wires which allows access to de-solder them from the rear pickup.

Bottom: the chassis is in the right way up and the axle retaining plates have been removed and the pickup wires de-soldered and released. The white cylindrical pickup units can be seen in front of and behind the motor/gearbox unit.

Bottom right: dismantling is complete and the brass parts can now be bathed in the cellulose solvent prior to the detergent wash and rinse.

Photographs by the author.

A rough diagram is helpful to use for the re-assembly. The gearbox motor unit and mount are secured by four screws, two in each chassis side. These are removed and safeguarded. The front and rear axle are still retained by the compensation springs, two to each axle held in place by a rectangular plate on top of the chassis, with four screws each. Once these are removed, the axle, wheel, hornblocks and coupling rods will lift out from above.

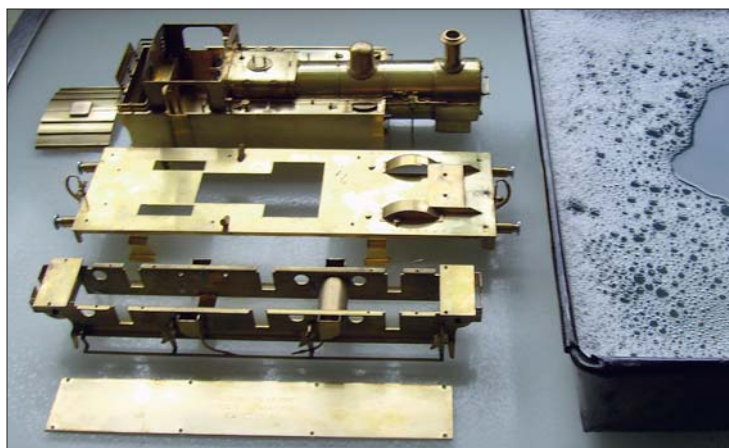
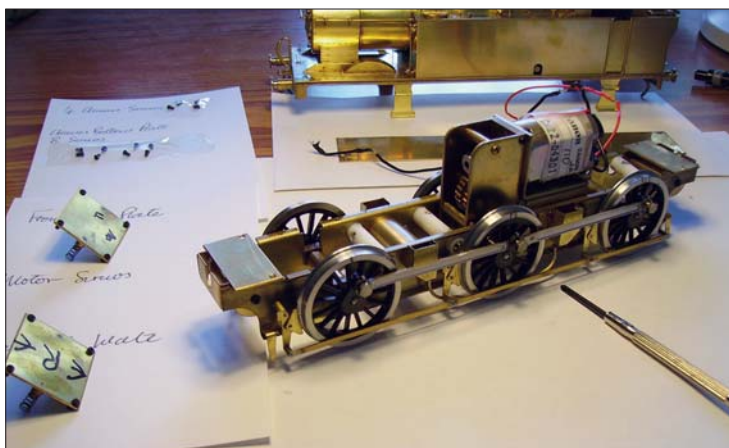
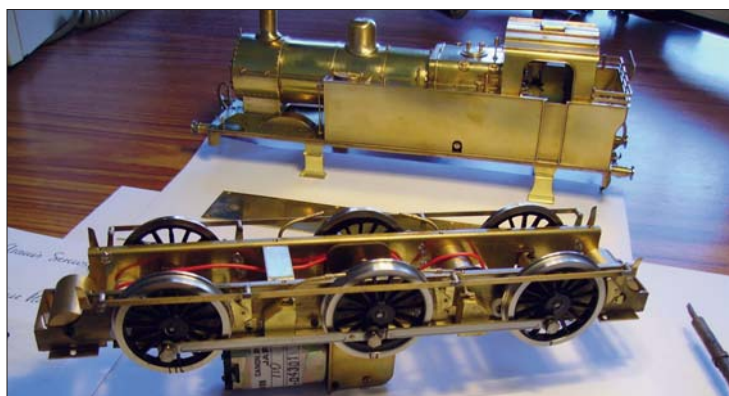
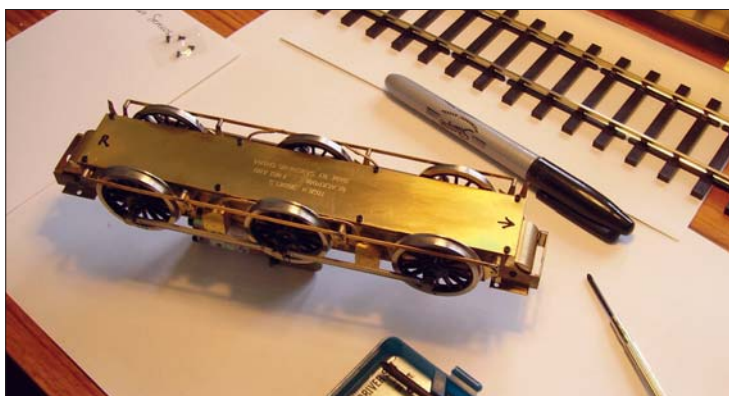


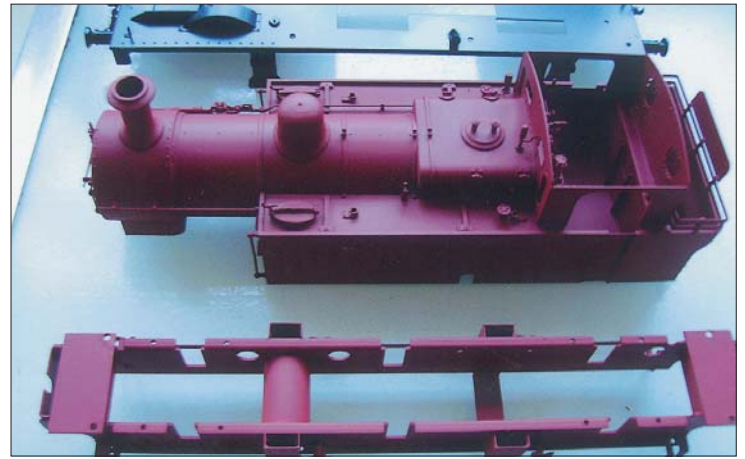
The screws locating the coupled wheels on the axles must not be loosened, or the gauge setting will be lost. All three axles and motor will need to be raised gradually millimetre by millimetre, and very gently, to maintain the wheel quartering.

The painting

Everything which will be painted now requires de-polishing and de-greasing by immersion and washing in the cellulose solvent, then washing in detergent and then water to remove the solvent and residual flux. The instructions say that any dubious soldering can be remedied, but I found nothing that needed this attention.

An etch primer and Railmatch paint are recommended, but experience with Halfords red oxide primer in conjunction with Halfords satin black on previous models, encouraged me to use these finishes. All paint was delivered from aerosol spray cans; thin coats can be applied first in the awkward corners and last over the large areas. Any parts where bare metal is retained, such as backplate details, and the edges of the slots for the axle hornblocks, can be protected with Humbrol Maskol. Despite the preparation, the primer lifted around the steam dome, but removal of the cracked paint film, further washing, drying and fibre-glass brush abrasion solved the problem after a further local spray with primer. The





Above: when dry, any parts which should be left unpainted, axle guides and some cab fittings, can be protected with Humbrol Maskol.

Above right: the primer coat is completed and the footplate has received its Satin Black spray coat.

Below: the spray painting is completed and the buffer beams brush painted, ready for re-assembly.

Below right: profile of the finished model showing the bunker detail.

paint finish in parts of the well-detailed cab can be incomplete, particularly behind the firebox backplate details, it will require a brush to apply Humbrol 85 Satin Black behind the details.

The cab floor – planked wood in the real engine – is brush painted matt dark earth. Some of the cab walls and roof can be brown, but in service quickly became black. Glazing can be fitted with the aid of Devcon or Bostick Impact, but unless very accurately fitted may be better omitted. The wheel rims are blackened with Humbrol Satin Black enamel, while the flanges and running surfaces are kept clean metal, for good current contact.

The re-assembly

Allowing 24 hours for the finish to harden, re-assembly can commence. The chassis is supported on blocks front and rear. The axle slots are cleaned before the centre axle and motor unit are dropped into place. The front and rear

axles are also dropped into place, and some care is needed to ensure that the hornblocks engage correctly and allow free movement up and down. Also ensure that the sprung contacts of the pickups are correctly seated and are contacting the inside of all the wheel rims, before the compensation springs and the retaining plates are replaced. When all are correct, the four screws to each retaining plate are replaced and tightened. The four screws to locate the motor plate between the frames are placed, then tightened before a test run of the motor and wheel assembly, which should run smoothly in each direction. All these screws must be really tight and this is the last opportunity for any lubrication if necessary.

The wire connections from the motor to the pickups must be re-established, with the wires routed as before. A touch with a fine soldering iron should suffice to re-attach the wires, but a minute amount of resin core solder might be needed. Any flux must be removed. Now the contact from each pair of wheels must be tested in turn. All should make perfect connection to ensure smooth running.

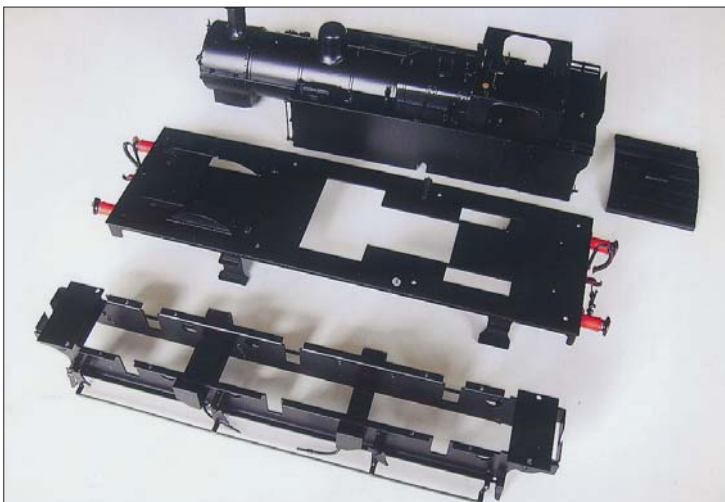
The chassis baseplate can now be replaced with the eight screws. The painted body is now applied to the footplate and the eight screws replaced, with the long ones at the front. Any cab detailing is completed, before the cab roof is replaced with its two very small screws. Lastly the four screws securing the chassis to the footplate are inserted and tightened, really tight without damaging the screw heads. A track test is now advisable before final paint-

work and decal application. The buffer beams and buffer shanks are Humbrol 174 Signal Red, the buffer heads black or gun-metal grey, Humbrol 53.

My model was finished to represent the Fowler 0-6-0T 'Jinty' preserved by the Midland Railway Trust at Butterley, Derbyshire. I used HMRS transfers, and etched smokebox number plate, shedplate, makers' plates, rebuild plates and water capacity bunker plate, supplied by Guilplates of Guildford. Real coal was used to fill the visible part of the bunker. The rest was filled with polyurethane foam and topped with Devcon epoxy resin to hold the coal in position. I had an anxious moment running the Devcon into the bunker – what if it spilled down the outside?

The appraisal

The finished model is no longer a potential problem. I am delighted with the result, now I can relax and make some fire irons, get some lamps, etc. Any criticism? The profile of the chassis is too shallow front and back, while the brass weights at each end show in the profile as a result. There is a gap at each side of the firebox backplate, but this is not visible. The flat footplate extends across the chassis under the boiler, where a dedicated modeller might be able to introduce some dummy motion detail. However the overall result is quite exceptional, a tribute to the ingenious design and the workmanship of the Chinese operatives who produced such an excellent model at a price that many British enthusiasts can afford.



Sunderland trams

Modelled in the period early 1930s to 1954

GORDON BULMER describes the layout which is home to his Corgi 1:64 scale fleet.

My interest in tram and tramway modelling is relatively recent. I was a collector of diecast models but I digressed into Corgi 1:64 scale trams after a visit to the National Tramway Museum (now Crich Tramway Village) in 1992. I decided that I could do a more accurate job of repainting Sunderland (my local system) trams than Corgi was doing at that time. I had honed my airbrushing and masking skills by restoring a number of old Dinky and Corgi toys so when, some time later at a toyfair, I met someone who could produce bespoke transfers for the various Sunderland tram liveries, I had all I needed to start my Sunderland fleet.

Of course, when I had produced seven or eight, I was often asked if I was going to motorise them. After saying no for a while, the rot had set in and I motorised No.86, the official Last Tram. Having done that, I needed somewhere to run my new toy. As I had no knowledge of tramway building I decided a good move would be to join the Tramway and Light Railway Society in the hope that there would be some other tramway modellers in the area. This proved to be the case and in 1999 the North East Area Group was formed with me as its Secretary. This group is now successful and meets at 1900 on the third Wednesday of each month in the Durham City Companions Club, Waddington Street, Durham.

This eventually led to my decision to build *Sunderland Tramways* for my own amusement and for exhibition at local model railway shows. As I decided to build the model tramway for exhibition, it had to be a maximum size of 48" long and 18" deep for easy transport, light enough to be carried by one person (me), run Corgi 4-wheeled trams (which I already had), have live overhead (as per the prototype), and both automatic and manual control. It also had to be a complete townscape where the trams were a small but vital part of the whole scene. Because of the size restrictions the track is laid as end-to-end double track as used by Sunderland Corporation.

Sunderland Corporation Tramways had an unusual terminus on its Grangetown route where the trams turned off the road (the A19

Above: the Sunderland end of the tramway showing the railway bridge, the Beamish main street, tram shed and Vaux Brewery which houses the transformer.

Right: the unique Grangetown terminus (on the pavement) with No.16, which has just arrived from Roker. To the left of the tram is the Camrex Paints factory, which houses the control panel.

Photographs by the author.



which then ran through the town) and stopped at the rear of the pavement. I used this as a location on which to base my model, which although not prototypical also includes a depot.

Construction

Building the single baseboard complete with folding legs started in September 2000. The frame and folding legs were made from dressed 2" x 1" timber with 9mm MDF as a top, all joined by glue and screws, giving a final viewing height of 38".

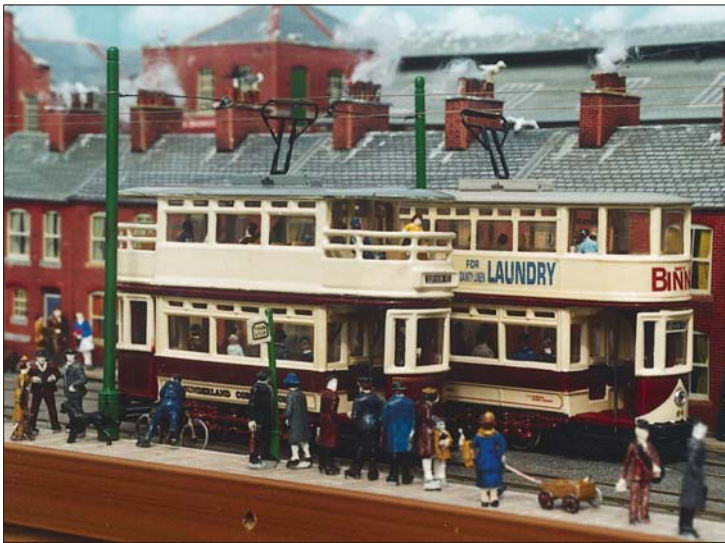
After making a full size paper plan the track was laid using Peco code 75 flexible track and SMP tramway points which were all fixed by track pins tapped gently into pre drilled holes. The points were built for me from kits by Alan Kirkman, a long standing member of the TLRS, as sprung points on the main line. The depot

points are worked by the rod-in-tube method to levers at the rear of the baseboard.

As it is difficult to section the overhead, the track is used instead; in fact there are ten sections on the main line and seven more in the depot, all individually switched. The track was then wired incorporating a Gaugemaster hand-held controller and SS1 Super Shuttle to a control panel, with track plan, at the rear of the tramway. The return wire was to be attached to the protruding end of a single traction pole near the centre of the baseboard when the overhead was erected.

Being a tramway, the next job was to erect the traction poles and these were painted before being screwed into the pre-drilled holes. Once these poles were fitted and fixed by lock-nuts I built up the baseboard using layers of card until the rails were left just proud of the surface. After the street was finished with





Above: the second balcony car No.10 and No.64 loading on the Ryhope Road.

Right: ex-Ilford No.5 in service in Sunderland. This is the second tram to carry this number and was supplied by Brush in 1932 for Ilford Corporation. It was bought by Sunderland in 1938 when it was fitted with vestibules, rewind motors and a pantograph. It was withdrawn when the system closed on 1 October 1954.

Far right: No.61 leaving Grangetown on the long trip to Roker. This car was purchased in 1902 from ERTCW as a vestibuled open-topped car. It was rebuilt in 1934 as a turret car, an experiment for Sunderland's sunny summers! As it did not have doors on the upper deck saloon, the crews and passengers alike soon knew it as 'The Icebox'. It was stored during the 1939-45 war and was withdrawn in March 1953.

Metcalfe sheets representing Tarmac and paving, the depot area and the back street were completed by using Metcalfe self-adhesive setts. Alan Kirkman, using Tramalan traction poles, frogs and ears and David Voice nickel silver wire, then erected the live overhead. The use of Corgi trams meant that the running wire was installed at 98mm above road level rather than the 85mm which is usual for OO; although later it became clear that 98mm is slightly too high. At this point the traction poles had their decorative bases glued on to conceal the threads and nuts.

Trams

The trams are all Corgi Dick, Kerr type 4-wheeled and have all been modified, by removing the trolley plank from the roof to allow bow collectors or pantographs to be fitted, and having the destination boxes moved to the correct place. Many of the trams have also had the number of saloon side windows changed. This was achieved by cutting away the original window castings and drawing the correct window style onto paper four times actual size. These were then reduced to the correct size and photocopied onto thin card. After cutting out and painting the window frames cream, the final job was to laminate the prepared windows, cut to size and fit to the tram replacing the original glazing.

Fleet List

- No.5 was bought by Sunderland in 1938 from Ilford Corporation.
- No.10 was purchased from English Electric in 1918 to replace the original 1900 tramcar of the same number destroyed by a bomb in 1916.
- No.16 was purchased from Dick, Kerr & Co Ltd of Preston in 1900 as an open-topped bogie car.
- No.61 was purchased in 1902 from ERTCW as a vestibuled open-topped car. It was rebuilt in 1934 as a turret car, but soon became known as 'The Icebox'.
- No.64 was purchased at the same time as No.61. It was rebuilt in 1933 as a totally enclosed car.
- No.84 was built by Sunderland in 1926, utilising the lower deck of a 1908 Brush built car (No.33) from Sunderland District Tramways. No.86 was built by Sunderland Corporation in 1932. It was the official Last Tram on October 1 1954 when the system closed.



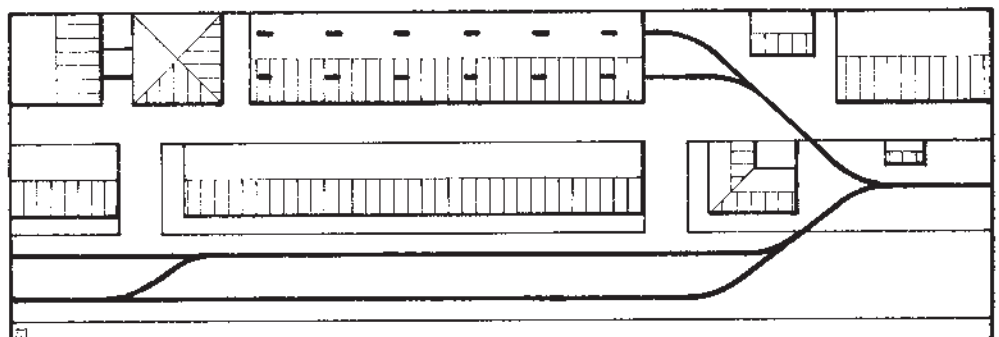
The fleet now covers the period from the early 1930s, when Sunderland was experimenting with bow collectors, to 1954 when most, but not all, of the fleet had been fitted with pantographs, and has trams in the early maroon and cream, and the later red and cream liveries. All have Tenshodo motors of 28.9 or 31mm wheelbase modified for live overhead, and current collection is by Meadowcroft bow collectors or Sommerfeldt pantographs.

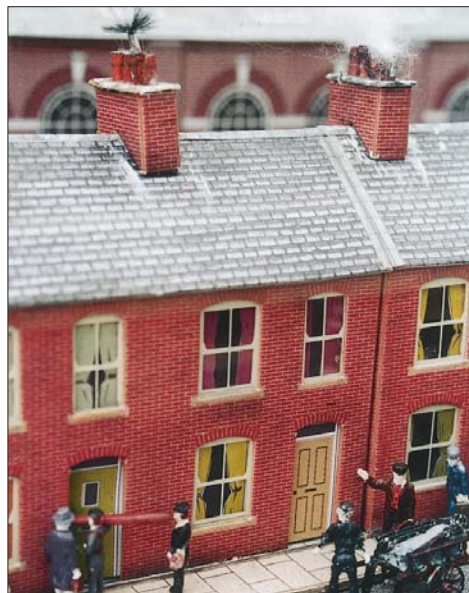
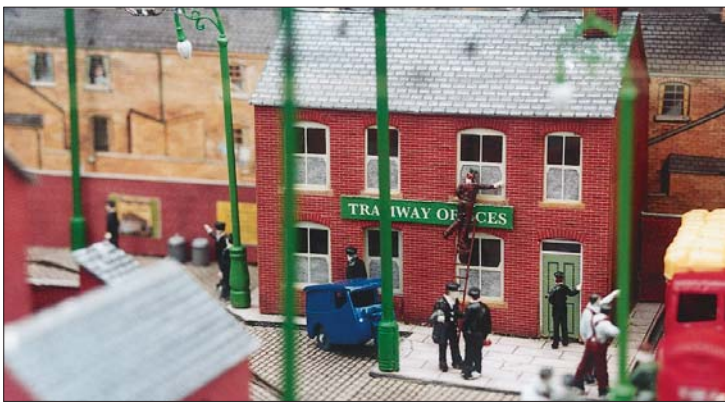
Townscape

The next job, which was done by my wife Margaret, was to complete the buildings. All the houses, the shop and the pub on the main street are Metcalfe kits, along with the Vaux brewery which houses the transformer and gives space for another one should it be needed. Two half-relief kits were built and glued together back to back, with the lower floor not

fitted, the upper floors cut away and some of the unseen windows left out for ventilation. Behind the terminus is a warehouse, occupied by another Sunderland company, Camrex, which manufactured marine paints. This is built from a Modelyard warehouse kit and houses the control panel and shuttle timer.

The tramshed started life as an Alphagraphix kit with extension walls, but because the tramway runs Corgi trams, the doorway was made higher and wider than originally intended. The front was recovered so that it matched the other buildings and a new roof was made from card and Superquick slate paper. The roof is not complete on the back slope to allow any trams inside to be seen. It is attached to three wire frames that support the two lengths of inverted brass U channel for the overhead. The buildings were completed by the construction of a brick tram shelter and toilets next to the pub, both of





which were scratchbuilt using surplus materials from the kits. Most of the buildings were then glued into place but the brewery and the warehouse are retained by screws which allow access to the transformer and the control panel. After all these were fitted, we tackled the backscenes, which were made from 3mm ply with bracing on the back. The boards were covered on the front with Peco cloudy sky paper that in turn had buildings from the town backscene cut out and stuck onto card, and then attached to give an illusion of depth to the backscenes.

The left endscene has been made as a viaduct and bridge and underneath the bridge is a reversed photograph of the town street at Beamish Museum complete with tram tracks.

The road vehicles that make up the scene are mainly 1940/50s but there are some from earlier years. In Sunderland at that time there were still many horse-drawn vehicles to be seen on the streets, including milk floats, the large fleet of Ringtons home delivery vans and of course the well known Vaux fleet of brewery drays. Most of these are from the Lledo Days Gone range and are about the same scale as the trams. The only piece of the main street not used by the trams has a repair gang and is being finished by a Matchbox road roller driven through a narrow slot by a crank from a small motor and gearbox mounted under the baseboard. This motor is dc and is powered by an old mobile phone charger.

Top left: a busy scene outside the Tramway Offices; the plumber is busy inside and has left his Reliant 3-wheeled van outside.

Top right: ex-Ilford No.5 collecting passengers near the brewery before passing the Ringtons Tea van and 'Bill Stickers' at work replacing a poster.

Above left: Nos.86 and 61 wait their turn for duty: 86 is in the livery it carried as the official Last Tram when Sunderland ended tramway operation in October 1954.

Above centre: in Ryhope Road, the chimney sweep is at Mrs Brown's and is making sure the brush has cleared the pot. Hope no one has washing out!

Above right: Dayson rebuilt No.16 on its way to Roker passes No.10 heading for the terminus. The original No.10 was destroyed by a bomb dropped from a Zeppelin in 1916 and was replaced by this car in 1918; the new car was unique in that it had only three upper deck windows rather than the usual four.

Because the Corgi trams are 1:64 the people proved difficult, as 1:76 figures are too small. An acceptable compromise was found by using Dapol 1:72 people on the street and Slater's 1:76 people inside the trams.

The other street furniture is from model railway sources. All the inhabitants were painted by Margaret using acrylic paints and were then placed on the layout in small scenes. The final touches were the positioning of the pigeons and seagulls and their droppings!

Operation

All trams are placed into the depot through a space in the rear wall, and enter and leave service from there. Putting trams onto the track at any other point is made difficult by the presence of the overhead wires. The use of live overhead and cut rails allows three trams to be in service at any one time with those at the intermediate stops along the street moving off when the following tram approaches. The rest of the automatic control was achieved by the use of the Super Shuttle with diodes used at the end sections.

The seven operating trams represent many of the classes of cars used in Sunderland. Three of them are painted in the early crimson and cream livery and the remaining four are in the later red and cream colours. One tram stands on the stub near the bridge at the left hand side of the tramway to add additional atmosphere. The depot houses the second set of trams enabling those in service to be changed with a minimum of disruption.

Sunderland Tramways was completed in time to be present at Perth Green Model Railway Exhibition in March 2002 where it was very well received with many people saying that they had fond memories of Sunderland trams. It has since been successfully shown at a number of model railway exhibitions around the North East of England and at the 2002, 2004 and 2006 Festivals of Model Tramways held at the Manchester Museum of Transport.

Tulloch

West Highland Wanderings – 9

IAN FUTERS has surveyed another outpost on this superbly scenic stretch of railway.

If you have kept up with previous Wanderings articles – indeed I know that some people have made a separate file of them – Tulloch will show that not all West Highland stations are the same. True, many of them have followed the strict pattern of an island platform setting complete with stairs and underpass, to enable passengers to use the station. With the next three stations to be described, the mould is broken and a more typical station setting will be found. That is to say, the island platforms are dispensed with and the more normal British pattern of two platforms sitting opposite each other can be found.

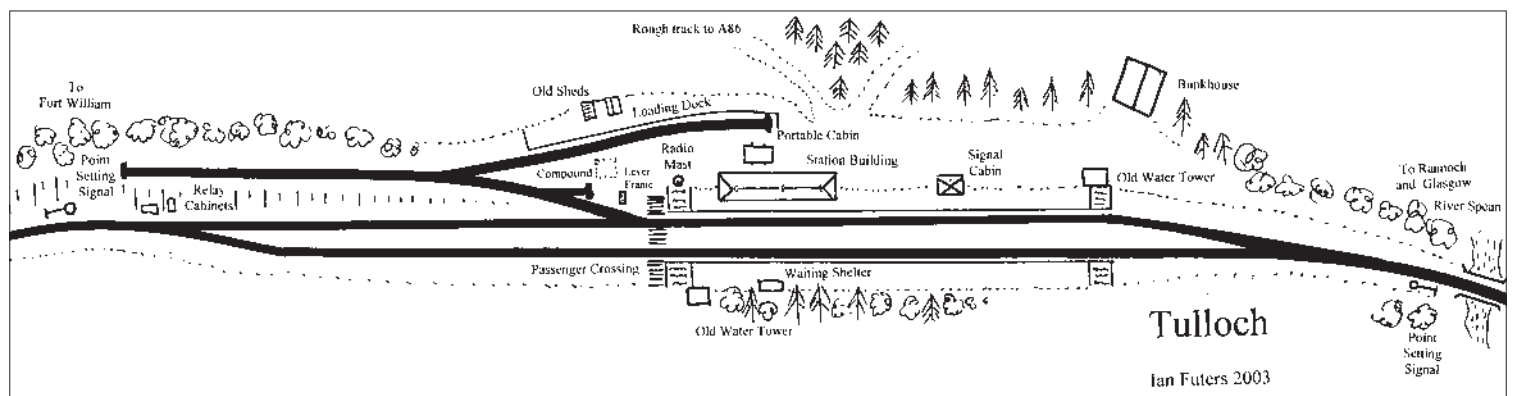
Tulloch is quite a remote station, lying as it does either at the start of the climb onto Rannoch Moor, or at the end of the steep descent past Loch Treig, if you are heading in the direction of Fort William. It lies in Glen Spean and is close to the river of the same name. It is about 16 or so miles from Fort William, and the A86 passes very close to the station. That road eventually connects with the A9 at Kingussie; the Highland main line is also to be found there. Indeed for many years the station sign at Tulloch stated that this was also the station to be used for Kingussie. That was probably put on the nameboard simply to upset the Highland Railway! Kingussie is about 32 miles away as it happens, but as we shall see later, there is a further connection between the two stations.

Whilst the station track layout is quite different, the station buildings look more or less the same as others on the line, but are they? Well actually Tulloch station building is slightly larger. The way I have started to look at the station

Above right: general view of the station area, with the signal box on the right.

Right: view looking west, with the yard on the right. Note the ground frame, and trap point protecting the main line.

Photographs by the author.





buildings is quite simple. I look at how many bay windows a station has to see into what category it falls. The majority of buildings have two bay windows, at least one station building latterly only had one bay window (Ardlui) whilst some of the stations close to Fort William itself would seem to follow the pattern of having three bay windows and an open archway into the booking office.

They still follow the same dimensions when it comes to doors and windows, end window panels and general brickwork but these subtle differences need to be pointed out. There is no such problem with the signal cabin; it follows the traditional pattern of being basically just over 11' square. What is interesting about Tulloch signal cabin is that the 15-lever frame is still intact.

It is a beautiful location surrounded by rolling hills with mountains in the distance. I visited the station in August 2002 and the weather had just started to clear from the rain and mist of earlier in the week. I took a mid-day service from Fort William and was not the only person getting off the train. There is a well-established bunk house close to the station and it is obviously well used, indeed I had met some of the occupants earlier in the week at Corroul. I was extremely pleased that the sun came out for me and the photographs taken that day are bright and clear.

Basically, the two running lines form the loop with a right-hand point at the Fort William end and a rather neat left-hand curved point bringing the track in from the south. As it happens, the line is on quite a tight curve leading from the south and Loch Treig. Looking on the map, the line is heading practically north from the direction of Loch Treig and then as it approaches Tulloch it does a full 90-degree curve to the west as it enters the station. Just past the two platforms is a right-hand point into a small yard which in turn has a Y point giving access to a kickback siding. There is a short headshunt which rises above the level of the main running lines at its buffer stop end. A trap point in the sidings protects the main line.



Top left and right: the station building, with a closeup of the storm screens.

Above: from the westbound platform, the building's extension can be seen. Note too the three bay windows and the arched entrance to the booking hall.

Left: the sharp curve to the south and east, with a Sprinter heading for Glasgow.

I believe the yard has existed in this form for a number of years. At the moment it is a refuge for the First Engineering company and vehicles belonging to that company were observed. On the day I visited Tulloch, a First Engineering team was working close to the station installing the new track protection system. I explained to one of the team what I was up to so that he was aware of my presence. He had actually read some of the previous articles, so we had quite a chat. He also had a very nifty satellite telephone which he was keen to show me. The station building is now a restaurant and as a result has some additions to the building at the rear. They can just be made out in some of the photographs.



Top left: the westbound platform betrays the low height of the WHR originals.

Top right: the 15-lever signal box.

Left: the yard, with its curved loading bank.

Below left to right: the new radio aerial for train protection; remnant of the water tower at the south end of the station; and a closeup of one of the bi-lingual station nameboards, in English and Gaelic.

There is a rather nice curved loading bank, obviously original and on it stands a couple of small sheds including the typical corrugated iron oil store or lamp hut. Next to the track is a portable building. One of the two rough tracks leading up to the A86 passes by the end of the loading bank. The yard itself is simply a maze

of clutter. There are sleepers, old rails, whole crossing vees, a small compound probably for gas cylinders and a whole assortment of chairs, some of quite a vintage. Amongst all this clutter there is a brand new radio aerial, again for the new track protection system.

The two platforms are of stone construction

and in one place you can see the original height of the platforms, which is quite low. At most West Highland stations during the steam era there would be typical NBR water cranes. There were two together at Crianlarich to allow two locomotives to be watered simultaneously. At Tulloch are the remains of two water towers at each end of the platforms. These would have been linked into water cranes which on the NBR were quite unlike other water cranes found on other lines. They were simply tall cast iron towers with the water sack hanging alongside them. As the climb out of Tulloch southwards was quite steep, usually 1 in 50 or less, and it stretched all the way to Corrour summit, you can imagine water would have been taken on as required at Tulloch.





Nowadays, like many of the other West Highland stations, Tulloch has red chippings adorning its platforms. It also has a fair selection of tall lamp posts painted in a rather nice shade of green. The station building has also been tastefully refurbished and still has its window end panels intact. These apparently are also known as storm screens for obvious reasons.. Unfortunately, its original roof tiles have been replaced with a man-made equivalent, which is not so attractive.

As mentioned before, the signal cabin is a well-preserved example of a West Highland platform-mounted structure and it too still retains its windows as well as its lever frame. It also houses an assortment of cylinders and boilers so it is probably a heating unit for the restaurant. When I visited the station, the white fencing was freshly painted and what with the increasing sunlight that day, the station looked extremely well. Trains heading north to Fort William find there is only a simple bus-type shelter on that platform and it is hidden by a fine selection of trees behind the platform. Passengers alighting on this platform have to walk to a sleeper-style crossing over the tracks. In actual fact it consists of purpose-built panels rather than sleepers. Near this crossing is a small ground frame which controls the points to the yard.

The usual Gaelic name was to be found on some of the nameboards; Tulloch translates into An Tulach. At each end of the loop can be found the usual instruction boards informing the driver to stop and obtain the radio 'token' before continuing on with the journey. The signal control centre at Corpach keeps a watchful eye on the proceedings. The two station loop points are set so that southbound trains enter the loop on the left and a similar operation sees the northbound trains doing the same. There are point setting signals at each approach to the station. The usual lineside equipment boxes are to be found, whilst I also witnessed evidence of new cable ducting running alongside the line.

On the approach from Fort William the line twists and turns as it nears Tulloch. It is quite amazing to witness this and it continues as the train climbs up the side of Loch Treig. The River Spean is crossed not far south of the station but dotted all along the route are cattle

creeps, bridges over burns or small streams, as well as old iron bridges carrying roads or farm tracks over the line. These are quite unique to the line but are to be found throughout the length of the railway between Craighendoran and Fort William. On the Mallaig extension the bridges are mainly constructed in concrete.

Another quite interesting development within sight and sound of Tulloch was the construction of a new trackbed during the 1930s in connection with the Loch Treig dam. Hydro-electric power was to be utilised to feed the turbines at Fort William which in turn served the aluminium plant. A 1½ mile diversion of the West Highland line, which included a new tunnel, was constructed and the height of the line was slightly raised. Even today the old trackbed can still be seen and at this point an old ballast siding at Fersit was expanded to serve a depot and workmen's encampment. A small temporary halt was built to serve the location but once construction was complete, the station was removed. The halt at Fersit was actually in the timetables between 1931 and 1934. I have always fancied constructing a layout based on the same location but calling it *Loch Treig*, as it is in such a beautiful location right beside the loch itself.

The traffic patterns simply provide three trains a day each way along with the *Caledonian Sleeper* train. Since October 2003, Class 67s have been operating the sleeper services, and that – in all probability – means the end of Class 37 haulage on the West Highland line. They spent over 20 years providing the motive power for both freight and passenger trains; they have served the line well like their predecessors, the Class 27s.

I mentioned at the beginning of this article a further connection with the Highland main line at Kingussie. A closer look at any map of the area, to the east of Tulloch, will show the A86 road heading that way past a small hamlet called Moy and then skirting the northern shore of Loch Laggan (a K2 2-6-0, No.61791 was named *Loch Laggan*). The road then passes a small settlement named Kinlochlaggan before it winds its way past the mountain called Black Craig. It reaches a junction with the A889 which heads southwards whilst the A86 heads northwards to Newtonmore and then Kingussie which is on the A9.

Above left: view from the panelled crossing towards the elevated yard headshunt.

Above: the corrugated iron huts are typical features of West Highland stations.

The connection relates to a couple of proposed railways between Tulloch and Newtonmore. There had been a planned line between these two locations even before the West Highland had been thought about. The line was to go from Newtonmore to Fort William and would have been operated by the Highland Railway. Over the years there have been further suggestions that construction of the line would be possible, to allow the paper, timber and in particular the aluminium traffic, easier access to Invergordon on the Far North line above Inverness. Invergordon is just north of the junction at Dingwall, from where of course the Kyle line heads west. I am sure this plan has been raised in quite recent times, possibly the 1980s. It has to be admitted that, if this line had been built, the lower end of the West Highland line could possibly have gone completely.

However, such a project would actually make a superb 'might have been' style of layout. The idea of a small wayside station nestling by the side of Loch Laggan with a never-ending supply of freight trains between Fort William and Invergordon rumbling through, would possibly satisfy the most fastidious of modern image modellers. There would be the possibility of numerous Class 37s, along with the present order of the day in the form of classes 66 and 67. Much of the exquisite rolling stock available for the modern enthusiast would be suitable, and the earlier vacuum-braked stock would allow a variety of typical 1980s wagons. What a super thought, and what better name could you want for a layout – *Kinlochlaggan!*

However, back to the real wanderings...

Because there are only three main services each way, and I wanted to photograph Roy Bridge and Spean Bridge in an afternoon, I walked up the rough track from the station to the main A86 road whereby I stuck my trusty thumb out and hitched a lift down the valley. So the next Wanderings article will look at these locations.

Stanier's ghost

A 'Black Four' in 4mm scale

MILES MACNAIR has modelled a might-have-been four-coupled LMS locomotive of the 1940s.

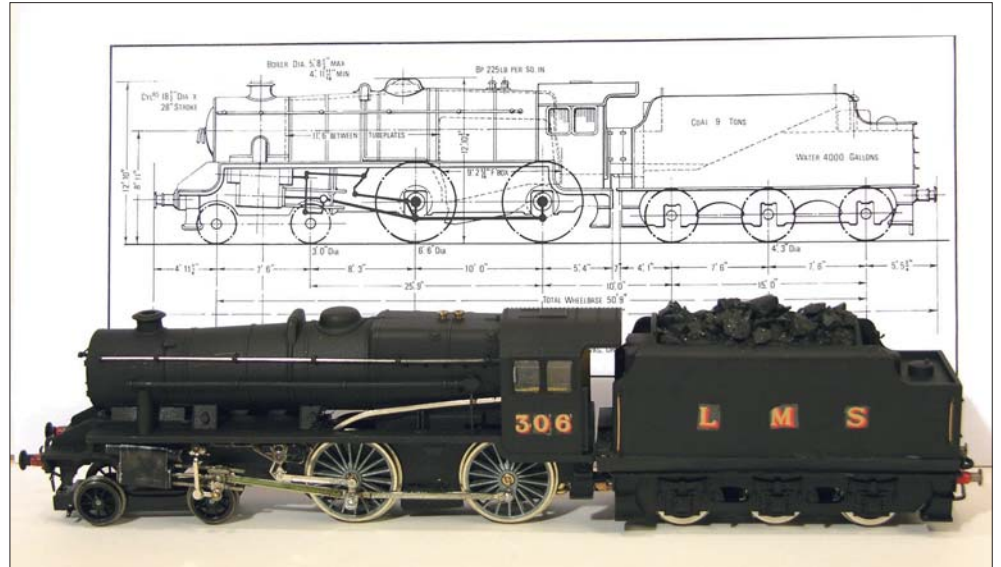
I have always been fascinated by locomotives that were designed or projected but never built. The modelmaker has the unique privilege of being able to turn these design concepts into miniature reality.

One of the 'locomotives that never were' was the Stanier 'Black Four' 4-4-0, which was apparently sketched out in the LMS drawing office at Derby in September 1941. Very little is known about it, and in fact the only reference I have been able to trace is an article by Don Rowland in *Railway World* March 1985.

The drawing in the article has a good provenance, but the author can only speculate on why valuable drawing office time was devoted to such a project in wartime; he concludes that it may have been prepared (rather obtusely) to support the case of those arguing in favour of building more Black Fives, rather than a) building this entirely new class of locomotives – with a higher axle loading – or b) rebuilding the ageing Midland compounds with taper boilers.

The model

The chassis was made in two parts; the coupled wheels' block was scratchbuilt out of 18mm x 1.5mm brass section, 80mm long, using screwed bar spacers, while the cylinders and motion were mounted on a bracket arm of narrower brass section. Other frame extensions were cut from plasticard. Coupled wheels were Romford 26mm, insulated on the left hand side. The 7'6" wheelbase bogie was



Above: the nearly-completed Stanier 'Black Four' in front of the line drawing that inspired it. The 8F reversing rod was later replaced with a longer one to match the reversing link.

Below: closeup of the finished model on *Strathnair*. Note the new reversing rod.

Photographs by the author.

from a Hornby 'Duchess' model supplied by Modelspares of Burnley.

Cylinder blocks, slide bars, piston and connecting rods were from an Eames LMS kit. The

Walschaerts motion is an adaptation of the Hornby 'Duchess' motion (Modelspares) with a shortened radius arm. (I am not good at making scale Walschaerts motion, having sweated for too many hours making the valve gear for 'Claughtons', 'Clans' and 'Rivers'. How many other readers have successfully completed a Lancashire & Yorkshire Steam Railmotor? Lucky modellers of the Great Western.)

The drawing shows a foreshortened LMS Type 3B boiler, and I have cheated only very slightly by using a Hornby Stanier 8F boiler



Right: No.306 heads onto the viaduct in front of the ruins of Castle Nair.

Below: the 'Black Four' at work on a secondary passenger train of elderly ex-Midland clerestory stock. A 'Pug' shunts Strathnair yard.

and cab (Modelspares again) with added lead weights to compensate for the front-heavy whitmetal cylinder blocks. The only modification was two small cut-outs in the footplate to accommodate the driving wheels.

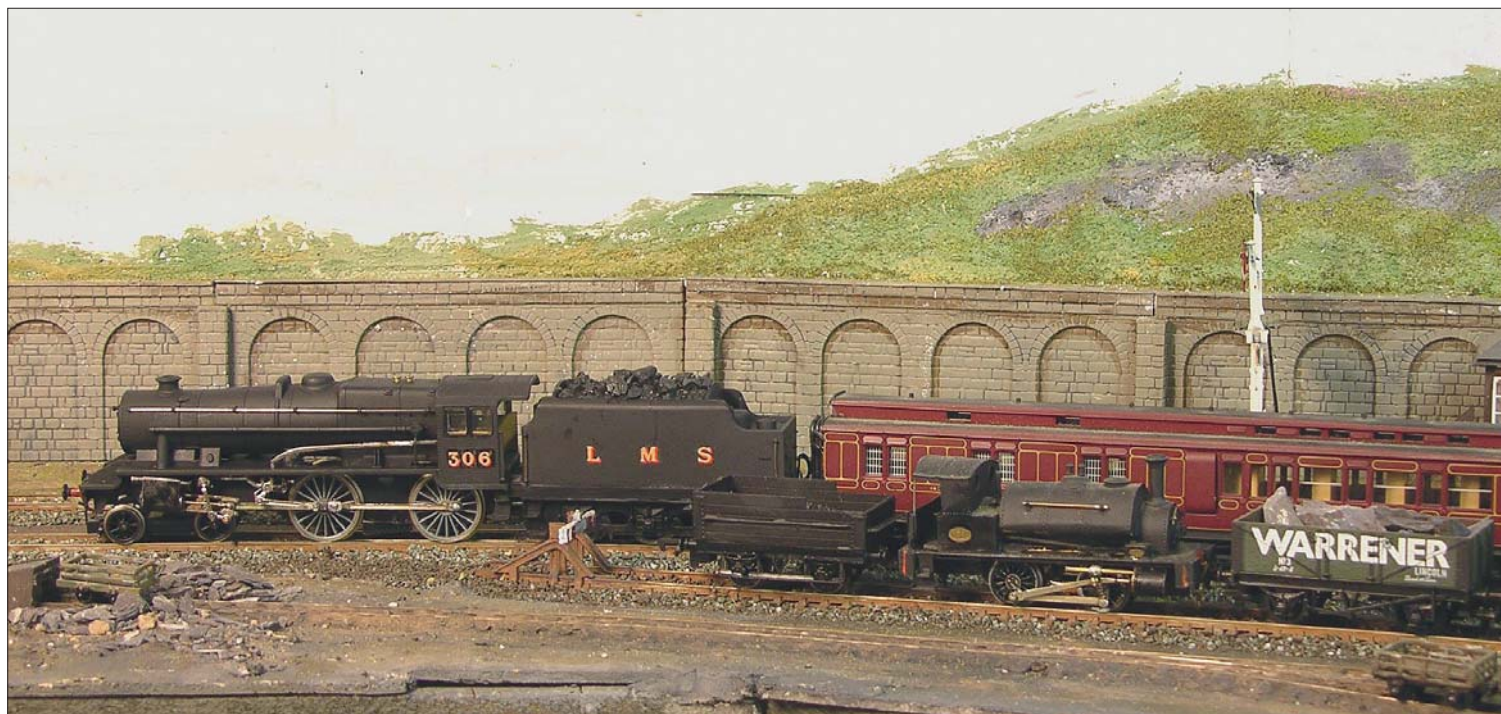
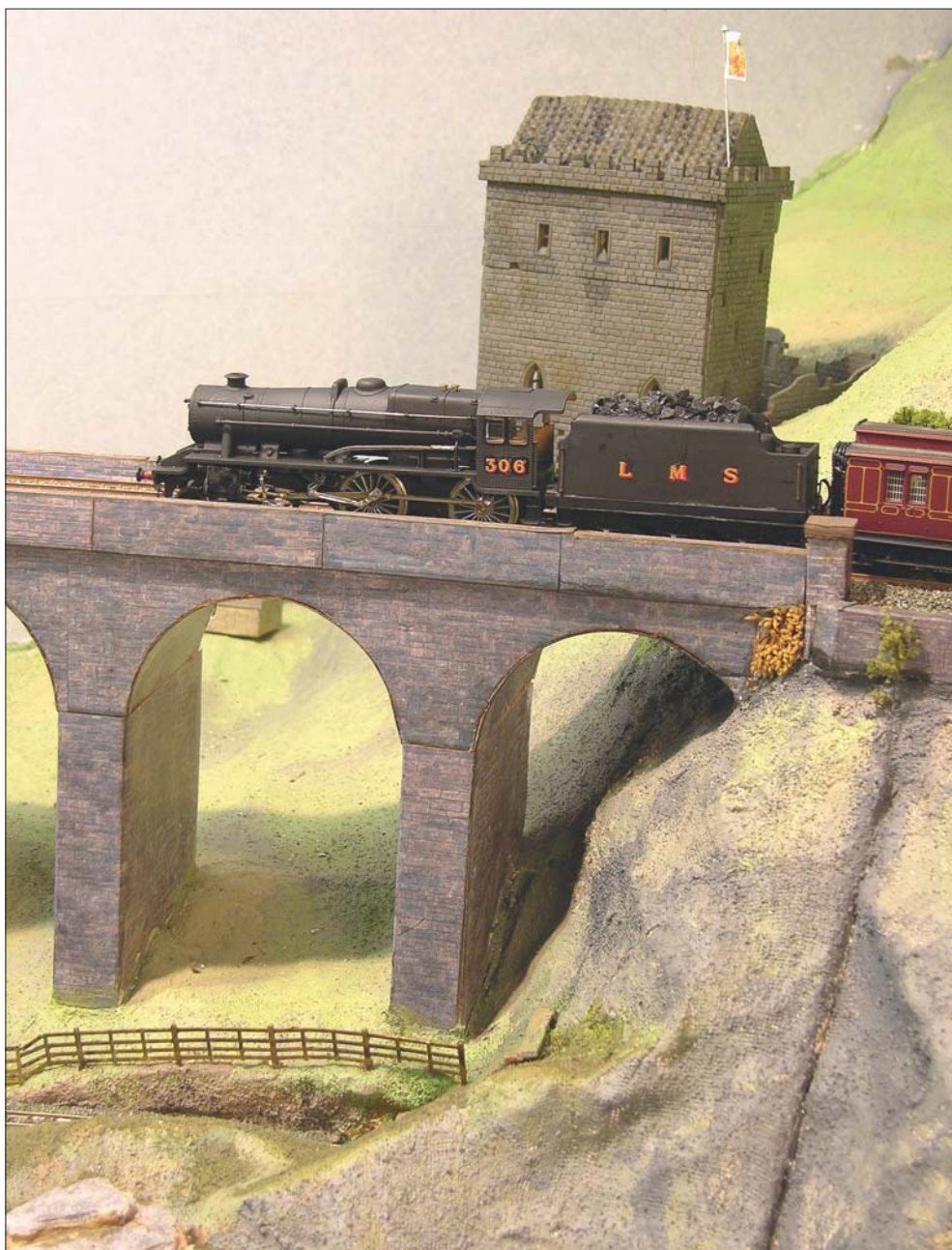
Electrics, motor and the tender were simplicity itself. A Hornby tender drive, LMS 8F tender body and sprung drawbar (from...guess who?), with the plastic coal substituted by the real stuff.

After suitable masking, the locomotive and tender bodies were sprayed with Halfords' matt black, to give a suitably drab wartime finish. It is assumed that the class, if built, might have been allocated the numbers from the Johnson 6'6" 4-4-0s (unrebuilt) that had been withdrawn, and No.306 was selected. Cab details were painted in afterwards. A mixture of Humbrol black and matt varnish was applied selectively to some of the motion to disguise its 'coarseness'.

Conclusion

This fantasy model is a powerful addition to the somewhat eccentric locomotive stud on my *Strathnair* layout. I hope that it feels at home in the shed which also contains a scratchbuilt model of Webb's remarkable compound 2-2-4-0 tank locomotive No.777, a Drummond G&SWR Class 131 4-4-0 and a Pickersgill Class 956 4-6-0, kitbashed from a Hornby 'King Arthur'.

I have been building this loft layout over the last 25 years (it has Peco track throughout). It was originally inspired by an article in RAILWAY MODELLER about how to achieve height in a layout - *The Z Factor*. The central feature is a gorge and waterfall (80' scale), superimposed with an 11-arch curved viaduct.



Ramsey

Isle of Man Railway in 4mm scale – part 2, locomotives

ALAN CATLOW continues the description of his Manx terminus in 00n3. Part 1 last month.

For most people, the locomotives are the main attraction to any model railway. In the case of the Isle of Man Railway, it is the distinctive 2-4-0Ts that were built by Beyer Peacock in Manchester from 1873 when the line first opened. All the locomotives were delivered from that manufacturer on a regular basis with one exception up to 1926. In total sixteen steam locomotives were on the books; there have been others but they belonged to the Manx Northern Railway. That railway was absorbed into the Isle of Man Railway in 1905. As a result some of its locomotives were short-lived and would certainly not have been around in 1964 and so would be out of period for my model.

Branchlines is the leading manufacturer of Manx model kits as it provides complete locomotive, coach and wagon kits. The firm also provides numerous parts to enable the old GEM loco kits to be brought up to the modern-day quality that we have now come to expect. My first Manx loco was a Branchlines *Mannin* kit. It proved to be a good training ground for me as it did not go together as easily as I envisaged it would. I very soon learned how to improve and speed up construction, so much so that I have built six of the Beyer Peacocks and the solitary Dübs 0-6-0T. I still have two more old GEM loco kits nearing completion. It would not be prototypical to build every locomotive as some were withdrawn prior to 1964 but I have tried to include the ones which were operational at that time.

During the building of these locomotives, I have tried to create their individual looks as they had during my chosen period. By that time, most if not all operational engines were running with many visual repairs done to them. For example, the side tanks had nearly all received extra metal welded onto them to prolong their life rather than have new tanks



fitted as they have nowadays. That welding made certain engines very easy to recognise even when the number or name was unable to be seen. The side tanks themselves were not always the same size; some earlier engines carried smaller tanks while certain 1874 locos had received larger tanks part-way during their life to bring them into line with the 1905 allocation. Those modified engines never carried the works plate on the cabside as their newer cousins did. All this may sound complicated but it makes it all the more interesting for the modeller who is trying to create perfection in miniature.

It is all very well creating a perfect loco body but the chassis really is the most important part of the whole operation. All my engines run on a standard system. They all have the Romford 40:1 gear ratio, Mashima 9/16 motor with a 12mm flywheel. The driving

wheels are Romford 15mm x 10 spoke to RP25 profile. In recent times these finescale wheels have proved difficult to obtain, so I have turned down the profile on normal ones in an electric drill with extreme care.

The original GEM chassis will convert with a little work into the same running quality as the Branchlines equivalent. As I had acquired a number of these chassis in the early days I was determined to see what improvements I could make to them. As they are constructed from whitmetal, I soldered brass bearings into the casting for the axles to go through. Apart from causing less wear from axle rotation, I found they added extra strength to the structure of the chassis. Other chassis improvements I created are to solder brass nuts into holes for holding the motor mount and the front pony truck. The whitmetal front buffer beam is replaced with a strip of brass making that too





Left: close-up of loco No.1 *Sutherland* by the water tower to the rear of the carriage shed. By 1964 these engines were pretty run-down and many had received welded patches to the bottom of their side tanks, this is one such loco.

Below far left: *Caledonia*, one of the Branchlines kits, awaits painting. This is the only 0-6-0T on the system and was purchased by the Manx Northern Railway, so you could say that it was on home ground.

Below left: No.5 *Mona*, seen from the air.

Above: a close-up shot of No.8 *Fenella* of 1894 having just arrived in the main platform at Ramsey. Details such as the patches on the side tanks are clearly seen.

Top right: double headed trains were quite rare over the northern line. On this occasion Nos.12 *Hutchinson* and 16 *Mannin* are entering Ramsey.

Right: fictitious diesel No.18 and named *Ramsey*. Constructed from the Roxey Mouldings electric tram loco, this model now sports a radiator from a road vehicle, a rear fuel tank and numerous other detailing parts to make it look Manx. With its Mike Chinery chassis, this locomotive makes a very useful little shunter.

Photographs by Steve Flint, Peco Studio.

more robust. Once completed with my standard motor etc I cannot tell one chassis from another; they all run equally well. My only problem now is getting hold of some more of the original GEM loco chassis, they are certainly rare these days.

Finishing off the locomotives is to me very satisfying. All those little bits of brass fittings that are either available from Branchlines in its kits or as a separate items, although delicate and intricate make a vast amount of difference to the end product. There are certainly other fittings that can and have been added to my engines to enhance them even further, such as the rear life guard under the coal bunker on locos Nos.4-14 and 16, the oil caps over the cylinder slidebars – they vary, early engines have two each side, later ones have three each side. And don't forget those all important individual patches on the side tanks and finally those draught-dodgers on the cab sides.

Painting is another aspect that I really do enjoy doing. I still prefer to use a brush rather



than spraying; strange really because my first job on leaving school was spraying cars in a local Ford garage.

The colour of the locomotives is claimed to

be Indian Red. From reports on the Island, the paint was mixed individually in-house for each engine as it was required, so that would possibly explain why some engines do look a slightly different colour. And so it is with the models. As no two engines were built together, there is a need for a new mix of paint each time one is ready as no proprietary paint is exactly right. As a base I start with Humbrol 100 and add various amounts of yellow, red and black until I am satisfied with the end result.

The lining of yellow, black, yellow is the icing on the cake. This I found in the excellent waterslide range from Fox Transfers. The firm supplies straight lengths, curves and corners. I was surprised that it took 46 corner pieces to do one engine, the curves and straight pieces used are minimal. With this system it is possible to line an engine in an evening. When this is dry the following evening, I would then seal the lining with a satin varnish.

To be continued.

List of locomotives built to date

Locomotive	Builder & Date	Model Origins
No.1 <i>Sutherland</i>	Beyer Peacock 1873	Branchlines kit
No.4 <i>Loch</i>	Beyer Peacock 1874	GEM body, Branchlines chassis
No.5 <i>Mona</i>	Beyer Peacock 1874	GEM body, modified GEM chassis
No.8 <i>Fenella</i>	Beyer Peacock 1894	GEM/Catlow body, modified GEM chassis
No.12 <i>Hutchinson</i>	Beyer Peacock 1908	GEM body, modified GEM chassis
No.15 <i>Caledonia</i> (originally Manx Northern Railway No. 4)	Dübs 1885	Branchlines kit
No.16 <i>Mannin</i>	Beyer Peacock 1926	GEM body, Branchlines chassis

Others waiting to be completed:

No.10 <i>G. H. Wood</i>	Beyer Peacock 1905	GEM body, Branchlines chassis
No.11 <i>Maitland</i>	Beyer Peacock 1905	GEM/Catlow body, modified GEM chassis
Nos.19-20 (ex County Donegal Railways railcars)	Walker Bros/GNR(I) 1950-51	Anbrico kits on Mike Chinery chassis

Two other vehicles that are purely fictional do appear from time to time. They are:

- No.18 *Ramsey* A modified Roxey Mouldings electric tram loco converted to run as a diesel shunter. This is painted brunswick green and is powered with a Mike Chinery motor bogie.
- No.21 A single car railbus powered by a Halling motor bogie with an old Airfix Park Royal body, heavily modified to create a look of something ex-County Donegal. It is painted in the style of the other two railcars 19 & 20 and takes on the next available number. This vehicle is something of a star performer at exhibitions and provides a great talking point.



...an exchange of railway modelling ideas for beginners of all ages

Westbridge-on-Sea

Part 4 – the final track plan, the scenic work and the rolling stock

ROBERT ILES compares the original concept with the final result and completes the account.

The first ideas for *Westbridge-on-Sea* started with a track plan sketched out roughly on a piece of paper. The aim of the project was to replace *Grizzly Flats*, a veteran G45 scale layout that had steadfastly served the Pecorama indoor exhibition for many years. The reason to include this series in the RAILWAY MODELLER'S *Right Away* section has been to share with '...beginners of all ages' the story of how the project developed over the months and to show the effectiveness of tried and tested modelling methods.

In Parts 1, 2 and 3 of this series, the baseboard structure, track, wiring and kit work were examined to give an insight into how building the layout was approached. The use of traditional methods has been advocated to show how effective they can be. In this final article in this series, the landscape contour modelling, treatment of the visible surfaces and the rolling stock are considered. These topics and those in the previous articles may now help to provide the new modeller with ideas and confidence to turn thoughts into reality.

Apart from using the full length and width of the available space, the use of height has helped to make *Westbridge-on-Sea* truly three-dimensional. Apart from the splendid viaduct, there are tunnels, hills and a seashore, all at different levels. The original plan defined where the raised and lowered baseboard sections were to be built, but it was not until the landscape contour work started that the final shape emerged.



Sheets of expanded polystyrene from packaging were used to build up the hills to just under their required height. This was cut with a sharp knife, taking care to keep fingers behind the blade. The layers were glued together with PVA glue. Results came at a satisfying pace and it was not many days before the basic work was done.

Openings were cut into the woodwork in the places where there would be rock tunnels. These areas were to be the subject of future cosmetic work. One-piece plastic mouths were used where the tunnels were set into earth hill-sides. A hoop of plasticard was attached to the back of the mouth to represent the beginning of the tunnel interior wall.

The rugged landscape's rocky effect was initially modelled using Pecoscene Landform plaster bandage. This is material impregnated with plaster which, when wetted, can be shaped to your needs. On top of this, hole filler was applied with a 1" paint brush to produce the finer details. Around the tunnel mouths,

builder's pink plaster was used. This was shaped and sculpted with a knife and a wire brush to create a rocky finish.

When the plasterwork was completely dry, the next task was to reproduce the finishes that would depict rocks, grass, sand, sea, trees and all the other required surfaces. No secrets here; commercially available scatter materials, trees and matt paint did the trick.

A look at the photographs of the layout will show that there are a number of separate areas that required individual treatment as far as scenic work was concerned. At the lowest baseboard level of the layout is the beach.

The beach slope was made with foam-board, the material often used in shops for signage. The modeller could ask at shops for an old sign to use. Some craft shops stock it too. Foam-board is easily shaped; on *Westbridge-on-Sea* it was stapled down and the staples painted with enamel to stop any rust stains eventually seeping through.

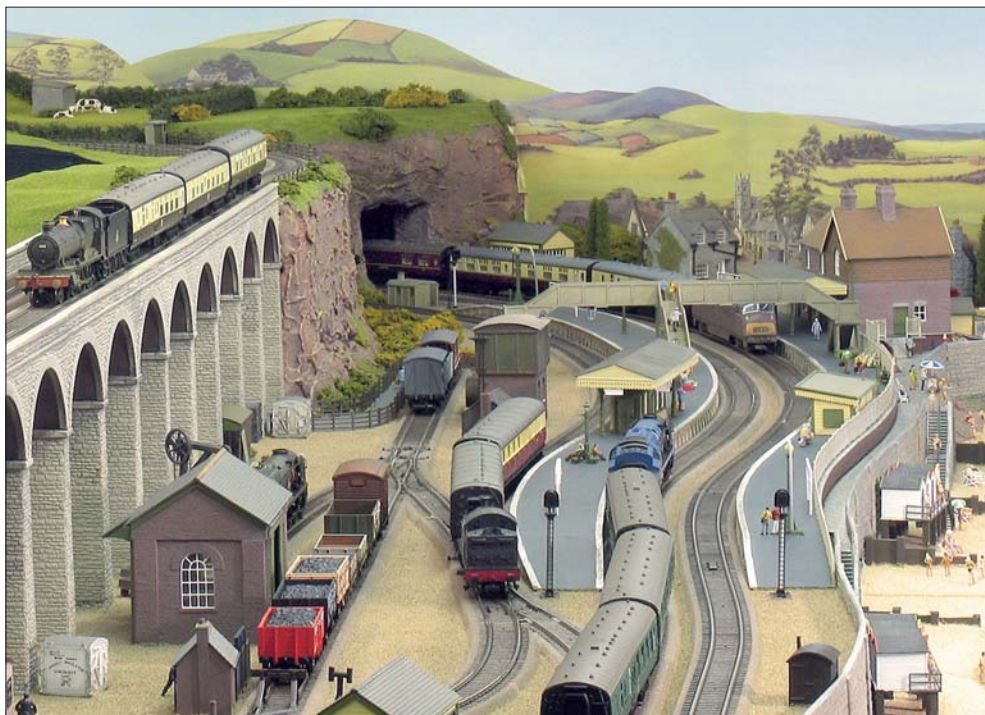


The beach has waves lapping on the sand; these are made of plaster. The damp plaster was dragged into a basic wave shape with a piece of scrap plastic and finished with a knife. When dry, it was painted sea green and dry-brushed with white crests and gloss finished to appear wet. Woodland Scenics Realistic Water, a kind of varnish, was used for the finish.

Where the sand remains wet, as a result of the ebb and flow of the tide, the varnish overlaps the sand. The outfall pipe also has a trail of dampness across the sand as it flows to the sea. The sand itself is fine stone ballast scatter material.

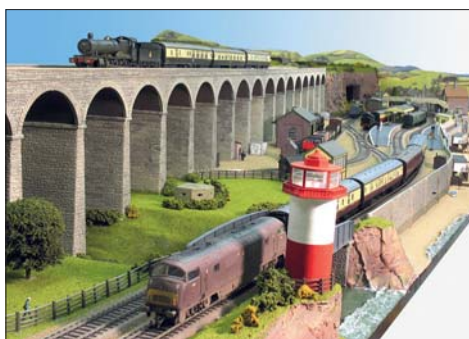
The sea wall was made from Wills coarse stone-effect sheets with buttresses made of cut sections, glued across the joints. Sea wall steps are incorporated and are made from Plastruct.

The sea wall is stained a little way up and some green algae is just noticeable. The algae was done by dry brushing, but the tide mark was carefully measured using a piece of wood as a gauge. This ensured the correct level all the way along the wall.



At each end of the layout are country backscenes mounted on the wall. These give a very good sense of depth and seem to extend the layout beyond its actual dimensions. This is a south coast setting, so the station at the east end of the beach is bounded by trees. These are between the station and the backscene and effectively compress the perspective into the horizon. The buildings, trees and landscape blend together to convince the eye. The tunnel mouths are fashioned in plaster to create a rock appearance, painted brown and topped with green scatter material and bushes.

A similar treatment is used at the west end of the layout. Buildings, field hedges, animals and hillsides disguise and break up the boundary between the horizontal layout and the vertical backscene. The fences by the track are cheap, realistic and add a finishing touch.



A specially made feature is the lighthouse. This was not a kit, but started out as a piece of plastic pipe. The top section was fabricated from plasticard. The light is powered via a unit that switches the lamp on and off slowly, to replicate the real thing. These units are available from Heathcote Electronics.



There is a considerable amount of activity within and around the station. The branch line operates separately and is connected to both the main line and the coaling stage and sidings. Around this area are huts, a goods shed, small crane, water tower, footbridge, signal box and other detail features that would be expected in a prototype scene.

The station itself has a wealth of scenic detail. The Post Office has a pillar box and telephone kiosk outside and there are flower beds adjacent. Ivy grows up the wall of a nearby house and cars are posed in realistic places. The back of the station building has a goods ramp, next to which is a load of sacks to be collected.

The wartime bunker in front of the viaduct is a sobering touch, reminding us that not all seaside activity has been pleasant, but it helps to give a sense of history to a new layout. This is just in front of the viaduct, the arches of which are perfect havens for storage huts and small business lock-ups. Also under the arches are cable drums, planks of wood and an electricity sub-station transformer, all placed in plausible locations. The eye naturally follows through the arches to the street scene behind. The fact that this is slightly obscured by the viaduct heightens the viewer's curiosity.

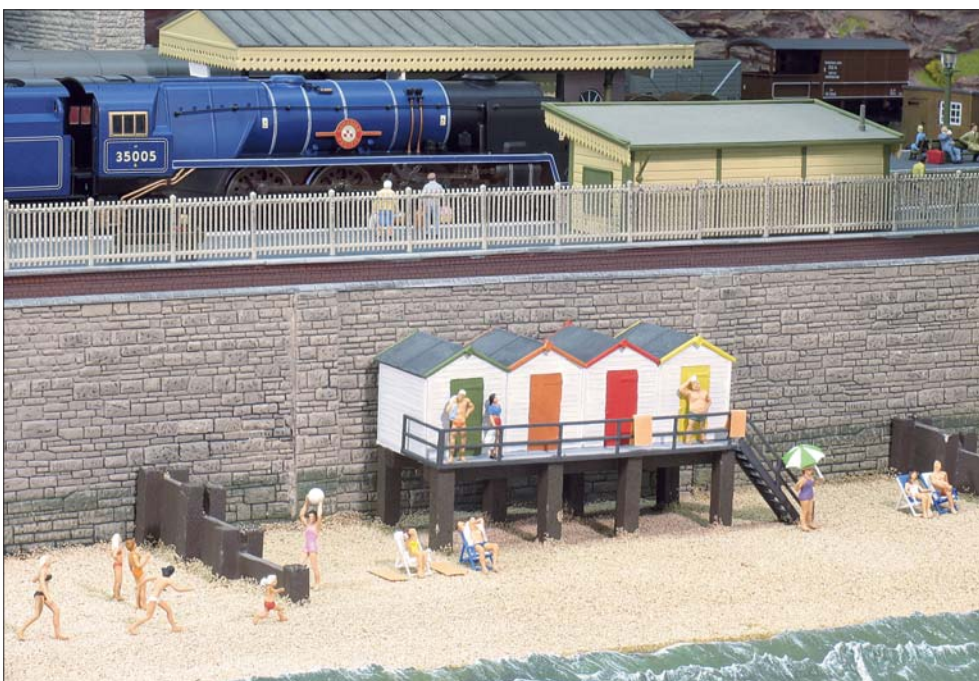


A look at the street will reveal a war memorial, floral-decorated roundabout, market stalls, some shops and a chapel. People bring it all to life and road vehicles of the correct vintage suggest more movement.

The other mode of transport on *Westbridge-on-Sea* is on the river. The motor and rowing boats are waterline models which means that they do not have a full hull; just the part that is normally visible above the waterline. Those with ambitions to portray a larger harbour scene can obtain waterline sea-going ship models.

The river is plaster, painted in dark blues and greens, highlighted with white wave crests, just like the sea. A coat of Woodland Scenics Realistic Water created the deep, wet look.

Scattered over much of the layout are people. Some are dressed as passengers or in working clothes, others are sunbathers. These are not expensive and can quickly animate a scene.



This exhibition layout has to function unattended for many hours every day, all year. It is under automatic control that allows up to four trains to work in sequence on the main line. The folded figure-of-eight track could allow trains to catch up and collide with each other if a reliable control system were not in place. Reed switches, operated by magnets in the passing trains, help to ensure that accidents are prevented.

The branch line, although connected to the main line at the station, operates totally independently. Visitors can activate the branch line by means of a push-button.

The rolling stock is a blend of Southern Region and Western Region during BR days, in an era when steam and diesel cohabited. This allows scope for a wide variety of passenger and goods workings with steam the principal motive power, but with diesel increasingly taking on the role. A few old private-owner wagons, which we imagine could have been saved by a preservationist, are in the sidings. They await transit to a fictitious restored branch line

that was closed by Dr. Beeching. The locomotives and rolling stock are from Hornby and Bachmann.

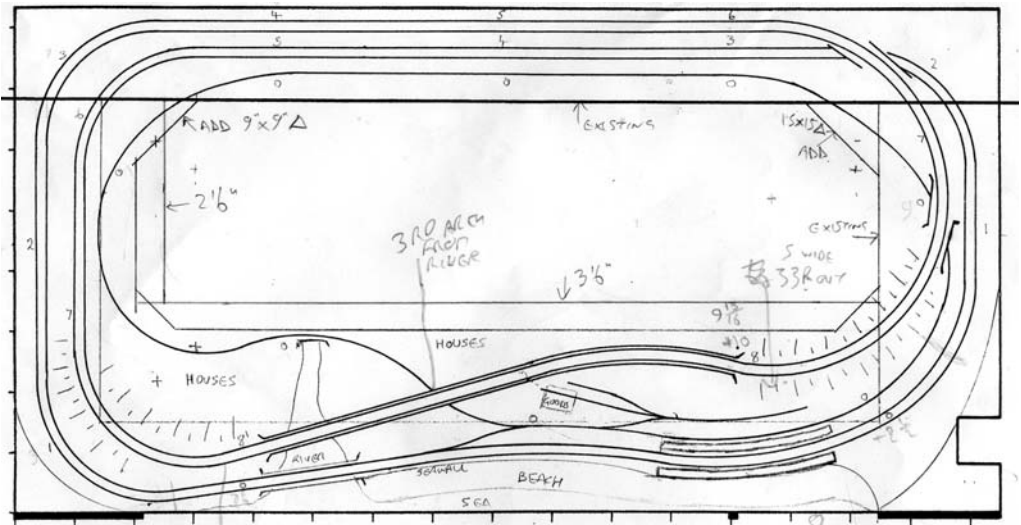
A comparative look at the original track plan sketch, which has been repeated in each of these articles, and the drawing of the final layout will show that it is fundamentally the same, but just a few differences are revealed. The viaduct is straight rather than curved at the east end allowing a different configuration of track. There is a tunnel instead of a bridge and the hillside is constructed near to the station. The station area is extended and the branch line takes a more acute angle through the arch of the viaduct. This is so that the longest coaches can travel along that line without fouling the arch.

The river has moved slightly and is a more important feature. At that end of the layout, the hills were not clearly defined in the sketch, but the finished drawing shows that the topography and the placement of some detail features, have evolved during construction.

The trackwork behind the backscene is unchanged and merely serves as a joining section between where the trains disappear and emerge again from the tunnels.

Visitors to Pecorama ask how long it takes to build a layout; this one was logged at nearly 900 hours.

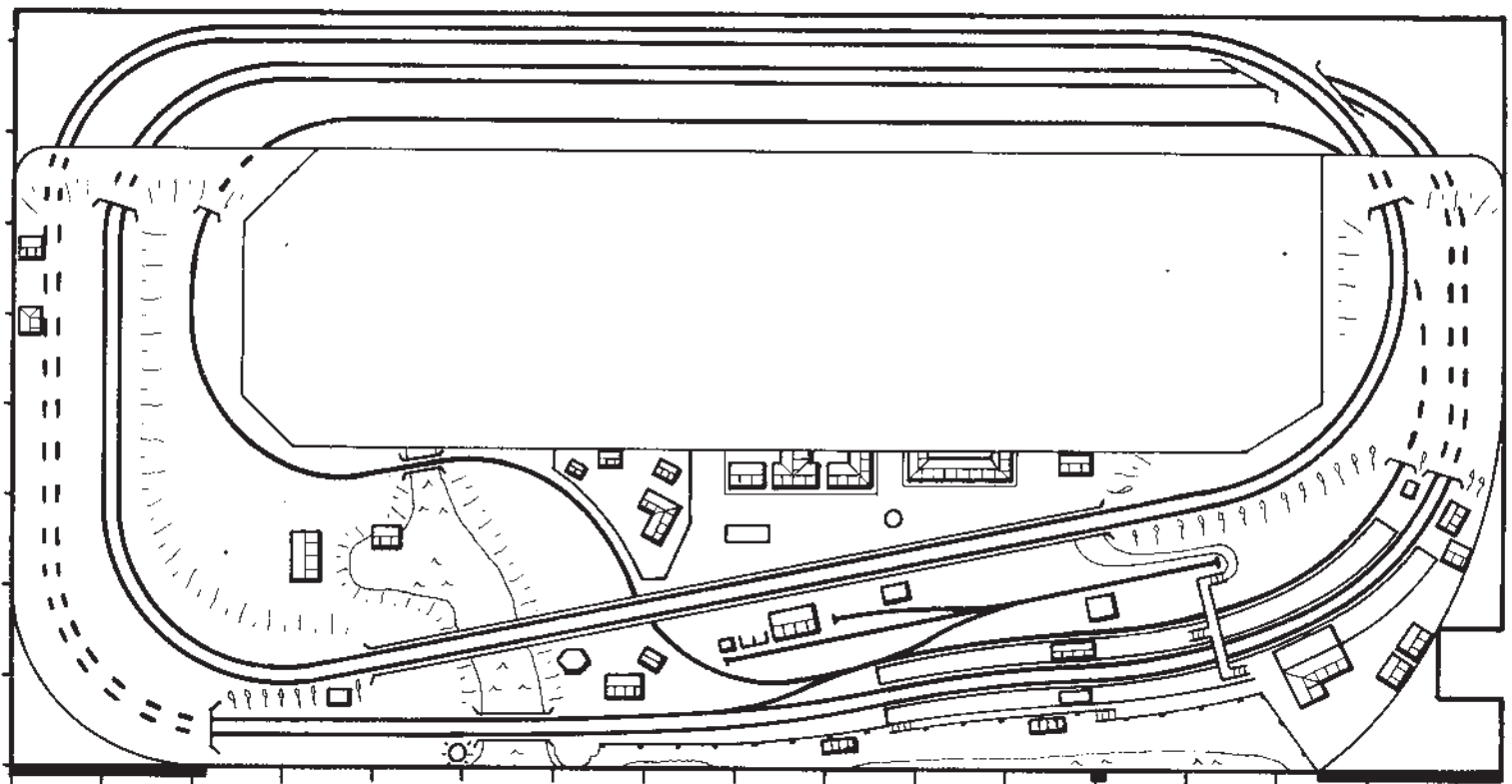
Westbridge-on-Sea will have thousands of visitors in the coming years. It has been built using the traditional methods recommended to those of all ages beginning the hobby. These methods form the best basis upon which to develop modelling techniques. Visit the Pecorama exhibition and see the results for yourself.



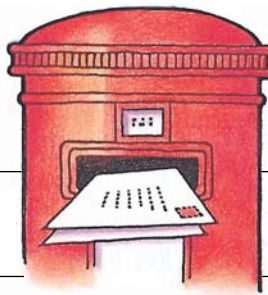
Above: the original track plan sketch.

Below: the final track plan.

Photographs by Jolyon Sargent.



READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

TRACTION ENGINES

I have heard some extravagant claims made about the pulling power of the Union Mills N gauge locomotives; so when I recently purchased a 3F of my own I decided to do some traction trials to see what it was really capable of. I thought that your readers may be interested in the results of those trials.

The trials were conducted on my test track, which is not particularly well laid (deliberately so: I am more interested in discovering how my locomotives will behave in sub-optimum conditions than when everything is perfect for them) and has a ruling curve radius of approximately 8". For these tests, however, I wanted the track to be spotlessly clean, so I gave it a thorough rub-over with methylated spirits before I started.

Under these conditions, my Farish 'Duchess' can haul 22 metal-wheeled Farish bogie coaches round the test track; so I started the Union Mills model at this loading. It had no difficulty with this train, so I added nine Farish 4-wheel coaches, again with metal wheels. Still the 3F was laughing, so I added my rake of five 6-wheel coaches. These are Farish 4-wheel coach bodies mounted onto Fleischmann 6-wheel chassis with nylon wheels. Still there were no traction problems, so I delved into my NPCS box and pulled out three Lima Palethorpes wagons and a Lima full brake and added these to the back of the train. At last some wheel slippage was apparent; but not so much as to prevent the locomotive from starting the train and pulling it happily round the test track for lap after lap.

I do not know how much more stock would have been required to bring the engine to a stand, because the train was now practically nose-to-tail and there was simply no room to add anything more. But I can say this: on clean track, the Union Mills locomotive was perfectly able to pull a 40-vehicle train of some 137 axles round a track with tighter than 9" radius curves.

How's that for a 'traction engine'?

JEREMY BURROWS

HEADLAMPS

I read with interest Andrew Sharples' article on headlamps (July issue), so well done to him for reminding us of an important element of railway operation in days gone by. In *Freight Train Operation* (reviewed in the same issue) Bob Essery makes the same point, and another good article on the subject is Barrie Walls' *Goods Trains from the Steam Era* in your January 2004 issue.

It doesn't look as though anyone else has spotted it, but I'd suggest that Andrew's numbering of codes isn't correct. Under BR, from June 1950 the codes were listed as A to K (A being Express Passenger, and so on) and

they changed to numeric (1 to 9 and 0) from June 1962 with the introduction of the 4-character codes displayed by the newer diesel and electric locos. Even these codes could sometimes be seen on steam locos (as distinct from the well-known Western Region 'reporting numbers') in the latter days of steam – either as paper labels pasted onto boards designed to fit lamp-irons, or more crudely chalked onto smokebox doors – in addition to the traditional lamp settings. Has anyone had a go at modelling this?

ALASDAIR J.C. TAYLOR

COUNTY DONEGAL

I found the article [*last two months – Ed.*] on the County Donegal Railways Joint Committee most interesting. One would think that the pictures in the article were pictures of the actual railway. However it does contain some inaccuracies.

Firstly, Ireland is not part of 'The British Isles' and I would be most grateful were you to accept that fact.

Secondly, the CDRJC did not own the line from Derry (Londonderry) to Strabane. That particular line was built in 1900 by the Londonderry & Strabane Railway, which was taken over 100% by the Midland Railway of England in 1903. The line was closed in 1955.

Thirdly, the line from Strabane to Letterkenny was built by the Strabane & Letterkenny Railway. The S&LR remained a separate legal entity until the very end. Indeed, the L&SR/CDRJC and the Londonderry & Lough Swilly Railway glared at each other in Letterkenny, somewhat like the Americans and the Russians in Berlin during the Cold War. Indeed in 1928, the CDRJC refused an offer to buy the L&LSR.

Fourthly it is not quite true to say that first railcar in either Ireland or the UK was introduced by Henry Forbes in 1930. Henry Forbes did introduce conventional railcar/railbus operations in 1930. These railbuses/railcars meant that many of the branch lines, especially the Glenties branch, retained passenger services long after steam operation of passenger services was no longer financially viable. In 1906 the CDRJC fitted an ordinary Ford car to run on the railway. It was used as an inspection car, until the end. If a train was coming, it was simply hauled off the line. Additionally it was pressed into service, hauling a passenger vehicle during periods of great demand. Indeed the CDRJC was the only narrow gauge line in Ireland that had corridor-connection carriages. The CDRJC constructed a special wagon to carry bags etc on its railcar services.

Fifthly, the Clogher Valley Railway closed in 1941. I accept that the stock may not have been auctioned until 1947. Since 1928, the CVR had been owned by the local authorities through whose areas it ran.

Lastly, around 1952, the CDRJC asked the local authority for a yearly subsidy of STG£1,500 to maintain the track. There was much junk-speak from the local politicians until some bright spark in the local authority noticed that it would require yearly expenditure of STG£3,500 to maintain the road to the same level as the railway. The Committee got the requested subsidy.

MÍCHÉAL Ó BÉARRA

PRIVATE OWNERS

I consider the caption in *Hilltop Colliery* (September) misleading, to quote: 'A typical scene from the early twentieth

century, colourful Private Owner wagons as far as the eye can see'.

Such a scene would have been totally impossible at any colliery anywhere at any time in the twentieth century with the exception of the early war years when wagon pooling was in force except that none would have been as clean as those shown; by 1944 from personal recollection only about half had any discernable lettering at all. If this had been correctly captioned, as is that below on the same page, this protest would have been unlikely.

I have included at least one illustration in each of my series of books showing colliery scenes for the benefit of modellers, both early twentieth century and during wagon pooling. I have also included track layouts of collieries large and small.

As a rough guide, collieries in Wales featured mainly their own wagons, those in other parts of the country the mix was half colliery, half merchant-owned wagons. An exception could be made for those producing gas coal, where the proportion could have been half colliery, the balance divided between coal merchants and those owned by either gas companies or coal factors.

I know that it is an irresistible temptation for those modelling the steam era to include Private Owner wagons in their favourite livery and to this extent the range of models now available from all sources is additional encouragement, but there has never before been more information on the subject available in print.

I must comment on the photo on page 570 of the same issue, which shows that some accurate research has been done to establish what wagons could have been seen at a colliery in that district, based on those which are identifiable.

KEITH TURTON

Mr Turton's latest book on PO wagons is reviewed on p.736 – Ed.

PULLMAN CARS AND FEEDBACK CONTROLLERS

On my large "00" gauge model railway I have four panel mounted 'Pentrollers' supplied by Stewart Hine. These controllers have and still are working perfectly with all types of motors in use on my collection of finescale locomotives.

Recently I treated myself to a rake of six of the new Bachmann Metro-Cammell Pullman cars with internal lights. On the first run with the coaches I noticed that the red warning light on the Pentroller was flashing at a fast rate and the ammeter needle on the control panel was vibrating at the same frequency, indicating that a feedback 'pulse' was affecting the smooth output of the controller. This condition prevailed with just the coaches standing on the track. I understand the light source in each coach is an LED with a resistor that is causing the problem and needs looking into, as people using other types of feedback controllers would not be aware of the problem unless they have an ammeter in the 'output' circuit.

Below: the extended Bevois Park and St. Denys, by Andrew & Simon Tucker. The bridge in the far distance marks the join between the two, old and new.

Photograph: Andrew Tucker.



I have been in contact with Stewart Hine regarding the problem and he has strongly advised me not to run these coaches with locos having coreless (Portescap) motors as each pulse of the lighting circuit will cause a drop in the track voltage, followed by a sharp rise, which will in turn cause a pulse of armature current and rapid brush wear. In the meantime I have disconnected the lights on my coaches.

Will you therefore publish my findings in your magazine to enlighten model railway owners as to the problem, which could damage their loco motors.

BRIAN J.R. YATES

'ON THE CASE!'

I was very interested to read the last part of your editorial in the September issue of RM, pointing out the advantages of N gauge for modelling the SR third rail system.

We are on the case!

The extended *Bevois Park & St Denys* had its first outing over the bank holiday weekend to the Westinghouse Club exhibition at Chippenham. This was always intended to be a trial run before any scenic work is carried out on the new baseboards. In fact it was the first time that all of the boards have been erected together. Unfortunately we had to rush the wiring and a fault gave problems. However, we did prove that the concept is workable and there was a lot of interest in the idea of modelling this location with the gently curving four track main line.

ANDREW TUCKER

WOODFIDLEY CROSSING

I have lived at one of the two ex-railway cottages at Woodfidley Crossing on the Southampton-Bournemouth line for the past 29 years. I am researching the history of the London & South Western Railway Southampton-Bournemouth-Weymouth line, and in particular the area of Woodfidley Crossing. It is towards this end that I am writing to you.

For many years we had a regular visitor here by the name of Robert Ormiston-Chant, from Manchester, who was a very keen and knowledgeable railway enthusiast. About three months before he died, Robert promised to send me copies of several articles, track diagrams, and fact sheets about the Woodfidley area. Also he promised a list of known occupants of the cottages over the years that he had compiled, and their occupations on the railway. He did in fact give me a copy of the article he wrote for *RAILWAY MODELLER* about the gates at this crossing, which was published in November 1978.

A few months after his death I contacted his sister and asked if it was possible to have copies of all the photographs, track drawings; in fact anything germane to Woodfidley and Brockenhurst station. She informed me that a fellow enthusiast from the local Model Railway Club had removed all his railway material. She was unable to supply me with details of this person.

I am writing to you to ask that you would kindly publish this letter in the hope that the person who acquired his collection or any one else would read it and be willing to supply me with copies of anything germane to my research.



I hasten to add that I have undertaken this project for purely personal reasons.

KEN HILL,
Woodfidley Crossing, Brockenhurst,
Hampshire SO42 7QL

SR MATTERS ARISING

Having been advised that a statement of mine was quoted in a letter in the July issue of your magazine, I purchased a copy, something I have not done on a regular basis for about ten years.

I have to say that I was impressed by the 'Watlington' feature in the July issue and, turning to more familiar SR territory, was intrigued to find an article on the 700 Class goods engines that began life on the LSWR in 1895 and lasted almost until the end of steam. The article presented good basic information (such as might be read in the late D.L. Bradley's *Wild Swan* and *RCTS* books on the subject, written 20 or more years ago), but in my mind it also raised a number of questions.

I would like to point towards some of the answers because it seems to me that my questions would also be those raised by a manufacturer who wished to provide a state-of-the-art model that we now expect in 2006. Indeed, those who wish to further their interest and practice in the hobby as well as, possibly, new entrants, might also find a number of questions especially if they have access to a selection of photographs on this subject or if they should wish to produce a model in the LSWR or SR periods. I am conscious that the following mainly uses the 700 Class article as an illustration, but may I mention the boilers and the tenders of these locomotives?

The original pattern of boiler that appeared on this class did not have visible washout plugs on each side of the firebox, but three boilers, probably from a batch built after the original construction as spares, were so fitted and appeared on several engines at various times including 691/2/5/6 in SR days and 30316/27/88/90/701 in BR



Top: photograph 1; centre left and right are photographs 2 and 3, above left and right are photographs 4 and 5.

Photographs courtesy John Harvey.

days. The shape of the dome also varied. The first enclosed photograph, by Tony Sedgwick, of 30316 taken on 1 May 1954 at Eastleigh illustrates these points. Removal of the snifting valves was a policy of O.V.S. Bulleid who considered, probably rightly, that they were unnecessary and was generally well under way several months before nationalisation. A little later than many other classes, No.693 of the 700 class was the first to be so treated in November 1947.

It is perhaps a pity that the article did not include a photograph of the class in LSWR days, not only to illustrate the boiler fittings including the Drummond chimney, but also the tender. Noticeably, the tender drawing (which, importantly, is somewhat bereft of end detail) shows the axlebox springs in the form in which the tenders were built, but alterations were carried out at the end of the LSWR period to give the arrangement shown in the photographs. Steam heating pipework was also added and Photograph No.2 shows the end of a short wheelbase (13') tender in 1948. Please note the steam and vacuum hoses.

Note also the position of the spring hanger in relation to the frame cut-out. For comparison I enclose three details (Photographs 3, 4 and 5) culled from my collection showing the original LSWR form of spring (3), the modified form (13' wheelbase, 4) and the later arrangement on a 14' wheelbase ten-

der (5). A BR list dated April 1957 gives 30316/26/39/46/50, 30687/88/94/99/700/701 as having the short wheelbase (13') tenders. There were other tender changes between engines besides, many of which have been identified but not included here. I mention this because modellers of these engines may be interested in choosing a correct number applicable for the tender they model, and they may want a tender that has lamp irons and other detail correctly placed on the end.

I also noted the article on SR headcodes and duty numbers. Again, this gave a good introduction to the subject, but what struck me was that the photographs of the models with the engine duty number on the disc did not look right. Not always did the duty number appear on a disc, but having seen the comparatively narrow width of the pasted-on paper figures in the BR period and from photographs noted that paint and stencil were sometimes used in earlier days, I wondered whether a more realistic alternative was available to that portrayed.

The whole matter of the operation of the railway by the SR and BR(S) in the steam era can be very interesting and as the article shows, relevant to the modeller. I would like to advise that members of the Southern Railways Group (SRG) can access an extensive library and an enquiries service holding a considerable amount of photographic and documentary information relating to Engine Workings and Duties, especially in the BR period.

However, the main point I would like to draw out of this letter is that if more and better quality ready-to-run models are to be produced, then the information available to manufacturers must also be of the quality required for them to be able to do the job as helpfully and straightforwardly as possible. It seems to me that the specialist 'line societies' such as the SRG can play an important part in any necessary research. After all, research life did not stop with the publication of Don Bradley's books two decades ago.

JOHN HARVEY
Chairman, Southern Railways Group

NER FOOTBRIDGE

Reading the August edition of the *RAILWAY MODELLER* I noticed on page 527 that you have found tracking down the exact origins of the NER footbridge in 00 from Hornby tricky.

The footbridge is on the Newcastle to Carlisle line at Stocksfield Station in Northumberland.

GRAHAM WILLIAMS
We actually meant where and when the first one was installed - Ed.

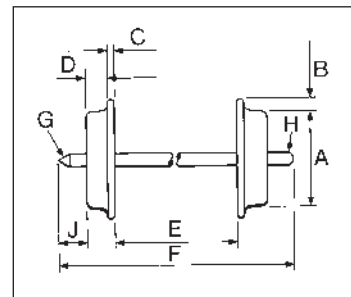
'FASCINATING READING'

I read with great interest the article by Mr. Petch in the September *RAILWAY MODELLER*. Anybody interested in mining in Somerset should read Simon Winchester's book *The Map That Changed The World* (Penguin, ISBN 9780140280395). It is about William Smith who produced the world's first geological survey map. There is a big section on North Somerset, Mr. Smith even lived at Tucking Mill House. This location became famous as being close to the S&D railway line. The book makes fascinating reading.

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Brand new Drummond M7 in 00 from Hornby



105 of Dugald Drummond's 0-4-4 tanks for the L&SWR were built between 1897 and 1911. They were remarkable in that the majority remained in everyday service until the early sixties. In fact when the writer was underlining their numbers in his Summer 1955 ABC, the class was still substantially intact at 103 locos.

Although this splendid Hornby replica is a brand new superdetailed

model, some purchasers who 'collect' rather than operate, may see it as a replacement for the Triang Hornby M7 of 1967-86 which nowadays seems very basic by comparison – earlier examples were in unpainted black plastic.

We have four samples of the new model; non-motor train fitted short-framed No.357 in post-1931 Maunsell green lined black and white livery, and

three long-frame motor train fitted locos in BR mixed traffic black, Nos.30031, 30051 and 30108.

The short-framed engine has underfootplate sand containers at the front and the appropriately shaped smokebox wingplates, open bunker coal rails, and red number plate on the bunker rear sheet. Full marks to Hornby for including the correct Urie power classification 'K' on the platform

valance to the rear of the front buffer beam.

The long-framed locos have the front sandboxes integral with splashers and the consequent abbreviated wingplates. The compressed air motor-train equipment is a remarkable piece of modelling, consisting of air reservoir ahead of leading coupled wheels, air pump attached to right hand side of smokebox and the actuating cylinder



56xx 0-6-2T with DCC On Board in 00 from Bachmann

Bachmann has released the second of its decoder-fitted models, the 56xx 0-6-2T in BR lined green as No.6671 (ref.32-076DC, £63.15).

Bachmann has listened to customer feedback of the decoder that has so far been used in its US 'DCC Onboard' range and train sets, and it was felt that a decoder with superior power control was needed. The firm was able to provide a decoder that offered high frequency pulse width modulation for quiet drive, back EMF for superb slow running, and function button control over selection of the inertia and a low shunting speed. This is impressive performance for a decoder in this price



bracket and is affordable in a DCC Onboard product.

The decoder supports short addresses but does not support

advanced consisting. In the Bachmann Branchline range this decoder will be fitted to models other than the 'Jinty' (see last month) and Pannier, where space constraints require the narrow variant of Bachmann decoder to be installed.

SAMPLE SUPPLIED BY
Bachmann Europe PLC, Moat Way,
Barwell, Leicestershire LE9 8EY

PRICE in text

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

Hornby M7, continued

to the leading end of the right-hand side tank. The pipe runs that link these elements are installed on the model and can actually be traced on their convoluted routes between fixings. Hornby has included the additional hose connections that were necessary for motor-train operation, plus working scale couplers, in the parts bag. The air reservoir is removable (the front body fixing screw is above it), and must be taken off the model if the supplied NEM pocket and tension lock coupler is to be used at this end of the model. Fastening cleats around the lower edge of the smokebox door, Urie-style, and two extra lamp irons on the door for use with SR headcode discs are not forgotten.

Features common to both versions are the detailed cab interior with separately applied and painted regulator handle, lever reverse, handbrake and other fittings, all beautifully finished but difficult to see in that commodious Drummond cab. Tank-top details, which include lifting lugs, inspection plates and water fillers are well carried out.

The boiler fittings look just as we remember, particularly the slender dome with the 'crown' of two brass safety valve columns. Something also well remembered, because a speciality of the young Brewer was leaning

over bridges and trying to look down loco chimneys, are the four casting holes in the top of the chimney cap, seldom before seen modelled. Water feed and injector pipes are in copper and the sprung buffer heads are bright metal, as are the coupling rods and brake tie rods.

Beneath the superstructure, the horizontally mounted can motor sits between the leading axle of the bogie and the driving axle. A weight is located over the coupled wheels, shaped to allow some empty space between the cast metal frames and boiler underside, and the adhesion of this loco seems to be considerably better than

that of model 0-4-4Ts which we have sampled in the past. On the 1:36 and 3' curves of the Pecorama Loft Layout the M7 handled a creditable four coaches with ease.

We cannot see much space anywhere for a decoder although a DCC socket is provided, right up the smokebox end. Controllability of the model is good, with current collection by wipers on all wheels. The bogie pivots and slides in an arc, but its movement is not controlled and no form of springing or compensation is present on the engine at all.

Disappointments? Although the original very slim polished brass front

spectacle plate rims did tend to disappear from these engines over the years, it's pity they were omitted here. What *could* have been left out to advantage is the double row of very 'shipyardy' rivets along the line where the cab is fixed to sidetanks and bunker. It is true that there was a riveted join here, but it was nearly always invisible, even in BR days. Here is a case of too much detail, really.

Otherwise, the M7 is another large step along the road of ever-improving ready-to-run models, and when the eagerly-anticipated Hornby 'King Arthur' is released, we shall be that much closer to (but still quite a way from) Waterloo station as it used to be, perfect in 00.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES
No.357 (ref.R2503) – £79.99
No.30051 (ref.R2504) – £79.99
No.30031 (ref.R2505) – £79.99
No.30108 (ref.R2506) – £79.99

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



Weathered container flats and new Limpet opens in 00 from Bachmann

Bachmann has issued a version of its twin-unit container flats in weathered Raifreight Distribution livery. The treatment is quite effective, as it does not obscure the finely printed wording, and the all-important UIC number panel at the left-hand end of the combination has been kept clean, as if the real thing has been wiped over to ensure the wagon could be identified.

The anchor mounts for containers, supplied with the packaging for each 'half' of the combination, have also been neatly weathered.

Engineers' or departmental stock live often-humdrum lives, away from most enthusiasts' attention. Yet the



wagons with the marine names play a vital role in the upkeep of the railway system.

Bachmann has added to the fleet of ready-to-run models in 4mm scale with its new Limpet (TOPS code ZKA).

The model is a finely moulded item, and is available so far in three liveries: plain grey (ref.38-086), engineers' 'Dutch' grey & yellow (ref.38-085) and LoadHaul orange & black (ref.38-087). Painting and lettering are excellent, as we would expect.

The chassis boasts crisp rivetwork, good detail and brake shoes in line with the metal three-hole disc wheelsets. Slim tension-lock couplers in NEM pockets on swivelling mounts are fitted, as are plastic scale coupling hooks and solid buffers.

All are excellent additions to the modern freight scene in 4mm.

For 00

SAMPLES SUPPLIED BY
Bachmann Europe PLC, Moat Way,
Barwell, Leicestershire LE9 8EY

PRICES

Intermodal twin-unit (ref.37-316)

ZKA Limpet, all liveries

£20.85

£8.15

WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



New C-Rail container transfers

Arran Aird of C-Rail Intermodal has added two more packs of container transfers to his ever-expanding range in 00 and N. As before the waterslide sheets have been produced for C-Rail by the noted American manufacturer Microscale.

Pack No.14 in the 00 series covers 30' Bulkainers and 20' Tankainers: there is sufficient on the sheet to cover three of the former and two of the latter. Pack No.15 will treat three 40' and one 20' 'boxes' in the Maersk and Triton fleets.

The sets are duplicated in N, as packs Nos.5 and 6 respectively.

For 00 and N

AVAILABLE FROM
C-Rail Intermodal, 'Morven', Roome
Bay Avenue, Crail, Fife KY10 3TR

PRICES

00 pack No.14 - £4.95

00 pack No.15 - £4.95

N pack No.5 - £2.50

N pack No.6 - £3.00

Fox Transfers for Hornby HST car and Fastline 56s

Fox Transfers has added several new sheets to its range of expertly-printed waterslide transfers: they are for an HST power car and Class 56s.

Cotswold Rail HST car No.43087

wore a bright red livery for a while, with Hornby branding (it has since been reliveried, and operates in the First Great Western fleet). The Fox sheets are refs.F2787 (2mm/N, £6.95), F4787

(4mm/00, £6.95) and F7787 (7mm/0, £12.75).

Fastline Freight, owned by engineering group Jarvis, operated three re-activated Class 56 'Grids', Nos.56 301-303. The Fox pack includes pre-spaced diagonal white & yellow striping, correct current overhead live wires warning flashes, and sufficient cantrail striping to complete one locomotive. The sheets are refs.F2788 (2mm/N, £7.75), F4788 (4mm/00, £7.75) and F7788 (7mm/0, £12.75).

Fox Transfers can supply RailMatch acrylic paint for both these distinctive modern liveries.

For 2mm, 4mm & 7mm scales

MANUFACTURED BY
Fox Transfers, 138 Main Street,
Markfield, Leicestershire LE67 9UX

PRICES

In text. Please add £1.00 per order for UK postage, £1.50 to Europe and £3.20 for rest of the world.



New Setrack



Peco has increased its range of code 100 00 Setrack with a new Long Straight, which at 670mm is effectively twice the length of the ST-201 Double Straight - a siding in one piece!

Further development of the 00 and N Setrack ranges is in hand, details of which will be revealed in due course.

For 00

MANUFACTURED BY
Pritchard Patent Product Co.,
Underleys, Beer, Seaton, Devon
EX12 3NA

PRICE ref.ST-204, £2.75

GWR railcar in N from Farish

The popular Graham Farish GWR single-unit railcar is now available in BR carmine & cream, and in two running numbers: W27W and our sample, W20W (which does not feature in the current GF catalogue).

The paint scheme is subtly different from its catalogued sister too: this model sports white roof domes over the cabs, unlike the plain grey-roofed version GF illustrates.

SAMPLE SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY

PRICE
ref.371-627A, £68.95

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.



New Hornby 08 in 00



Hot on the heels of the weathered rail blue- and Freightliner-liveried Class 08 shunters (last month), Hornby has followed up with one in EWS maroon, modelled on south Wales-based 08 630 (ref.R2595, £57.99).

It's well finished and runs superbly, just like previous versions of this popular model, which was reviewed in full in RM August 2005.

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE
In text

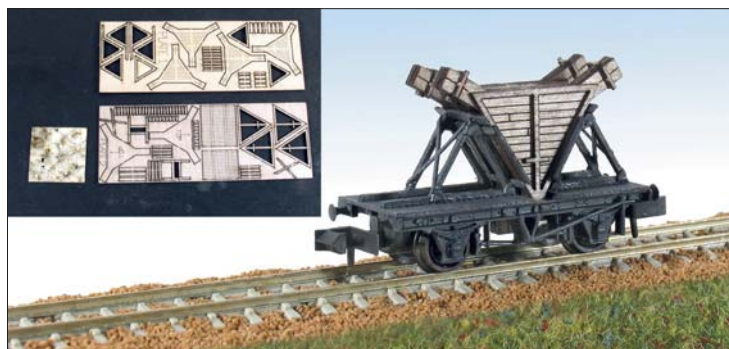
WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

GWR Aero propeller-carrying wagon kit in N from Mill Lane Sidings

Mill Lane Sidings has released another new wagon kit, of a very unusual prototype: a GWR Aero aeroplane propeller-carrying wagon, Diagram E4.

Initially, five wagons were built in 1938. They were designed to carry the then modern three-blade variable pitch propellers, and were basically standard O32 opens with bespoke bodywork. Within a few years there were over 170, but post-war jet developments curtailed the fleet's usefulness: most wagons were converted back to plain open vehicles.

The kit is intended to fit a Peco ref.NR-121 10' wheelbase chassis. It is entirely of laser-cut wood – some parts of which are self-adhesive – and is



accompanied by very detailed instructions, to aid modellers with a moder-

ately complex assembly procedure, and also because laser-cut wood kits

are less common here than in, for example, the USA.

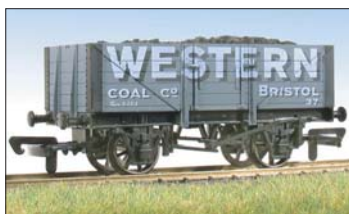
Mill Lane Sidings has only had 200 Aero kits produced, so don't delay if you want one of these distinctive wagons running around on your layout!

For N

AVAILABLE FROM
Mill Lane Sidings, 7 Mill Lane,
Rainford, Nr. St. Helens, Lancashire
WA11 8LW

PRICE
£4.50. Please add 60p P&P per order,
and make cheques/POs payable to 'R
Bardsley'.

Western PO



A limited run of private owner wagons has been produced for the 2006 AMRCWWE Bristol exhibition by show sponsors Dapol.

For 00

AVAILABLE FROM
David Baverstock, 18 Meadowsweet
Avenue, Filton, Bristol BS34 7AL

PRICE
£9.00 inc. P&P. Please make
cheques/POs payable to 'The
Association of Model Railway Clubs
Wales & The West of England'
(AMRCWWE).

A1 Models palisade and chain link fencing in N

A1 Models has added two new packs of fencing to its range of crisply etched nickel silver items.

The left-hand photograph illustrates modern palisade fencing, which contains sufficient parts to make a scale 370' of 6'6" fencing. The fence posts are doubled with separate parts to make them thicker. Each post is half-etched, allowing the fence to be bent over a straight-edge to produce cor-

ners. Often the real things are left in their natural alloy (i.e. silver) state, but the finished result can be painted the builder's choice of colour.

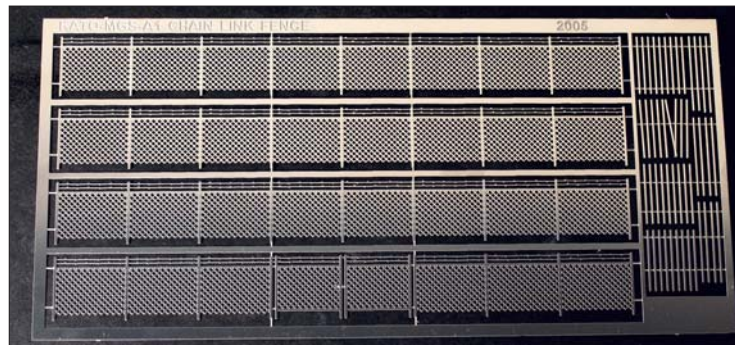
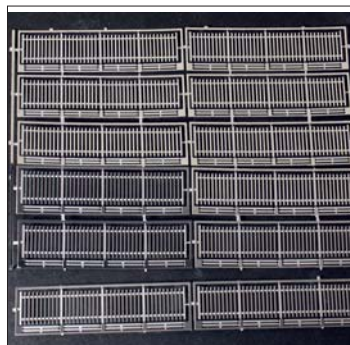
The chain link fence comprises four 145mm long frets with separate support posts. One of the lengths incorporates gates, which can be cut and posed open if required. The barbed-wire tops can be angled or left vertical as desired.

Both these packs will have many uses on 1:148 scale layouts.

For N

AVAILABLE FROM
M.G. Sharp Models, 712 Attercliffe
Road, Sheffield, S. Yorks., S9 3RP

PRICE
£9.99 each type.



1:32 scale Robert Hudson 'Rugga' skip from Slater's

New in the range of light railway materials from Slater's Plastikard is a kit for the typical Hudson 'Rugga' side tipping skip wagon which would be the ideal accompaniment to the Model Company's kit for the Malcolm Moore loco reviewed in our August issue.

This particular type of 1 cubic yard capacity V-shaped hopper was made by Robert Hudson of Leeds from the 1930s, though it did not become common until after the Second World War and the 'Rugga' skip was in production for over 30 years. The design was differentiated by the almost semi-circular ends and the channel used for the chassis facing inwards. The axleboxes housed simple but robust roller bearings.

In model form, the skip itself is a plastic injection moulding, while most of the chassis components are whitemetal castings – a one-piece frame, axleboxes, upstand 'pressings', crosspieces, body support brackets, body catch, and coupling pocket tops. The parts are highly detailed; the nut, bolt, and rivet detail is particularly notable.



There is also an etched brass fret providing riveted strips for the skip sides, coupling links, and a jig for drilling mounting holes in the hopper. Brass wire is supplied to make the coupling pins.

The wagon runs on four-hole disc

wheels with black acetal plastic centres and blackened tyres running on pinpoint metal axles. Brass bearings are provided.

The kit can be obtained for either 2' (3/4") (ref.32W01) or 20" (16.5mm) gauge (ref.32W51).

The instructions occupy two sides of a sheet of A4, folded to make an A5 size 'booklet'. They are clear, thorough, and illustrated with black & white photos to aid assembly. The process is quite straightforward, and superglue is recommended for construction.

Slater's markets these kits in a pack of three, but Branchlines will split packs and sell individually, reboxed and each with its own etched brass assembly jig.

For 1:32 narrow gauge

MANUFACTURED BY
Slater's Plastikard, Temple Road,
Matlock Bath, Matlock, Derbyshire,
DE4 3PG

SAMPLE SUPPLIED BY
Branchlines, P.O.Box 31, Exeter,
Devon, EX4 6NY

PRICES
pack of three – £33.00
singly – £14.00
P&P £2.00 per order under £50.00;
£4.00 above £50.00.

County Donegal Railways railcar No.1 'scratch aid' body kit in 4mm

Worsley Works has recently produced a 'scratch aid' body kit for the pioneer County Donegal four-wheel railcar No.1. This tiny vehicle was built as an open inspection car by Allday & Onions of Birmingham in 1907 with a 10hp engine, and rebuilt with enclosed body seating ten in 1920. During the 1926 coal strike it replaced a steam-hauled service on the Glenties branch, and its success in this role prompted the wider development of railcars on the CDR. It was rebuilt with a 36hp Ford engine in 1949. Upon withdrawal in 1956 it was presented to the Belfast transport museum. The model seems to represent the final form.

As usual with Worsley's body kits, reference to pictures of the prototype and a scale drawing will assist assembly. Also as usual, the parts are accurately drawn and neatly etched, with

half-etched fold lines and surface detail.

The front, sides, and rear of the body are made as separate parts: it would have been much better if they had been made to fold up from one piece, as these small parts are more awkward to align and fix than a conventional coach. The same applies to the mesh ends and sides for the luggage rack on the roof. Further, while the mesh is as fine as can practically be etched it is still much coarser than the original; it might be better to use fine brass wire for the uprights and top rail and ignore the mesh altogether.

The radiator and the front of the engine compartment, along with the rear of the engine compartment, are laminated from two or three layers. The louvers on the bonnet sides fit neatly into half-etched recesses.



The kit does not include glazing or any interior detail, and there are no 'solid' details as castings – in particular the headlamp and axleboxes are needed. The builder must also supply handgrabs, door handles, and door steps.

No running gear is provided, except for the main frame and a couple of

strips to represent the mudguards, and motorising will certainly be a challenge! The model is just 45mm long and 17.5mm wide.

Worsley Works now has a wide range 'scratch aid' kits in scales from 2mm to 16mm. 50p (in stamps) plus an A5 stamped self-addressed envelope brings you a copy of the latest list: please indicate your area of interest.

For 4mm narrow gauge

MANUFACTURED BY
Allen Doherty, Worsley Works,
19 Douglas Road, Worsley, M28 2SR.

PRICE
£9.00. Please add £1.00 per order
for postage & packing.
(Please make cheques payable to
A.Doherty.)



Auhagen has recently released a useful scenic item based on the natural 'sea moss' material which is so well suited to representing small trees as it

comes or can be combined to make branches; it has in a relatively short time established itself as the standard basic ingredient of quality vegetation

Auhagen foliated 'sea moss' trees

in model form. However, as it comes the 'twigs' are relatively thin and bare, and for anything other than trees in winter it would benefit from the addition of foliage. Auhagen has now made the scenic modeller's task that bit easier by offering the 'sea moss' with its fine foliage material already applied, either in light green (ref.70 931) or May green (ref.70 932, illustrated).

The application is not too dense, and the adhesive used seems positive without cloying – there is no sign of 'clumping', and we found very little excess foliage loose in the box.

The pieces come in a clear plastic vacuum-formed pack which seems to protect them well; our sample had hardly any broken pieces, and it may well be that the application of adhesive and foliage reinforces the essentially

fragile plant material.

The pack contains ten pieces which vary from 120mm to 200mm in height; they can be used in just the same way as the plain 'sea foam', individually or in combination. Tree bark can be applied to the exposed 'trunk' areas to bulk up the tree if required.

Remember that this is a natural material and no two plants grow exactly the same, so the selection of pieces in every pack will be slightly different.

For various scales

AVAILABLE FROM
International Models, Plas Cadfor,
Llwyngrwil, Gwynedd, LL37 2LA.

PRICE
ref.70 932 £15.00 + p&p.

New scenic accessories from Noch

Noch, the well-known German manufacturers of scenic accessories, has recently released a number of new products for landscape modelling.

The Professional grass set (ref.07070) is primarily intended for use with the wonderfully effective Gras-Master electrostatic applicator (see review in RM November 2005). The pack includes various different colours and lengths of grass fibres in useful quantities:

- scatter grass (2.5mm long fibres) in spring meadow (20g), summer meadow (40g), marshy soil (10g), and reeds (10g);
- field grass (5mm fibres) in light green (15g), mid green (15g), ochre (10g), and golden yellow (10g);
- and wild grass (6mm fibres) in beige (10g), light green (20g), and dark green (20g).

The pack thus provides the complete colour range as available in the various fibre lengths. Further, the balance of the quantities does seem sensible for most applications, making this an ideal 'starter pack' of material to accompany the Gras-Master.

The back of the pack includes some suggested mixture recipes for various grassy areas.

There is also a list of the various material included along with the product reference code, which facilitates re-ordering particular types and colours although the individual sachets are not labelled to confirm identification.



Field grass with 5mm fibres for use with the Gras-Master is now available in 30g packs; we illustrate the light green (ref.07082). It comes in a plastic bag with a header card, but the bag is also mounted in a card box (open topped, naturally) – once the header is removed and the bag opened, it will stand in the box, thus spillage is avoided. The only thing neater would be a re-sealable bag!

The other colours available are mid green, ochre, and golden yellow.

To enhance the various grass fibres, Noch offers a pack of meadow flora (ref.07172) in four colours – light green (olive), dark green, red brown, and light brown. These are intended to give more texture to longer grass, or add colour highlights – the flora can be added by hand once the long grass has been applied using the Gras-Master. They might also be used to create the thin grass covering at the edges of a field or alongside paths, for examples, by the combining the flora with the grass fibres and then applying the mixture with the Gras-Master.

For brighter flower effects, there is a



similar pack (ref.07170, not illustrated) with heather (purple), poppy (red), dandelion (yellow), and white.

The new reeds, in three assorted colours – green, beige, and brown (ref.07060) are perfect for use along the sides of lakes, ponds, and streams, but could also represent long grass or even corn. The fibres are c.50mm long, but can be trimmed as required.



It is recommended that they be 'planted' with hot glue; ordinary white glue (PVA) can also be used but the setting time is naturally longer.

Finally, there is a new selection of small wall sections using as the base material the high quality hard foam, light but rigid, which can be cut with a

modelling knife or sawn, sanded and filed, and even bent to shape if gently warmed with a hairdryer. The deeply textured finish is hand painted. We illustrate the garden wall (ref.13208). The pack includes four pieces each 120mm long by 13mm tall, increasing to 20mm at the pillars, to the top of both the wall and pillars, which are sloped. The wall is capped with tiles. The wall is 6mm thick, the pillars 8mm. The sections are finished both sides and each end. In places the surface render has fallen away to reveal the brick structure.

Several other styles of wall are also offered in this range – the church wall is a taller version of the garden wall, the country house wall is rough stone, while the villa wall is dressed stone. There is also a villa set with curved sections and a set of stone steps.

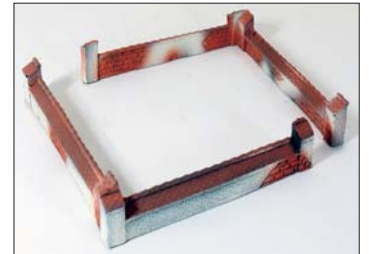
Capping is also available, in packs containing two strips of ornate stone and two of plain ridge tile. These are intended more to top off plain sheet used as walling rather than with these complete wall pieces.

The back of header cards/packs carry a description of the product and instructions/suggestions for use.

For various scales

*DISTRIBUTED BY
Gaugemaster Controls,
Gaugemaster House, Ford Road,
Arundel, West Sussex, BN18 0BN.*

PRICES TBA.



Classic Lines display cases for 4mm scale

Classic Lines of Southport has released a couple of types of display cabinet for 4mm scale models. The single track type can accommodate

models up to 13" long, and the four-track tiered type is intended for boxed sets, such as loco and three coaches.

The felt bases are available in

green, red or black, and our sample single-track case had ballasted track. Rails are trimmed smooth, but not perpendicular in some examples. Lids are clear plastic, the bases wooden.

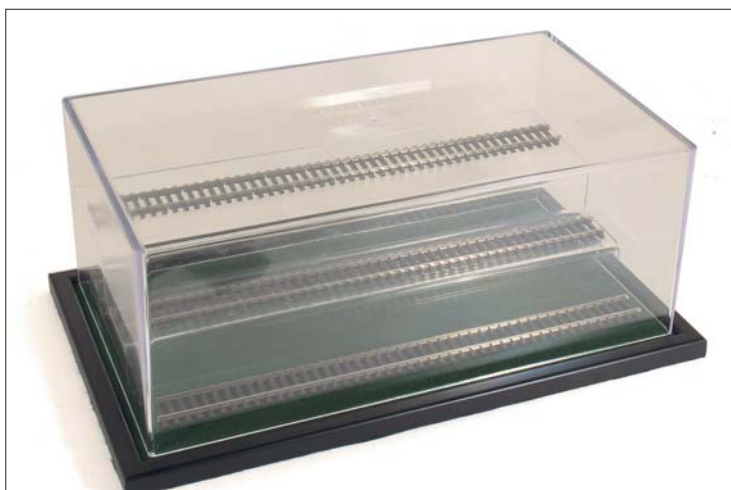
Other scales can be catered for, as can special orders.

Classic Lines cannot accept credit/debit cards; please send cheques/POs only.

For 4mm scale

*SAMPLES SUPPLIED BY
Classic Lines of Southport, 45 Arundel
Road, Hillside, Southport PR8 3DA*

*PRICES
Single track box – £39.50
Tiered box – £75.00
Prices include P&P.*



Cards & Calendars

Great Western Steam

This full-colour calendar opens up to A3 size with the photographs at the top and the dates below.

Produced by the Great Western Society, the calendar depicts both iconic and stalwart locomotives as operated in the 1950s and 60s on the Western Region. The locos range from 'Castles' and 'Manors' to the 'Marlow Donkey' and a diesel railcar. The illustrations are, as usual, from Colour-rail.

The captions are economical on words but adequately describe the view. Throughout the dates pages, references are made to the Didcot Steam Days enabling the enthusiast to organise a good day out.

Price is £3.50 at the Didcot shop or £4.60 by post.

Great Western Society, Didcot Railway Centre, Didcot, Oxfordshire OX11 7NJ. Telephone 01235 817200. www.didcotrailwaycentre.org.uk

Welshpool & Llanfair Light Railway

Two Christmas cards are on offer – pictured below – featuring, on one card, a painting of No.14 (ex-SLR No.85) leaving Castle Caereinion with No.822 *The Earl*. This is a painting by Howard Birchmore. The other has a similar style illustration of 1902-built Beyer Peacock 0-6-0T *The Earl* at Heniarth with a mixed train for Llanfair.

The message inside is 'With best wishes for Christmas and the New Year'.

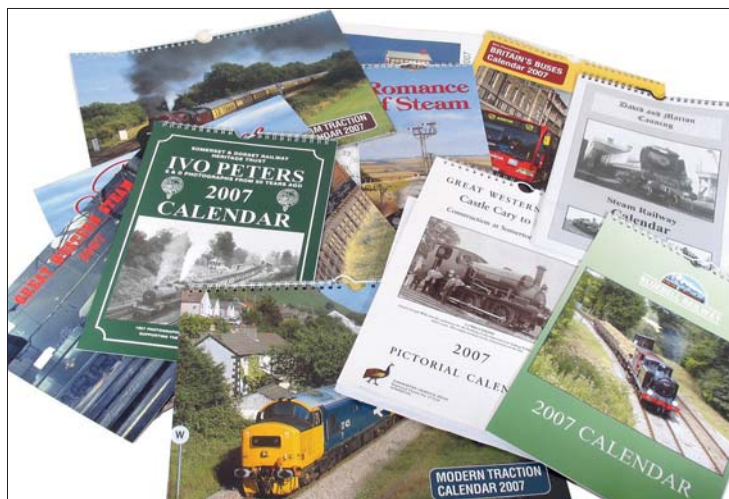
Prices for twelve cards is £3.50, thirty cards £8.00 and fifty cards £13.00. Cheques should be made payable to W&L Sales Ltd.

R.O.Cartwright (W&L Sales), Owl Halt, Manor Road, Sealand, Deeside, Flintshire CH5 2SB. Telephone 01244 815273.

Bluebell Railway

'100% steam!' This is the greeting on the introductory page of this colourful calendar. This portrait A4 format collection of colour photographs and date areas, bound with wire and a hanger, represents good value at £5.99.

The front is printed in a shaded green on which a picture of Billinton E4



No.32473 appears with an engineers' train. The high-quality photographs have an air of fun and enthusiasm, a hallmark of the Bluebell Railway.

Inside the front cover a brief description of the Bluebell Railway introduces the railway to those less familiar with its origins and activities. It includes a contact address for those wishing to find out more. On the back are details about how to join the Bluebell Railway.

The year starts off with a fine shot by Jon Bowers of No.672 *Fenchurch* as it departs Horsted Keynes.

All the pictures are donated by members of the Bluebell Railway Preservation Society to help raise money. The calendars are available from the shop at Sheffield Park Station or from the website. Postage is £1.50.

Bluebell Railway, Sheffield Park Station, East Sussex TN22 3QL. Telephone 01825 720800. www.bluebell-railway.co.uk

Infocado Ltd. 'Romance of Steam'

The art of Barry Freeman is reproduced in an unusual format calendar; 420mm tall and 150mm wide. It is wire bound with a hanger. Price £4.99.

The postcard-size reproductions of excellent paintings form an interesting and colourful heading to each month. They bear brief but relevant titles such as *The Haymarket Wanderer* and *Heavyweights at Seaton*. Below, there is plenty of writing space for appointment entries and, in compact form, a whole month of dates at the bottom of every page. For some reason, only January has the weekends in a shaded brown, making that month even easier to navigate.

It makes a change from photographs and a pleasure to see such detail incorporated into works of art.



The calendar includes Barry's most recent painting, *Return to base* (see RM April).

In larger format, 310mm x 310mm, another calendar offers more work from Barry Freeman. It opens out to twice this size to make an impressive wall calendar for the coming year. This one is stapled with a drilled hole for hanging. Price £9.99.

At the bottom of each page a small version of the previous and following months' dates to help with planning. **Infocado Ltd., The Old Rectory, Water Newton, Cambridgeshire PE8 6LU. Telephone 01733 237373. E-mail: sales@infocado.co.uk**

Lynton & Barnstaple Railway

Once again the Christmas card – pictured left – features the work of talented watercolour artist Eric Leslie. Entitled 'Memories', it depicts a scene on the Lynton & Barnstaple from the 1930s, of *Lyn* and *Yeo* being prepared at Pilton Yard, Barnstaple for a journey through the snow to Lynton. The scene is based on memories of L&BR member Ron Hill, whose grandfather – a railway employee – lived in one of the houses backing onto the line.

The cards are available in packs of five, priced £2.50 per pack. Please add £1.00 postage (flat rate, covers any number of packs). Please make cheques payable to Lynton & Barnstaple Railway.

Mr D. Tooke, 3 Torrs Walk Avenue, Ilfracombe, Devon EX34 8AU. www.lynton-rail.co.uk

Cards are also available from the shop at Woody Bay station, where trains are running regularly up to Christmas, including Santa Specials, on the mile-long line.

Castle Cary to Durston

This fascinating calendar is compiled from an album by Edward Percy Wooldridge, one of the engineers on the line. He lived in Somerton during the construction years of 1903-1906. The album was given to the Marmaduke Cradock Trust by his daughter Enid Spicer in 1993.

Sepia tone has a unique charm and these shots evoke the time very strongly. Substantial captions add to the interest. Each month has an evocative illustration showing a different construction aspect of the railway each month. Good writing space is below to make this a useful item to hang on the wall. Reminders of important annual dates appear throughout. The wire binding is strong and has a central hanging loop.

More pictures and information can be found in *Castle Cary to Durston; the Story of a Railway* edited by Nancy Langmaid. This book, compiled by a team of ladies, was reviewed in the August RAILWAY MODELLER.

The calendar is £5.50 including P&P and the book is £12.00 including P&P. Both are available from:

Nancy Langmaid, 32 Highfield Way, Somerton Somerset TA11 6SQ. Telephone 01458 273859.



Irregular Special Railway Company

The railway travels of Sherlock Holmes are the subject of three Christmas cards from the Irregular Special Railway Company. They are entitled – left to right, above – ‘The missed connection’, ‘We had the carriage to ourselves’, and ‘Here’s our train Watson’.

The illustrations are reproductions of watercolour paintings by Douglas West, a keen railway enthusiast. He is well known for his Holmes book illustrations and golfing prints. The actual paintings were done in 1997 and 2000.

The cards are £3.00 per pack of twelve including P&P. Please make cheques payable to The Irregular Railway Company.

Christmas Card Offer, 170 Woodland Road, Sawston, Cambridge CB2 4DX. www.holmesandcompany.com

Ivo Peters S&D calendar

All the proceeds from this calendar go towards the restoration of the Somerset & Dorset Railway Mendip main line. For £4.95 plus 50p postage, the purchaser is treated to atmospheric black and white shots of the railway. They were taken in 1957 by Ivo Peters and come courtesy of Julian Peters.

The A4 portrait format comes with a wire binding with hanging loop and a restful green tint on the page borders.

An interesting history of the S&D is on the inside front cover and an explanation of the Heritage Trust occupies the outside back cover. It even has a map of the area and membership details.

Take a look at the S&D blogsite: <http://somersetanddorset.blogspot.com/>

Cheques to be made payable to ‘SDRHT’.

S&DRHT Sales, 107 Anchor Barton, Horningsham, Warminster BA12 7LR. www.sdjr.co.uk

Train Collectors Society

This calendar is A4 portrait format and features full-colour shots of model signal boxes. Unusual subjects include a Karl Bub S gauge signal box, an N gauge Architect kit, a Bassett-Lowke 0 gauge one and even a Co-op biscuit tin depicting a signal box.

There are some printed notes in many dates telling us about forthcoming sales, but there is still room for brief notes.

We received sample pages only so we are unable to describe the binding



Left: a Virgin Trains HST set kicks up the powdery snow south of Wickwar tunnel with a York-Bristol service on 28 December 2000. The photograph is available from Rail Photoprints as a Christmas card.

Photograph: John Chalcraft.

pictures on the three calendars have concise captions with the essential information about the subject. Calendars are £6.40 each or £6.10 for two or more including P&P.

A set of Christmas cards from Rail Photoprints comprises thirteen steam and ten diesel subjects. The cards are perforated to enable the recipient to use the picture as a postcard. They come complete with a C6 white envelope. Two more steam and two more diesel cards are in the pipeline.

The complete set of twenty-seven cards will be £9.00, but Rail Photoprints will accommodate individual specific card requirements.

Look out for the new A5 card showing Black 5 No.45407 and Standard 4 No.76079 crossing Ribbleshead Viaduct. This is a silhouette at sunset after snow. Price 70p per card, minimum order value £5.00.

Rail Photoprints, ‘Stoneycombe’, 8 Paulmont Rise, Temple Cloud, Near Bristol BS39 5DT. Telephone 01762 453045. E-mail: john@RailPhotoprints. Wanadoo.co.uk

arrangements. The quality of the paper and the reproduction of the illustrations indicates a very good quality product.

The calendar is £7.99 to non-members or free to members.

Contact the **Train Collectors Society, PO Box 20340, London NW11 6ZE.**

Welsh Highland Railway Bookshop

There is no new card for 2006, but stocks are still available of last year’s delightful Eric Leslie’s watercolour (see November 2005 p.746). A girl, with perhaps her brother and mother, is clutching a Rupert bear and waving to the driver of the departing *Russell*. The illustration probably depicts an early twentieth century Christmas.

The cards £1.95 for a pack of five and are available from the **Welsh Highland Railway Ltd., Tremadog Road, Porthmadog, Gwynedd LL49 9HP.** Postage and packing extra.

David and Marion Canning

Seven railway calendars are available from long-time publishers David and Marion Canning. There are four in black-and-white and three in colour. The monochrome calendars depict the steam era, early days of diesel locomotives, hydraulics and signal boxes. The colour calendars feature more modern steam railways, modern railways, cats, the weather and Swiss trains.

All the calendars have fifteen photographs.

The small production budget belies the overall quality. There is no price increase this year, making their products exceptional value. Wire binding

with a hanging loop provides strong support whilst generous-size photographs with functional captions and ample room for calendar entries all contribute to make a useful and enjoyable product. A substantial part of the profit is donated to the Cats Protection League. The calendars rival many on the market at £8.00 for monochrome and £10.00 for colour including postage.

The Cannings also work as photographers, producers of railway books and personal calendars for firms, clubs, organisations and individuals. Continuing the railway theme, there is a series of CDs and DVDs with over 200 black and white photographs on each. These are £6.00 per CD and £10.00 per DVD plus £1.50 and £2.00 postage respectively.

D.E.Canning, 20A First Avenue, Ravenswing Park, Aldermaston RG7 4PS. Telephone 0118 981 5678 or 07931 239546.

E-mail: info@davidandmarionphotography.co.uk

Talyllyn Railway

Packs of ten cards at £3.99 and a calendar for £4.50 plus £1.00 P&P each are available from **The Railway Shop, Talyllyn Railway, Wharf Station, Tywyn, Gwynedd LL36 9EY.**

Rail Photoprints

The calendars and cards from Rail Photoprints are produced to a very high standard. The two rail calendars feature steam and modern traction respectively. Both offer a minimum of fifteen large colour pages with room for notes. Many pictures would be suitable for framing after use. A third calendar is for British bus enthusiasts. The binding is wire with a hanging loop. All the

Darjeeling Himalayan Railway Society

Two packs of ten Christmas cards with envelopes in full colour with ‘Seasons Greetings’ inside are available from the Darjeeling Himalayan Railway Society.

One is entitled *Chasing the Train*, the other – *pictured below* – is *DHR in the Snow*. They are A6 and A5 size (folded) respectively and are £3.60 and £7.50 with £1.40 postage for each size.

The charming illustrations are from artist David Charlesworth GRA. A donation will be made to the Railway Children Charity for every card sold.

They are available from **DHRS Sales Officer, Peter Jordan, Lime Tree Lodge, Thorpe Road, Mathersey, Nr. Doncaster DN10 5ED.**



Book Reviews

The Leek & Manifold Valley Light Railway

Robert Gratton
RCL Publications,
Cambrian Forge,
Gardolbenmaen, Gwynedd,
LL51 9RX.

275mm x 210mm 368pp
Hardback £49.50
ISBN 0953876373

The 2'6" gauge Leek & Manifold is the classic English lost light railway, perhaps eclipsed only by the Lynton & Barnstaple: opened in 1904 under the provisions of the Light Railways Act, it was closed in 1934 after a tragically short existence, killed off by road competition and the indifference of the main line company by which it had been inherited (as part of the North Staffordshire Railway, the L&M had passed to the LMS at the Grouping).

In its scenic setting in the Staffordshire moorlands, running for just over eight miles from the standard gauge interchange at Waterhouses to Hulme End, the line was famous as an exposition of the light railway principles of the engineer E.R.Calthrop, and unique in Britain for the successful use of transporter wagons carrying standard gauge goods vehicles.

This is not the first book to deal with the Leek & Manifold, but it is certainly the most extensive. Researching the source material has occupied the author for several years. Although highly detailed about all aspects of the railway's background, backers, setting, history, route, stock, and ultimate fate, it does not quite stray into the self-indulgent territory currently favoured by certain railway publishers, where the minutiae of the life of the second porter at some wayside halt are included simply because they are available, though perhaps only anecdotally.

The coverage is indeed comprehensive, and the work is illustrated with 404 photographs, 58 maps and diagrams, 36 scale drawings, and dozens of facsimiles of historic documents, tickets, handbills, etc.

Inevitably some of the photos have been seen before but many have not, and all are reproduced here to a consistently high standard and are generally presented larger than previously, thanks to the size of the book and the expansive page design.

The route maps and structure drawings are by the author himself, to a very high standard, with subtle and effective use of colour; they are matched by highly detailed drawings of the locomotives (including those used by the contractors) and rolling stock, specially produced for the book by David H.Smith; all are reproduced to 7mm scale, which necessitates the coaches being split to fit the page, but they are repeated intact in 4mm scale, while the characteristic Fox bogie is enlarged to 16mm scale. Modellers could not ask for more.

The livery variations are also illustrated in colour on drawings, given the understandable lack of any colour photos (other than tinted postcards).

The book is printed on high quality art paper for optimum results. Roy Link's design skills have resulted in a thing of beauty, lavish almost to the point of extravagance, with moderate use of the graphics devices facilitated by modern technology: even the smallest tables have alternate lines with different but complementary tinted backgrounds to aid clarity, as if that were necessary, while facsimiles and postcards 'float' above the page with a simulated shadow, as opposed to actual photos, which do not even have a key line to define them.

There are long and informative captions adjacent to each image, while the credit is appended vertically to the side of the picture – the RCL house style but an irritation when there is almost always space within the caption. But this is a minor comment on an otherwise beautifully produced book.

Throughout numbered footnotes amplify points of information, and the work is rounded off with an index and an extensive bibliography, making it an invaluable resource for historians as well as inspiration for modellers.

While the price may seem high, it is hardly expensive for what is provided in terms of the volume and quality of the material and the presentation. This is railway history as art publishing: it deserves not to be hidden away on the library shelf but left on the coffee table to show off to a wider audience what our hobby can achieve.

We understand that half the print run is already sold, so do not delay if you are at all interested.

The price quoted does not include postage and packing.

Major debit and credit cards are accepted.

Abertillery and Ebbw Vale Lines

Vic Mitchell and Keith Smith in association with Dave Edge
Middleton Press, Easebourne Lane, Midhurst, West Sussex, GU29 9AZ.

240mm x 170mm 96pp
Hardback £14.95
ISBN 1904474845

Here is another volume in the publishers' *Welsh Valleys* series. In the established Middleton style, the photographs are presented in the order of a journey, in this case starting from Bassaleg Junction and travelling along the valley through Rogerstone, Risca, Cross Keys, Cwmcarn, Abercarn, Celynen, Newbridge, Crumlin, Llanhilleth, Aberbeeg, Six Bells, Abertillery, Blaina, Nantyglo, Brynmawr, and Ebbw Vale with its steelworks. The generous use of OS map extracts brings home to the reader the one-time complexity of the rail installations in this area, and the well captioned photographs span the years from pre-Group to diesel days.

Introductory chapters deal with geographical setting and historical background, and facsimile timetables and a gradient profile give the reader a feel for the operation of the lines in the Western Valleys.

Although passenger services were withdrawn in 1962, encouragingly some are to be restored in 2007.



Memories of Steam

The final years

Roger Siviter
Sutton Publishing Ltd, Phoenix Mill, Thrupp, Stroud, Gloucestershire GL5 2BU.
270mm x 195mm 144pp
Hardback £19.99
ISBN 0750944110

This album follows Roger Siviter's successful *Farewell to Steam* by this publisher. The collection of b/w photographs by himself and others was taken during the last three years of regular steam traction on BR, i.e. 1966-68. Informative captions give details of dates, trains and locations, and naturally there is a greater incidence of special charters than you would normally find in such a collection. Southern, Western, London Midland, Eastern and North Eastern regions are represented and the photographs are well reproduced and presented with a refreshing lack of flashy 'design'.

They were not pleasant years for a railway enthusiast to live through, although perusal of these images of four decades ago confirms the knowledge, unguessed at then, that there was very much worse to come.

Modelling Scotland's Railways

Ian Futers
Santona Publications, Rydal Mount, 224 Marlborough Avenue, Hull HU3 3LE.
272mm x 214mm 112pp
Softback £18.95
ISBN 0953844889

Given the subject of this book, it could hardly come with a better pedigree than that of being written by Ian and designed by Steve Flint, for both gentlemen have been building Scottish layouts since Steve's *Kyle of Tongue* and Ian's *Lochside* (1980), and of course they both have many other model railway projects to their credit besides.

The book will appeal at two levels, firstly to modellers in general who wish to try a Scottish prototype and secondly to those who enjoy Ian's simple but highly atmospheric layouts at exhibitions and in articles, and his other writ-

Above: USATC 0-6-0T No.30064 and onlooker within Eastleigh Works on 2 April 1966. Built by Vulcan in the US in 1943, the loco was then the works pilot. Withdrawn at the end of steam on the SR in July 1967, it has been preserved.

Photograph: Frank Hornby.

ings, in particular the *West Highland Wanderings* series.

There can be no doubt that this book is written, illustrated and produced by practicing railway modellers; one glance through its pages confirms this. Steve Flint's characteristic coloured trackplans illustrate every project, both theoretical and realized. There are around twenty in all. Most are drawn with 4mm scale in mind, with a couple of 7mm and an N, but most have a grid and are easily adaptable to your chosen scale.

Drawings of structures are to 4mm, 3mm or 2mm scale to suit page utilization and these are by the author, Richard Heard and Peter Goss. Line and wash sketches by Neil A. Ripley are a delight – pity there are only three.

The first chapter, entitled *A Scottish Layout Portfolio*, recalls 35 years of Futers layouts, stretching back to *Glen Douglas, Ashleigh, Longwitton, Lochty Road, Deadwater* and other well remembered names. There is also much information of an autobiographical nature in this section. We feel that readers will not mind that some of these layouts have been Northumbrian rather than Scottish, but the Borders branches are a great Futers speciality, and they are of course of impeccable NBR provenance. In fact, Chapter 3, entitled *Border Country*, expands on this theme and gives Ian the chance to discuss classics such as *Otterburn* and *Woodburn*. The well captioned prototype images are supported by photographs of actual models, often but not always by Ian's own hand.

The chapter entitled *Quintessentially Scottish Railways* provides a useful map of the principal rail routes at the Grouping, with a coloured key identifying the five main companies, NBR, CR, G&SWR, HR and GNSR. Additionally, this 'scene setting' chapter describes the house style of each of these five companies, with prototype and model photographs and some scale drawings of station buildings and signal boxes.

Most of the layout ideas are based on stations and lines which have existed, but some are might-have-beens in the best modelling tradition. Outstanding (and quite exciting) in the



Above: namechecked by the wandering Ian Futers in his article on Tulloch, here is the self-same K2 Mogul No.61791 Loch Laggan, in the sidings at Fort William on 16 August 1958.

Photograph: the late Les Pickering, courtesy Bob Brown.

latter category is *Drumnadrochit*, a station on Loch Ness on the proposed but never built Glasgow & North Western route to Inverness. Another idea, this time with a hint of Helensburgh, is *Victoria Park*, and Ian has started building this one in 0 gauge, and there are photos to prove it!

In order to study the modelling potential of the country in some depth, Ian has devoted several chapters to regions, as follows: *Ayrshire and the South West*, the area dominated by the G&SWR and much neglected by modellers; *The Central Belt*, commuter and industrial themes in this busy area; *From Fife to St Fillans*, the delights of Middle Scotland, long overlooked by modellers; *North by North West*, the favourite Highland areas; *North East Scotland*, rich in interesting branch lines; and *Along Main Lines* with ways to model them.

For those who, having read the book are consequently itching to start a layout, much useful information is provided, including secretaries' addresses of five Scottish line societies and useful web sites, a chronicle of appropriate locomotives, signalling details, specialist modelling products and suppliers, and a bibliography.

Tag Gorton's Steaming in your Garden

With contributions by Dick Moger and David Pinniger Atlantic Publishers, 83 Parkanaur Avenue, Southend-on-Sea, Essex SS1 3JA.
270mm x 215mm 111pp
Softback £18.99
ISBN 1 9028277 13 9

For anyone who had even thought about building and operating a garden railway, this attractive all-colour book by one of the subject's best known practitioners, would probably be all that was needed.

Tag's Introduction sets the tone of the book, establishing that the 'engineering' gauges of 3 1/2" and above are

not covered here, as they are more properly the province of the model engineer. Rather, the book deals with Gauge 1 standard gauge and narrow gauge on 32mm or 45mm gauge track.

After extolling the active social side of garden railways, where 'open days', garden parties almost, replace the exhibitions so prevalent in the world of the smaller scales, Tag confesses that he 'is not going to rattle on' much about Gauge 1, but will devolve that task to Dick Moger. This was a wise choice, for Dick's experience of G1 in the garden is immense, and his text on the subject informs and enthuses. Later in the book, under the heading *Main Line Magnificence*, Dick describes in the first person a G1 meet at his own garden line, and introduces G1MRA and defines its membership. On a more technical note, further on in the book Dick Moger describes the *Anatomy of a Small Steam Engine*, with diagrams to illustrate different boilers and drive systems.

Tag himself naturally covers *his* speciality under the headings *On Narrow Gauge Rails and Narrow Gauge Steam* in which he explains 16mm and G scales, radio control, and such technicalities as types of firing, oscillating cylinders and many other things.

The subject of firing is carried further by long-standing expert David Pinniger whose chapter on coal firing reveals that not only is this possible in the larger scales but that 'the heavier the train, the harder they work and the more steam they make'. This chapter

also includes some interesting 1970s reminiscences of Stewart Browne's Archangel Models and Dave Rowland's *Alderbrook Valley Railway*.

For those who are completely converted to 'steaming in the garden' (and there will be not a few) by Chapter 3, Tag wisely devotes Chapters 4 and 5 to *Buying a Steam Locomotive* and *Second-hand Steam* and in them he imparts some useful advice on what to look for and what to avoid.

Brunel

An Engineering Biography

Adrian Vaughan
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley,
Leicestershire LE10 3EY.
260mm x 207mm 159pp
Hardback £19.99
ISBN 0711030782

In a year when it could be argued that sufficient new books have been published about the great civil engineer and his work, and the associated images, dazzling as they are, are taking on an undeserved familiarity engendered entirely by persistent media exposure, then a reviewer will search each new book on the subject for that which is truly new, to him at least.

Adrian Vaughan is one of our most trusted present-day railway authors, who already has a biography of Brunel to his credit, and in this *Engineering Biography* he has provided us with a fresh and detailed look at the subject from an engineering and essentially technical viewpoint. For example, the contract drawings for the bridges and revetments at Sydney Gardens, Bath and the buildings at Steventon are a delight in line and wash in the style of the time, as are the elevations of the Saltash Bridge, the power plant of the *Great Britain*, the Maidenhead bridge and other works.

The technical slant to this biography results in the text carrying more dimensions, costs and even mathematics than perhaps we are used to, but the author's writing skills ensure that the reader is carried along from project to project without a moment's loss of impetus or interest.

The account of the survey of the GWR makes compelling reading and serves to illustrate the difficulties of such work before telephones or even bicycles were available. Only a remarkably good horse-drawn postal service enabled Brunel to keep track of and locate his surveyors, let alone know in which village inn they might be overnighing.

Many of the works which survive are illustrated by the author's own photographs.

Although, as remarked above, the literature on Brunel is very extensive, this *Engineering Biography* is nevertheless a valuable and enlightening contribution thereto.

The Liveries of the BR Standard Diesel Electric Shunters in Colour (1952-1996)

Steve Jordan
SDJ Publications,
90 Etherington Road, Beverley
High Road, Kingston-upon-Hull,
East Yorkshire HU6 7JP.
246mm x 184mm 80pp
Softback £13.50
ISBN 0954140419

This is the second diesel booklet from Steve Jordan, following the first volume which covered the main detail differences of the Class 08/09/13 shunters. This booklet deals with the liveries of these locos in some depth.

The period covered is from 1952, when No.13000 was delivered brand new, to November 1996 when the last part of the British Rail freight sectors, Railfreight Distribution, was sold off under privatization. Steve has included what he considers to be a natural progression of 'standard liveries', but not one-off depot repaints or the later privatized liveries.

The Introduction gives a brief history of the standard liveries and these are covered in more depth in the long captions under the photographs (one per page) which follow.

Only three of the photographs are in black and white, because colour images showing the liveries concerned could not be found. The colour pictures are generally of good quality, even the 'early' ones depicting black locos with 'lion-over-wheel' emblem, ladders, no chevrons, etc. We seldom gave them a glance in spotting days although our Southern Region ABC did list them, such as had been built at the time. Your reviewer even copped a few mainly, memory seems to reveal, in the Norwood Junction vicinity.

Later liveries gave the 08s a very different and much brighter look, carrying all sorts of names and logos and even the Inter-City swift. Many variations of these 'post blue' liveries are illustrated and described here.

Left: seven-month-old D3638, in company with Brush Type 2 D5516, at Stratford depot on 7 June 1959. Later sold into NCB service, the 08 was scrapped in September 1975.

Photograph: Frank Hornby.





Left: Royal Highland Fusilier in the Highlands – 'Deltic 19' leaves Garve, on the Kyle of Lochalsh line, with the Deltic Preservation Society's 'Freedom of Scotland' raittour. The special was pictured on 23 June 2003.

Photograph: John Chalcraft.

The majority of the full-page colour pictures are the work of the author himself, and they are of the highest quality. Each caption tells a story about the train, the location, the weather and often the surrounding mountains with their Gaelic names. The actors of course are Classes 20, 26, 27, 37, 47, 156, HST, 66 and 67, but the hero is the photographer himself. Consider that one day in winter 1995, the temperature at Bridge of Orchy reached a maximum of -10°C!

Private Owner Wagons

A fifth collection

Keith Turton
Lightmoor Press, 120 Farmers Close, Witney, Oxfordshire OX28 1NR.

280mm x 215mm 184pp
Hardback £19.95
ISBN 1899889221

This latest volume in Keith Turton's popular series reverts to the format of the first three, with information on where models of the wagons illustrated can be obtained. Over 60 wagon operators from many parts of the country are identified and the text is illustrated with around 170 photographs, many of which show not only the wagons but also much railway and related infrastructure and the staff and personalities which were such an important part of the industry.

This volume is different from its predecessors in that almost every wagon owner depicted is included because of reader response, and these contributions are acknowledged at the end of the Introduction.

Apart from a page of acknowledgements and sources relating to this volume, there is also a useful list of manufacturers and suppliers of model PO wagons and a bibliography of literature on the subject.

Guildford via Cobham

Howard Mallinson
Published by the author at 22 Gordon Road, Claygate, Surrey KT10 0PQ.
240mm x 205mm 278pp
Hardback £30 inc UK P&P
ISBN 0954393422

Sub-titled *The Origins and Impact of a Country Railway*, this is the story of the 'Guildford New Line', opened in 1885, electrified in 1925 and still a vital component of the London outer suburban commuter railway network.

It is a deeply researched work which is in effect as much a local social history as a railway one, for, rather like the 'Met.' but on a much smaller scale, the building and subsequent electrification of this railway influenced the residen-

tial development of the locality, away from its long-held rurality.

The 'cluster' of Surrey villages along the route, namely Clandon, Horsley, Stoke D'Abernon, Cobham, Oxshott and Claygate, did not get their railway easily, and the author gives a compelling account of the complicated competing schemes, the objections and skirmishes and the colourful personalities, businessmen and aristocrats, who were deeply involved in the fight to link, or not to link, these (still) pleasant places to London by railway.

Although this is not a technical history, there are many photographs of the line under construction, and of its operation from pre-Group days to the present, with trains ranging from Adams 'Jubilee' 0-4-2s hauling LSWR bogie compartment stock in SR days to refurbished Class 455s. An interesting sequence of colour pictures shows recent major track renewal at Claygate.

Two appendices provide a dramatis personae and an annotated bibliography for readers who wish to delve still more deeply into a fascinating subject.

The book is available from the author/publisher at the above address.

Video Reviews

Mechanical signalling and level crossings

Fastline Films 144mins

Fastline Films has compiled a two-DVD set from instructional films made by British Transport Films in the 1950s and early 1960s.

The DVDs are now aimed at the operators of standard gauge preserved railways, but they contain a good deal of material relevant to modellers. Fastline has assembled a collection of fifteen of these rare films that instruct staff on maintenance and good practice.

This first pair of DVDs, sponsored by the Institution of Railway Signal Engineers, contains two films on mechanical signalling and three films about level crossings. As a historical bonus, there is a documentary on the re-signalling of the line from Fenchurch Street, plus a sequence that was shot at Walton Street, Hull where a pair of motorised level crossing gates were installed and a safety film for London Underground.

The films are remastered to a very good standard, bearing in mind that they are around half a century old. The cost of the new masters is sponsored by the Health, Safety & Security Policy Directorate of Network Rail.

The typically austere, post-war approach to this kind of film-making actually does the job very well. The commentary is very clear, there is no extraneous music, and the visual sequences allow the viewer plenty of time to assimilate the intended message. Most of the two-and-a-half hours is in black and white, but there is some colour footage.

Copies are available for £30.00, cheques only, from **Fastline Films Ltd., PO Box 4472, Wedmore, Somerset BS28 4WY.**

Wartime on the Railways

David Wragg
Sutton Publishing Ltd.,
Phoenix Mill, Thrupp, Stroud,
Gloucestershire GL5 2BU
240mm x 160mm 200pp
Hardback £20.00
ISBN 0750942460

Recent history has a strong fascination. The subject of this book is still in the memory of many and recognisable to others born after the event.

The effects of the First, but principally Second World Wars on the British rail system are recounted in enormous detail by transport and defence author David Wragg. The text does not wallow in nostalgia, it reflects the austere times in a way that makes the reader believe they are remembering some historic archive film footage. Insights into military and civilian life form the backbone around which the railway history is woven.

The meticulous detail of the preparations for war by the railway companies are an object lesson in logistics and organisation. Troops, ammunition and provisions had to be where they were needed at the right time to fight in France. Meanwhile thousands of family members, particularly children, were ferried to locations in Britain believed to be safer than the cities which were threatened by the Luftwaffe.

It is amazing to read about the precautions and, in some cases, the remedial action that the railways took before or after enemy attacks. The remarkable speed with which lines and stations were reopened after damage was astounding. The bravery of the military and railway staff showed a steadfast devotion to duty.

Readers interested in the London Underground system will also have plenty to discover; have your Tube map handy!

Railway ships is an aspect not often covered. We can read about their role and successes in their original purpose and how they played such an important part in the evacuation of troops from Dunkirk and the Channel Islands.

Railway workshops also produced considerable amounts of military equipment; unusual locations became centres for manufacture, such as in the subway between Earls Court station and the exhibition hall.

War inevitably produces casualties; the hospital trains helped wounded soldiers and civilians to be evacuated. There is no glamour here, just an impression of dogged determination to overcome the immense daily problems.

A brief review can only provide a taster of the substantial content of the book. It is full, fascinating and written in a way that reaches all the senses. An eight-page section of black-and-white photographs enhances the message.

Switch off the BBC Home Service, brew a pot of Lipton's leaf tea, sprinkle on some National Dried Milk powder and sit down to 200 pages of solid railway history.

Diesels in the Highlands

Andrew Vines
Ian Allan Publishing Ltd,
4 Watling Drive, Hinckley,
Leicestershire LE10 3EY.
190mm x 238mm 80pp
Hardback £14.99
ISBN 0711031185

The theme of this album covers the four main rail routes which traverse these truly spectacular scenic surroundings. Firstly the West Highland line in its passage of the glens and lochs, the crossing of Rannoch Moor and the decent to Lochaber before reaching the coast at Mallaig.

Next, the Highland line from Perth to Inverness, which includes the highest point on the national rail network. Then, beyond Inverness, where the line turns inland towards Lairg and on through the Strath of Kildonan, and finally the Kyle line which, after striking west from Dingwall, descends to the beautiful shoreline of Loch Carron to provide some of the finest combinations of mountains and seascape to be seen by rail.

Warley information update

The Warley National Model Railway Exhibition draws rapidly closer. Saturday and Sunday December 2 and 3 are the dates for your diary. Those who apply for advance tickets are able to enter the Prize Draw which is organised with the help of the sponsors. Five prizes, each worth £50 will be made up from £10 vouchers plus £10 from the Warley MRC. The vouchers will be valid during the exhibition at the NEC. Full details of ticket prices and availability were in last month's RAILWAY MODELLER, but here are the contact details again.

Applications for advance tickets must arrive by November 15; the forms are available from **Advance Ticket Sales, 52 Calverley Road, Birmingham B38 8PW**. Include a large SAE. Alternatively, book by credit card using the **NEC Box Office**, telephone number **0121 767 4099**; a booking fee will be charged.

Squires Model and Craft Tools has again agreed to act as agents for advance tickets. Telephone **01243 842424**. There will be no booking fee and you will receive a free Squires catalogue.

Demonstrations are an established feature of the show and this year there will be more than twenty. They will show their skills and instruct modellers of all levels and abilities.

Fans of static models will enjoy exhibits from various clubs including a display of Gauge 1 from the Pete Waterman Collection and a model engineering display from the Birmingham Society of Model Engineers.

Following the success of Junior Modellers' Corner, the attraction continues enabling young modellers to have a go. More details of the show will follow next month including brief travel arrangements.

Comet 'Crab' chassis kit

Comet Models has produced chassis packs for both the rotary cam poppet valve and Walschaerts gear versions of the Horwich Mogul or 'Crab'.

The chassis is designed as a direct replacement for the Bachmann r.t.r. model. With slight modification, they will fit the DJH, SE Finecast and Lima r.t.r. 'Crab' bodies. They can be built to 00, EM and P4 gauges.

The kits follow current Comet practice with the option of building them either rigid or sprung. They are mostly in etched nickel silver with cast brass and whitmetal details. Frames, motion, cylinders and pony truck are all included. The modeller will need to supply wheels, motor and gearbox.

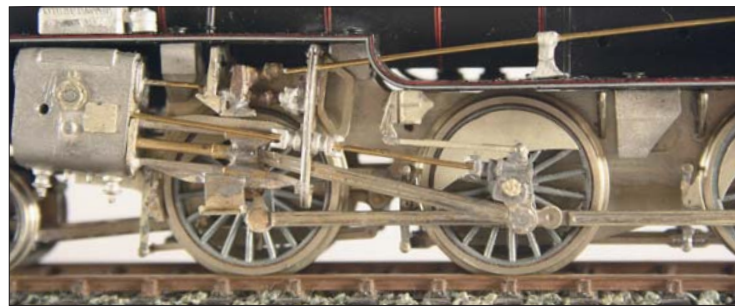
Kit LCP13 is for the rotary cam engines and parts are supplied for

both Lentz and Reidinger versions. Additionally, body detailing parts are included such as steam pipes, vacuum relief valves, reversing rod support and sandboxes.

Kit LCP14 is for the Walschaerts valve gear locomotives. Alternative parts are included for cylinder sides with the double relief valve and single valve type. There is also provision for rod or plate slidebar steps. This chassis has the option of portraying the engine in either neutral or forward gear with a working valve rod.

Basic kit price is £29.50. For further details, contact **Comet Models, 105 Mossfield Road, Kings Heath, Birmingham B14 7JE**. Telephone **0121 242 2233**.

www.cometmodels.co.uk



DCC Supplies

DCC Supplies is now authorised distributors for some more products.

The first is from Tony's Trains in Europe. The firm's spare parts, repairs and service of the CMX clean machine are always available, as is the RRAMP meter, an accurate volt and amp meter for DCC.

Miller Engineering, producer of the Lightworks USA range of animated signs, neons and billboards, has appointed DCC Supplies as its European distributor. The firm supplies paper thin illuminated signs for hotels, bars, barbers and others. A full range of billboard/hoardings is available.

The recorded ambient sounds from Fantasonics Engineering add audio life to your layout and are available from DCC Supplies.

Additionally, DCC Supplies has been appointed as distributors for Zimo Elektronik which supplies DCC controls and decoders, Pricom Engineering for Dream Player and DCC test equipment, TDP Associates for its scale speed indicators and Trackman 2000 which markets budget track cleaners.

Contact: **DCC Supplies, Suffolk Lane, Abberley, Worcs WR6 6BE**. Telephone **01299 896198**.

Townstreet coaling stages

Two new coaling stages have been added to the Townstreet range of structure kits.

A wooden-type coaling stage is the latest 7mm scale model and is available at £75.00 plus P&P.

A concrete tower coaler, which will span two tracks and is of the so-called 'cenotaph' type is in 4mm scale and will be released in November for £69.50 plus P&P.

Contact: **Townstreet, Greenhead Tower, Greenhead Gill, Grasmere, Cumbria LA22 9RW**. Telephone **01539 435465 between 1400-2000 Monday to Friday**.



Name check

In the article entitled *Thomas's Railway* in the October issue we referred to the author as 'Nicholas Graham'. This reference was incorrect, it should have

read 'Graham Nicholas'. We ask Mr. Nicholas and anyone else affected by this error to accept our sincere apologies.

Dartmoor Railway steam gala

Platform 3 at Dartmoor Railway's Okehampton Station was packed on Bank Holiday Monday to see the model railway steam gala. Visiting layouts ranged from N gauge to the real thing. A 1953 Hunslet 0-6-0 *Darfield No.1* steamed passengers to Meldon and back. Launceston MRC had an N gauge depiction of *Lydtor*. Also in N gauge was *Lanson Road*.

Tom Hussey, who works in the model shop as well as a volunteer trainee fireman on *Darfield No.1*, exhibited his 00 scale *Norton Fitz Lydeard* to display a complex series of workings with locomotives and rolling stock.

In G scale and GN15, *Pennygillam Mines* (pictured) was virtually all

scratchbuilt. It had many details such as a siren, explosions and smoke coming from the mining tunnels.

The SM32 live steam layout *Sticklepath* was presented in perfect detail by Ted Dixon and Richard Voaden.



Wadebridge show

The 16th model railway exhibition will be held at Wadebridge School, Gonvena Hill, Wadebridge on Saturday and Sunday November 11 and 12. Full details are in *Societies & Clubs*.

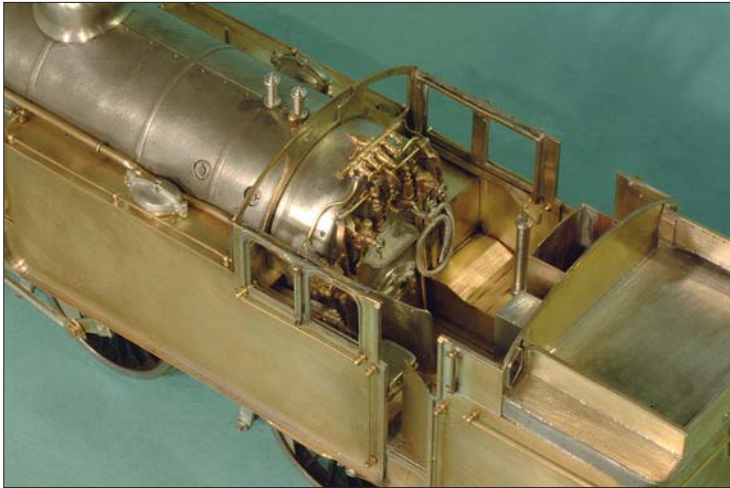
As before, it will be presented in association with Mevagissey Model Railway who will give a voucher for 50p off their admission charge with each entrance ticket to the exhibition. The charges are: adults £3.00, senior citi-

zens £2.00, children £1.50 and families (2+4) £8.00.

There will be many layouts in various gauges, trade stands for those Christmas presents plus refreshments throughout the weekend. Ample car parking is provided.

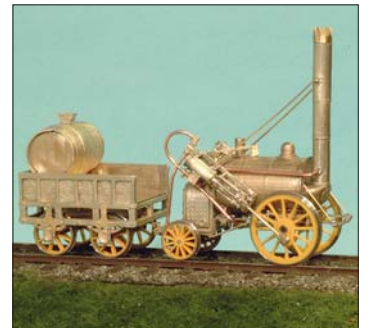
As in previous years, there will be a children's quiz with prizes. All profits will go towards the restoration of Bulleid 4-6-2 No.34007 *Wadebridge*.

Gauge 0 Guild Convention 2006 report



motor/gearbox, and the loco will also be available factory-assembled at a price yet to be advised.

From the standard DJH list a new item is the LMS 'Jubilee' 4-6-0 with a Stanier 3500 gallon tender. This pairing is the result of many requests, understandable as it covers 48 engines from this popular prototype – tender numbers 4600-4649, which were attached to locos 5617-5664 from new. Price of the kit will be £440, with factory built version at £2,115.



Guildex, the Gauge 0 Guild Convention, was held this year over the weekend 9 and 10 September at the usual venue of the Telford International Centre. The Peco Mobile Studio was present at the show and the following notes and pictures give an idea of the exciting new products which are planned in this scale by a number of manufacturers.

Locos

In the DJH Piercy range we saw an LNER Gresley V1/3 2-6-4T. This etched brass kit will feature a one-piece cast pewter smokebox/boiler/firebox assembly with opening smokebox door and modelled tubeplate detail. RRP is expected to be £375 less wheels and

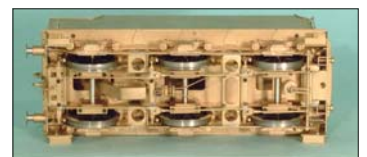
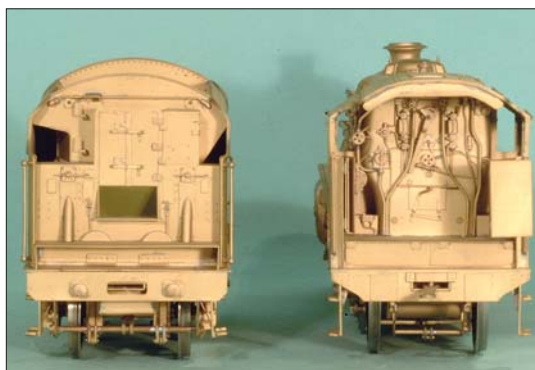
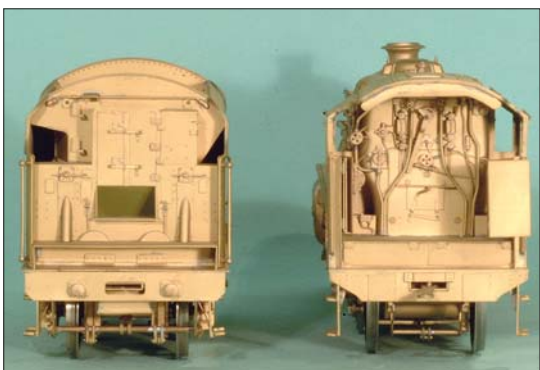


Tower Models displayed the first production sample of the GWR 'King' 4-6-0 which will be supplied 99 per cent assembled. By means of multiple provision of chimneys, steam pipes cab roof ventilators etc, the model can be finished to represent virtually any member of the class. The loco is Mabuchi powered with flywheel and the cost is £799.99 or, fully painted, lined, lettered, glazed and plated, at £1099.99. Such fully finished models are supplied to order which normally takes around five months.

San Cheng Crafts manufactures for several well-known names in the model railway industry, and this is its

first venture under its own banner. The early version of the LMS 'Black Five' is of all brass construction with hand-punched rivets, operating doors and water filler cap, detailed cab interior, sprung buffers and couplers and steel ball bearing axles. The model is scheduled to be available in early 2007 and estimated prices will be £900 for an unlined painted model and less than £800 for brass finish.

At the Warley NEC show in December, the 'Black Five' will be present on the Backwoods Miniatures stand.



Clockwise from top right: Tower 'King', Dragon Models 'Sharpie', Rainhill Heritage *Rocket*, San Cheng 'Black Five' in detail, DJH 'Jubilee' with 3500 gallon tender, and DJH Piercy V1/3.

Opposite page, left side: Meteor Models Caley 72, Heljan 47s, Gladiator LNER Beyer Garratt.



From **Rainhill Heritage** and available only from Dragon Models or Sanspareil ICS of Carlisle, comes Stephenson's *Rocket* complete with wheels, motor, gearbox and many lost wax castings. The price of this important part of early railway history is £250 plus £47 P&P.

The ultra-pretty small Sharp Stewart 4-4-0s as used by the Cambrian Railways and the Furness are now available as etched nickel silver and brass kits from **Dragon Models** at £260 plus £8 P&P. Also from this stable is an etched brass kit for an ex-L&YR sleeper wagon (*below*) with full internal detail at £36.50 plus £4.00 P&P.



Meteor Models had an etched brass and nickel silver kit for the CR Pickersgill 72 Class 4-4-0 of 1920 at £199. The prototypes served well into BR days and the sample on display represented No 54465 in the mixed



traffic livery. Also new from Meteor is a resin-bodied North Staffordshire milk van in early and late versions (*above*). Price to be advised.

The 1925-built singleton LNER Beyer Garratt 2-8-0+0-8-2 from **Gladiator** was displayed in 'photographic grey' and with valve gear and other details as yet incomplete, but is a very impressive model nonetheless which will retail at £495.

The **Heljan** ready-to-run Class 47 was present in both two-tone green and rail blue liveries. Although without lettering or insignia, these samples looked magnificent.

The Sentinel Y3 steam shunter from **Skytrex** at £150 ready-to-run must be among the most inexpensive motive power choices in this scale.

The Right Price Railway Company demonstrated rolling ball bearing axle bearings which take a standard $\frac{3}{16}$ "



axle and have an outside diameter of $\frac{5}{16}$ ", so standard bearing holes only need to be opened up a little. £3.50 per pair, £15 for ten.

Rolling stock

The **Tower Models** GW 'razor edge' diesel railcar was on display wearing the BR crimson and cream livery. These railcars are now available fully finished in a choice of liveries and with customer's choice of running number and roof colour for £675. Also of a Western nature from Tower is the etched brass autocoach which will be available in early and late versions – windows at both ends for the early. Price is expected to be about £215 in unpainted brass or £390 for a fully finished model.

For railcars of a more recent sort, **Peter Clark Models** has a Class 150/1. The kit is in etched brass with high quality resin ends and doors, detailed cab and partitions. Under-floor mounted motor drives both axles on one bogie per 2-car unit. Kit includes gears, bearings, drive shaft. Paxolin floors, snowplough and all nuts and bolts. The price is £315. A 150/2 and the Railtrack/Network Rail Class 150 (950 001) will be available around Christmas.

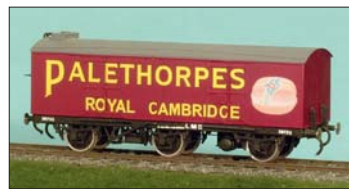


This page, right side: Tower GWR railcar and autocoach, Peter Clark Class 150/1, Skytrex Sentinel.



Two contrasting ready-to-run freight vehicles from **Skytrex** are the HTA 102 tonne bogie hopper wagon in EWS livery (£125) and BR standard 20 ton goods brake in Departmental grey and yellow livery at £85.

CRT displayed Bulleid 63' catering vehicles, namely Kitchen/Diner 3rd and Diner 1st, ready to run in green livery at £280 each. Also from this stable we noted Palethorpes PO sausage vans in boge and six-wheeled versions. A pre-



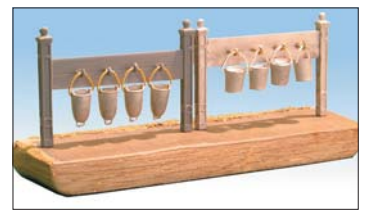
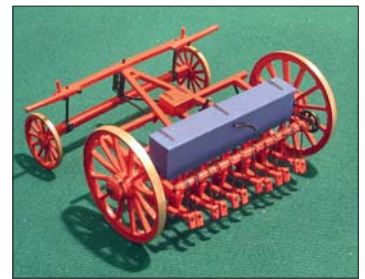
lettered **POW Sides** PO wagon kit on display was Gwaunclawdd Anthracite Collieries of Abergrave. These kits in 7mm scale cost £31.50 each plus £1.50 postage per order.



Parkside showed kits for a Southern Railway 25T goods brake with SR and BR transfers at £29.95 and a Blue Spot fish van at £28.45.



From **GJH** there was a Freightliner Heavyhaul MJA twin set bogie box wagon kit at £105, containing two one-piece wagon bodies, whitmetal TF25 UIC bogies, assembled screw link couplings, sprung buffers, resin and brass parts. A wheels and bearings pack to complete the model is available for £24.00. Also from GJH is an ISO 20' demountable tank kit which was displayed in P&O livery, at £21.00. The 4-seater track inspection trolley from this stable is a re-tooled all resin kit which retails at £9.00



Accessories

New items noted in the incredible range of 7mm scale cast metal accessories from **Duncan Models** included loading gauge, horse-drawn seed drill and 'pendant' fire buckets.



On the **GJH** stand were a Portaloo (site toilet) at £5.00, and a transportable cabin (£22.00) which has been re-tooled and is now cast in resin complete with interior desk, chairs and computer terminal!



Ten Commandments had LNER-style concrete huts in the 7mm scale cast resin/plaster range. These will be available in large form (double window, 10-piece kit) at £20.95, midi (single window, 8-piece kit) at £15.95 and a small windowless store as a 5-piece kit at £10.95. The large version will also be available for 00 and N scales.

SHOP NEWS

OPEN

Contact addresses

Telephone numbers are given where advised.

Peter Clark Models 92 Durham Road, Bromley, BR2 0SR.	020 8464 0696
CRT Kits/POW Sides Poplars Farm, Aythorpe Roding, Dunmow, CM6 1RY.	01279 876402
DJH Engineering Project House, Consett Business Park, Consett, DH8 6BP.	01207 500050
Dragon Models 9 Kingsley Close, Sully, Penarth, CF64 5UW.	
Duncan Models 34 Waters Lane, Salisbury, SP1 3NX	
GJH Plant Company 9 Merryhill Workshops, Telegraph Hill, Honingham, Norwich NR9 5AT.	01603 881157
Gladiator Kits Gun Hill Farm, Lamp Lane, Arley, Coventry, CV7 8QE.	01676 540628
Heljan c/o Howes Models, 12 Banbury Road, Kidlington, OX5 2BT.	01865 848000
Meteor Models 34 Coppice Drive, Parklands, Northampton NN3 6NE.	01604 671831
Parkside Dundas Millie Street, Kirkaldy, KY1 2NL.	01592 640896
PLM Cast-Aways 12 New Street, Merry Hill, Wolverhampton, WV3 7NW.	01902 339011
Right Price Railway Company 6 Stuart Grove, Altofts, WF6 2QZ.	01924 897660
San Cheng Crafts 902 Chevalier Commercial Centre, 8 Wang Hoi Road, Kowloon, Hong Kong.	
Sanspareil ICS Unit 4, How Mill, Millside, Brampton, CA8 9BU.	
Skytrex Unit 1A, Charnwood Business Park, Loughborough, LE11 2ED.	01509 233298
Ten Commandments 100c High Street, Cowdenbeath, KY4 9NF.	01383 610820
Tower Models 44 Cookson Street, Blackpool, FY1 3ED.	01253 623797 or 623799

Trains and Boats and Planes

The name of Rupert Harper's shop in Bognor Regis, Trains, Models and Hobbies, has changed to the above title. The web address reflects this and is www.train-sandboatsandplanes.com.

The opening hours have also changed to between 09.15 and 17.15 every day except Wednesday and Sunday.

It is now even easier to find the shop. A near life-size railway signal has been installed outside the shop, reminiscent of the Bassett-Lowke shop in High Holborn, London.

Trains and Boats and Planes, Shop 1, High Street, Bognor Regis, West Sussex PO21 1EH. Telephone 01243 864727.



Bachmann 'Retailer of the year'

Bachmann Europe plc has awarded Neil and Jill Gladwin, of J&N Models, Louth, the coveted 'Bachmann Retailer of the Year' award for 2005.

The Lincolnshire company only started trading in 2004. The firm is rapidly building its reputation for supplying items that modellers cannot obtain easily from other

stores. This includes products such as OTT-Lite and Liliput. J&N Models concentrate on one aspect of modelling; it is 100% railways and accessories.

Congratulations to Neil and Jill. Contact: **J&N Models, Unit MU5, New Market Hall, Louth, Lincs LN11 9PY. Telephone 01507 600501.**

New ferry wagon in N from Dapol

Due for release from Dapol is a new ferry wagon, which will feature the new close-coupling system which will be used on all future Dapol products. It will also include a standard NEM coupling pocket.

The wagon will be in plain silver with

a choice of four different running numbers. Each model will be limited to 500 units. Retail price is £17.99. In 2007, the liveries will include Danzas Cargo Wagon-Great Britain and Blue Circle Cement.

Contact your local model shop.

Bachmann 00 Ivatt tooling complete

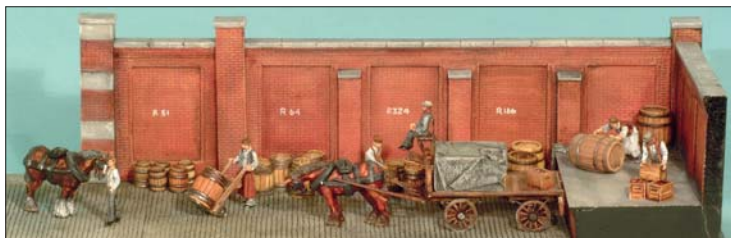
Bachmann Europe has announced that the tooling for the Ivatt 2MT 2-6-0 in 00 is now complete.

128 of these locos were built between 1948 and 1952 for service with the LMS. Construction continued under BR after nationalisation. Light axle loadings allowed them to be used on branch line passenger and freight duties. Their almost-enclosed cab made them ideal for working tender first where no turning facilities existed. They worked on all but the Southern Region of BR.

They were withdrawn between 1961 and 1967, seven locos surviving to work on heritage railways.

Initially, three versions will be available: 46521 - preserved on the Great Central Railway - in BR lined green with late crest. 46440, in BR black with early emblem and another in LMS black. Each model will be DCC ready, and have locomotive drive, tender cab and detailed pipework.

Recommended retail price £71.95. **Bachmann Europe plc, Moat Way, Barwell, Leicestershire LE9 8EY.**



PLM Cast-A-Ways very effectively used two made-up scenes to demonstrate new and established items in their range of 7mm scale scenic accessories. Prominent on these displays were the wooden garage/workshop front in a converted Nissen hut at



£4.50, 1940s/50s petrol pumps and oil stand at £3.40 and female attendant, £1.70. Harnessed Shire horses, head up or down, at £3.95 are sure to be a popular item. The backscene of one display actually featured the very useful new industrial brick wall units with pilasters, buttresses, gate posts etc with the relevant catalogue order numbers disguised as graffiti!

Over the next year many more new items from PLM are planned including Victorians/Edwardians, infantry figures and pilots, redesigned passengers and railway figures, and railway buildings to create a wayside halt or branch line station.

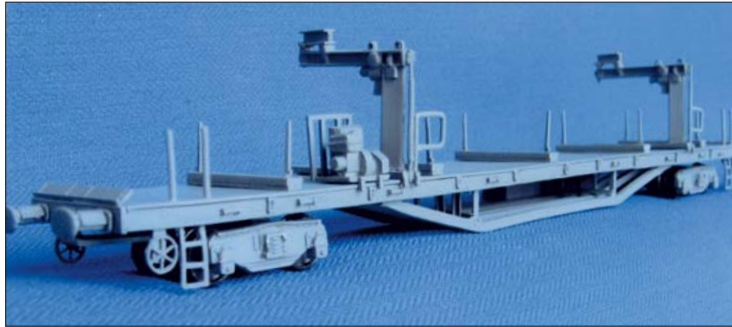
Genesis kits Salmon wagon kit

The latest issues from Genesis are Salmon wagons with 5'6" plate bogies.

The basic version is £16.00 plus £1.50 P&P. Another version is available with cranes, generator, steps and guardrails at £20.00 plus £1.50 P&P.

For details of this and the whole kit range details, contact:

Genesis Kits, Waverney Cottage, Willingham Road, Market Rasen, Lincolnshire LN8 3DN. Telephone 01673 843236.



Revised Glasgow Cathcart show dates

In the October issue *Societies & Clubs* pages, the information supplied to us regarding the dates of the Cathcart MRC show was incorrect.

The organiser has informed us that

the dates will be Saturday and Sunday November 4 and 5 and not October 28 and 29. For further information contact 01389 380725. See also the *Societies & Clubs* pages in this issue.

Tolworth Showtrain, 11 & 12 November

This annual model railway show, presented by the Hampton Court Model Railway Society, will be held at the Tolworth Recreation Centre, Fullers Way North, Tolworth, Surbiton, Surrey KT6 7LQ.

A free bus service is provided from Surbiton station which is well served by South West Trains. Car drivers can follow the blue RAC signs. The website www.tolworthshowtrain.co.uk gives details of the park and ride.

There will be 25 layouts and a similar number of specialists and general trade stands. The show is well known

for the display of American layouts; this year the NMRA has been deeply involved, giving a fine selection.

Other layouts will feature British and Continental railways from the 20th and 21st centuries. There is also a layout featuring a steam-driven beam engine in a canal pump house.

During the show, visitors are asked to vote for the best layout; the winner will be presented with the David Proops Sales Showtrain Cup on Sunday afternoon.

See *Societies & Clubs* for full details, or contact **020 8949 3413**.

Bolton MRC show

Bolton & District MRC will hold a show at St. James C. of E. Secondary School and Sports College, Lucas Road, Farnworth, Bolton BL4 9RU. The dates are Saturday and Sunday, November 4 and 5. Light refreshments and free parking are available; see *Societies & Clubs* for full details.

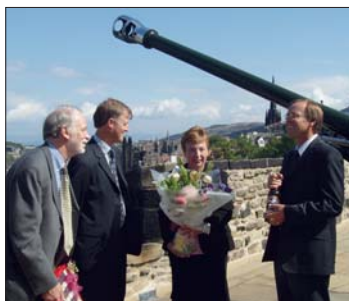
There will be twelve layouts on display covering a time scale from the 1920s until today, represented in

gauges from N to 0. One of the layouts appearing will be *Runswick Bay* (0) which was featured in *RAILWAY MODELLER* in May 1994.

The Club's new premises are at Gilnow Mill, Spa Road, Bolton BL1 4SF. They meet on Tuesdays and Thursdays from 19.30 until 22.00. Those interested can call Roger Courtney on 01772 460835 or Jim Lewis on 01204 840644.

'Tam the Gun' presentation

As related last month (p.663) GNER named locomotive 91122 *Tam the Gun* at a ceremony in December 2005 in



tribute to Staff Sergeant Thomas McKay who fired Edinburgh Castle's one o'clock gun for over twenty-five years. Hornby produced a limited edition commemorative train pack of 500. On August 21 2006, Simon Kohler of Hornby (*right of picture*) made a special trip to Edinburgh to present the certified first *Tam the Gun* train pack to Mrs. Joyce McKay, Tam's widow.

Harburn Hobbies will donate £10 from the sale of each train pack to Bowel Cancer UK, the charity that Tam helped to launch at the Castle last October when he was terminally ill with the disease. The charity's website is www.bowelcanceruk.co.uk

Eurospoor 2006

Europe's largest model railway event, Eurospoor, will take place this year in the Jaarbeurs (trade fair centre) in Utrecht between October 27 and 29.

In a 20,000 square metre area, visitors can view over fifty model railways belonging to clubs from the Netherlands and elsewhere. Collections, demonstrations, retailers and a huge used-item market are some of the attractions.

This fourteenth consecutive show

will be open from 10.00 until 18.00 on Friday and 09.30 until 17.30 Saturday and Sunday. Admission is €13 for adults and €7 for under 12s.

The venue is Jaarbeurs Utrecht, Jaarbeursplein 6, 3521 AL Utrecht, Holland.

Amongst the exhibitors due to make the journey is Bill Roberts, whose Belgian H0 layout *Antwerpen Sint Claralei* was featured in *CONTINENTAL MODELLER* May 2006.



Bachmann EZ Command Dynamis

This is a powerful successor to the original Bachmann EZ Command system. Dynamis will enable EZ Command users to progress smoothly to a full function DCC system.

Dynamis is modular, upgradeable and will incorporate contemporary features and technologies. The system is

extremely versatile and easy to use.

It will be NMRA-compliant and work with existing EZ Command decoders and a perfect partner for the new back-EMF decoder. The original EZ Command system will remain in production.

More detailed news as we get it.

Flying Scotsman overhaul auction

The National Railway Museum is planning a railway auction with a difference in aid of the *Flying Scotsman* overhaul.

Dubbed 'The People's Auction for The People's Engine' the Museum is promising lots to suit every pocket. Locomotive nameplates on engines such as *Christopher Wren*, *Elizabeth Fry* and *Robin Hood* go under the hammer.

The star of the auction will be a hand-coloured general arrangement drawing of a GNR goods loco signed by H.N.Gresley.

The Museum is also planning a contest based on a 'mystery lot' from the auction. A week before the auction, a

mystery photograph will be released to the media. Any member of the public who correctly guesses what the item is will be entered into a prize draw to be drawn on auction day.

The auction will be held in association with Cundalls. All profits will go towards the appeal for the *Flying Scotsman* overhaul.

The auction will be on Saturday October 28 at noon; viewing is from 10.00. The catalogue is £5.00 from **Jackie Barker, Cundalls, 15 Market Place, Malton YO17 7LP**. Please make cheques payable to 'National Railway Museum' and include your address and contact number.

Lochgorm footbridge

A 4mm scale footbridge for a typical Highland Railway example is available from Lochgorm Kits for £45.00. The latticework is at the correct angle for the bridge. There are currently twenty-one of these bridges in existence located from Dunkfield in the south to Helmsdale in the north and Strathcarron in the west.

The bridge is supplied as etchings with castings for all the pillars, corner posts and lamp posts.

For full details, send an SAE for a copy of the 4mm and 7mm catalogues. Also visit the website.

www.lochgormkits.co.uk
Lochgorm Kits, 3 Broomhill Court, Keith, Banffshire AB55 5EL.

More hoppers for Tutbury Jinny

The first batch of grain hoppers, produced by Dapol for the Tutbury Jinny, sold out very quickly after the review appeared in the July issue of *RAILWAY MODELLER*. They were specially commissioned to commemorate the traffic of malt and grain to the breweries.

A further production run at Dapol now means that they are on sale again at £9.99 each, or £19.99 a pair plus £1.25 P&P.

The Tutbury Jinny, 9 Tutbury Mill Mews, Tutbury, Nr.Burton upon Trent DE13 9LS. Telephone 01283 814777.

Invertrain house kits in 7mm scale

New from Invertrain is a series of three resin buildings kits.

A pair of brick terraced houses with a shared rear extension and two walled courtyards is released together with a low-relief pair of brick terraced house fronts and a low-relief pair of brick terraced house rears.

The houses include a middle floor with door and wall detailing; easy interior detailing and lighting installation is possible. Price £95.00.

The low-relief fronts and rears include the apex and about an inch of roofline beyond. The rears have the shared extension and walled garden. Fronts are £40.00, rears are £75.00.

Invertrain has also been appointed as agents for the S&D Models range of accessories and the Phoenix 43 range of 0 gauge figures.



Invertrain Model Railways, 33 Rose Gardens, Cairneyhill, Dunfermline, Fife KY12 8QS. Telephone 01383 880844.

Mercian Models J94 for Gauge 1



The latest release is a 10mm scale Austerity 0-6-0 saddle tank originally designed for the War Department and built for further industrial use, or as the BR version with the hopper bunker. The kit also includes etched fittings to produce the cut-down cab which was a feature of the 'Austerity' tanks on the Lambton Railway.

The wheels have been designed

specifically dished, as per the prototype, by Walsall Model Industries which also makes some of the fittings.

The kit is designed for electric power and can be supplied as a kit only or complete with wheels, gears and motor. Price TBA.

Contact: **Mercian Models, 1A Market Way, Hagley, Stourbridge DY9 9LT. Telephone 01562 884800.**

Twickenham MRC Roadshow

Twickenham & District Model Railway Club will present its Model Railway Roadshow in the local library in November as part of the club's policy of taking the hobby to the general public who would not normally visit a model railway exhibition.

The idea is to attract newcomers to the hobby. This is not a full exhibition, but an event to benefit the Club and

hobby as a whole. There will be two working layouts and displays.

The venue is in Garfield Road, Twickenham, TW1 3JT.

The dates are Thursday to Saturday November 9-11. Opening is 10.00 until 18.00 on Thursday and Friday, 10.00 until 14.00 Saturday. Admission is free.

Contact: **020 8560 4966 or 07799 728863.**

News from Derek Ascott

Derek Ascott of Worth has given up his interests in designing, producing and printing, following advice from his doctor.

With the help and co-operation of Crawley Model Railway Society and Tony McCellan of Langley Models, Derek started making masters for casting in 1977 with the advent of Lima Class 33s.

Derek and Rose wish to thank all and every one of their friends, cus-

tomers and trade associates for their kind support and interesting letters.

By now, Aladdin's Cave and Gogistics will be in the capable hands of **Tony Scott of Blackberry Way Casting Services, 38 Leopold Avenue, Handsworth Wood, Birmingham B20 1ES** to whom Derek and Rose wish every success.

A new-style catalogue is being prepared, but until it is ready, the existing catalogue will still be in force.

10000 & 10001 in ready-to-run brass



FIA Trains is to market high-quality, all-brass, 00 models of the ex-LMS main line diesel locomotives, Nos.10000 and 10001.

A total of 750 will be produced in a number of livery options. The accent is on quality for a pair of locomotives that are not commonly modelled.

The finished products will come with NEM pockets to give the modeller a greater choice of couplings.

The model will boast centrally-mounted motor with flywheels, all-

During its time on the Southern Region, No.10000 is seen at Weymouth with a Waterloo train on 20 June 1954.

Photograph: Philip J. Kelley.

wheel drive, sprung buffers, cab detail, full glazing, stainless steel numbers, letters and waistband. Launch price £399.99; order deadline November 14.

Contact **FIA Trains, Woodstraw Barn, Forty Acre Lane, Thornley-with-Wheatley, Lancashire PR3 2TT.** E-mail: FIATrains@fsmail.net

Transport Models 'Jinty'

A limited edition of the Bachmann Jinty No.47472 will be commissioned by Transport Models Ltd. of Preston. The model will be limited to 504 pieces and will be the first weathered Bachmann Jinty produced.

The actual loco was the Preston station pilot for thirteen years and the

model will carry the appropriate shed plate 24K. The price is £61.50 plus £3.50 P&P, discounted 10% if ordered prior to release.

For more information, contact **Transport Models Ltd. Unit 1, Oyston Mill, Strand Road, Preston, Lancashire PR1 8UR.**



NRM volunteers – new regime

After more than twenty years, volunteering at the National Railway Museum is being brought up to date. This will allow volunteers to contribute more than ever to the Museum's continuing work.

The 'Tuesday night team' has been working on the locomotives and rolling stock for over two decades. Many of the volunteers are interested in steam locomotives and have had the oppor-

tunity to work on numerous major projects including restoring *Duchess of Hamilton* and the flagship *Flying Scotsman*. Others have maintained the modern traction fleet such as Class 52 D1023 *Western Fusilier* and Class 40 D200.

Starting in the autumn, new exciting projects and a more flexible schedule will ensure continued volunteering opportunities throughout the week.

'Fire Fly' at Didcot

An audience with *Fire Fly* on Saturday and Sunday October 28 and 29 concludes the Brunel 200 season of celebrations at Didcot Railway Centre.

Fire Fly, built by the Firefly Trust, is a replica of the original 1840 locomotive. It will operate on the reconstruction of Brunel's broad gauge railway.

There will be other GWR trains running during the weekend including a

demonstration of the Travelling Post Office, showing how mailbags were exchanged at speed.

Didcot Railway Centre is open each day from 10.00. Refreshments are available and there is a picnic area.

For information contact: **Didcot Railway Centre, Didcot, Oxfordshire OX11 7NJ. Telephone 01235 817200. www.didcotrailwaycentre.org.uk**

Graham Farish 04 and 60 – tooling done

Shortly after we closed the October issue for press, Graham Farish supplied some images of its eagerly-awaited Class 04 shunter and Class 60. Both projects have now reached the 'tooling complete' stage.



The locomotives will have NEM coupling pockets, and the 60 is described as 'DCC-friendly'. Liveries for the Drewry shunter are to be green and pre-TOPS blue, and EWS and Mainline for the Brush Type 5.

Bradford MRC 50th anniversary

It was just a few years after the Club started in 1956 that they began holding exhibitions. To celebrate, there will be another show on November 4 and 5 to reflect something of the changes that have occurred to railways during fifty years.

The star layout will be *Deepcar* from Nottingham. The Club will also show a new tramway layout using the latest

digital technology and featuring numerous moving road vehicles. The tramway will form part of a 00 layout to be seen in the not-too-distant future.

By contrast, there will be a Continental Z gauge layout by one of the members. 0 gauge will be represented too.

See the *Societies & Clubs* pages for full details.

Lineside Delights signal kit in 16mm

Lineside Delights has produced a freelance working signal kit, in etched brass, whitmetal and timber. An elegant finial tops the genuine hardwood tapered post.

The spectacle plate, arm, stirrups and ladder are of etched brass. The lamp comes complete with an ornate bracket and lens which can be con-

verted to illuminate. All bearings, levers, backblind, counterweights and working platform are of whitmetal.

The kit is priced £17.95; please add £1.50 P&P.

Contact: **Lineside Delights, 7 Coralberry Drive, Weston-super-Mare BS22 6SQ. Telephone 01934 513537.**



PCA wagon kit in 4mm from DC Kits

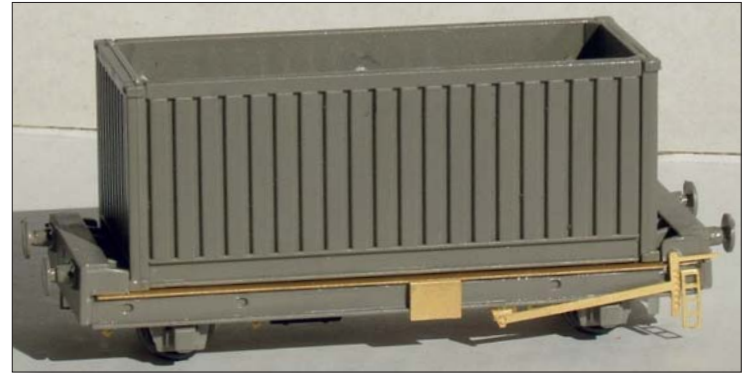
An all-plastic PFA wagon kit is available from DC Kits in packs of four.

The kit includes etchings for the top floor panel and under floor detailing plus brake handles and ladders. It comprises two walls, two ends – one with doors – and a plasticard floor. The wheels are 10.5mm Romford, but no couplings are provided.

The pack of four is £29.50, compre-

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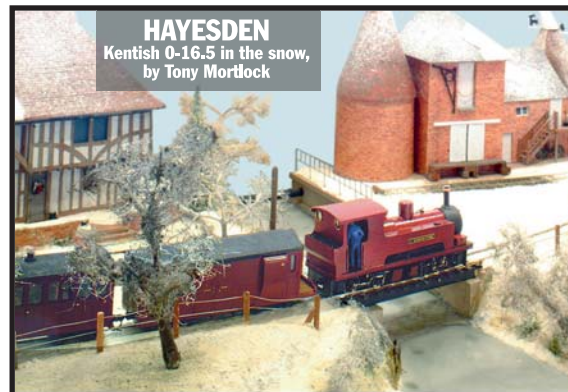
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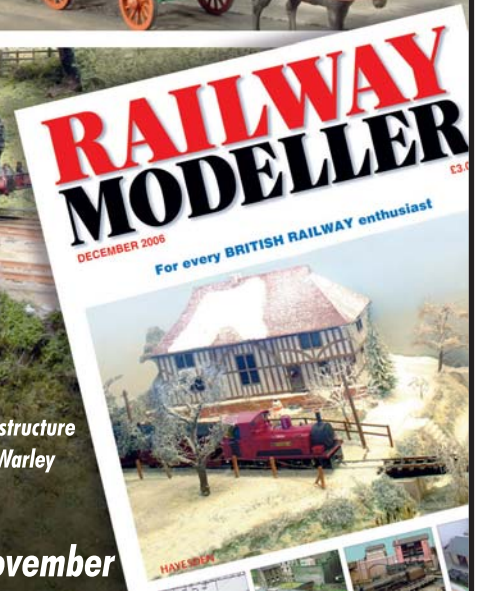


Coming next month

- **KITBUILDING WAGONS** Neil Burgess's approach to Slater's kits
- **A G SCALE SIGNAL CABIN** Mike Garforth builds a freelance structure
- **BALLYCONBEG** Wexford MRC's Irish outline in 4mm – see it at Warley

plus all the regular features

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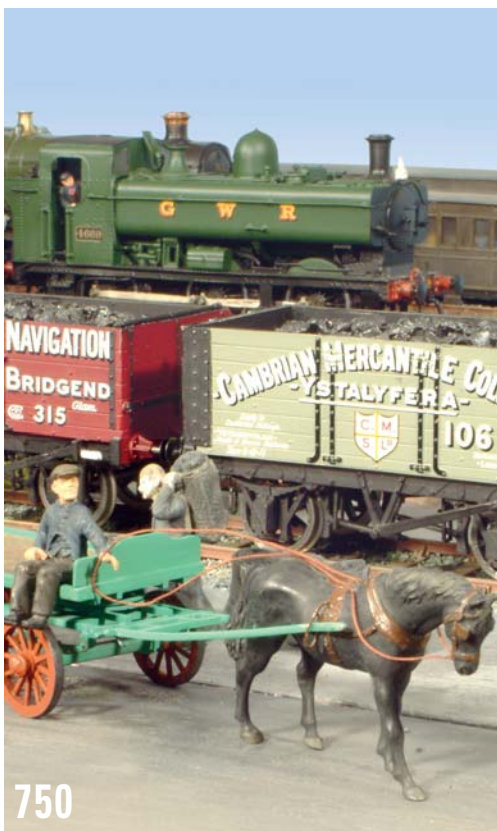
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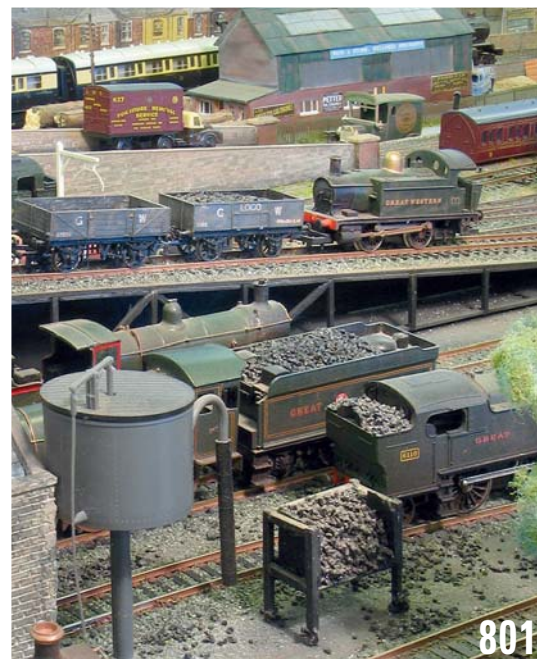


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RAILWAY MODELLER

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 Published on the second Thursday of the preceding month.

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Editor JOHN BREWER

Assistant Editor TIM RAYNER

Photographer STEVE FLINT

Editorial Assistants STEVE FLINT, ROBERT ILES

Societies & Clubs MARILYN WRIGHT, MAUREEN JENKINS

Review Photographer JOLYON SARGENT

General & Advertisement Manager JOHN KING

Advertisement Assistant SUE DAVIS

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The big one...

This being the December issue, it's not too long before the Warley Show!

The annual event at the National Exhibition Centre – full details of which are in *Societies & Clubs* and the news pages – has rapidly become the biggest

of the major exhibitions to be held through the year. Attendances in the upper teens-of-thousands testify to the veracity of this statement, as does the fact that many of the manufacturers – our parent company included! – keep their new-product powder dry until the first weekend in December. We will, naturally, be publishing extensive coverage of the event in our January issue (out 19 December): don't forget that the Peco Mobile Studio will be in attendance throughout the event, so if there's a new product manufacturers wish to have photographed, please make yourselves known to the staff on the Peco Publications stand.

There are three features in this issue with connections to the Warley show: the Bridgend MRC's 0 gauge layout *Penfold Priory* appears overleaf, as Railway of the Month; and the Wexford MRC is scheduled to exhibit its Irish prototype layout *Ballyconbeg* at the NEC. Finally, our contributor Ian Pickering, whose layout *Littleton to Biggerton* won him the 2005 'Right Away' Cup, and the chance to appear at the show, is due to have a demonstration stand. His new layout, *Betterton* – a clue to the positive experiences he had building *LtoB* – forms the 'Right Away' feature herein, and also is the main subject of the cover. (Incidentally, to those readers looking forward to reading *Hayesden*, by Tony Mortlock – which occupied the miniature cover in last month's issue – this article has been postponed until the January issue, out 19 December.)

The show could not function without those hardworking members of Warley MRC, under Exhibition Manager Paul Jones' leadership, who bring the event to fruition. Congratulations to them all, for 2006 marks the 40th anniversary of the Warley Club, and this exhibition (the club's 39th annual show) will be the 14th since moving to the National Exhibition Centre. So remember, on 2 and 3 December – it's Hall 1 for the Big 1!

CD-ROM and DVD

By now you will have discovered this month's free CD. The layouts present a London theme in 00 gauge with *Sydney Street* by Jim Connor (RM March), John Howe's *Kingsway Subway* (RM February). *Scrubs Lane* by David Eden (RM May). Moving eastwards from London, the programme reaches Germany with Graham Lightfoot's *Obersdorf Ost* in dual gauge H0/H0e and *Müllertal*, Axel Klozenbücher's N gauge layout set in the Black Forest. There is also coverage of *Westbridge-on-Sea*, the new Pecorama 00 exhibition layout, and a demonstration of the potential uses of the Wills 3-arch viaduct kits. Additionally, there is a look back at the special weekend held at Pecorama celebrating 60 years in business for Peco.

This material plus bonus features on building a Wills Craftsman mill kit and a tour of the Bure Valley Railway, are also available on DVD, price £10.00 plus 60p UK postage, £1.60 overseas. Full details of all the DVD Xtras are in the advertisement on page 44a.

Time to change

Nothing it seems lasts forever, and model railways are no exceptions: to keep things fresh without the prospect of the upheaval of a complete rebuild – maybe taking in a new scale, area or era *en route* – consider the possibility of alteration or expansion.

Fred Ellis took the latter route with his *Blagdon terminus* (see pp.780-782), which has now been turned into a through station with expanded goods yard. In doing so, he succeeded where prototype history failed: the Great Western planned the route through Blagdon as a through line, but it was not to be! Cleverly, the extension to the layout was designed to include the possibility of returning to terminus format if required.

Sometimes space constraints preclude an extension to a layout, but the model's width might not be as restrictive, especially if the modification amounts to a point and a dedicated siding, as Colin Chisem planned for *Tapley*. We return to this atmospheric layout, based around the buildings from Portesham, on the Abbotsbury branch, on pp.783-785. Obviously some chiselling was required to adjust the permanent way, but as noted above, nothing like the major work involved in a rebuild.

So if the current layout is feeling a bit 'stale' try ringing the changes for the New Year. It could make all the difference, and maintain the enjoyment!

Cover: **Betterton station approach with railcar No.8 on the branch line in the background. The 45xx in the foreground is one of only 300 built in Korea in 1976 retailing at £120.00 each.**

Photograph: Steve Flint, Peco Studio.



Railway of the month

Penfold Priory

An O gauge layout
by Bridgend Model
Railway Club

M. EDEY, M. EVANS, R. LOWE, P. LYDIARD and B. WYKES describe this 1930s/40s-set layout.

Much discussion took place on the layout before anything was committed to paper. Lots of ideas were talked through, which included things that we did not want as well as those we thought were vital. It took a long time but we got there in the end.

The key items were:

- The layout had to be able to be erected completely in the club room.
- Maximum train size would be loco and three coaches.
- There must be lots of potential for shunting.
- Layout would not be covered from end to end with buildings.
- Baseboards would be connected by 8mm bolts through turned brass bushes.
- Baseboard legs would be free standing with fiddle-yard supported fully; all other boards were 'piggybacked' off it.
- When boxed, the layout had to fit into a Transit-sized van.
- The layout would be fiddle-yard to terminus running GWR and LMS stock.
- All stock would be fitted with three-link couplings.
- Wiring was to be sectionalised with common return allowing two operators to work at the same time.
- Construction was to be 10mm ply on 75mm x 25mm PSE with 50mm x 25mm cross-braces.
- Fiddle-yard would enable 'hands off' movement of stock into its correct position, would be operated from the main controllers as well as its own controller, and would incorporate a turntable.

Decisions

So, the talking was done, the easy bit was about to start. The layout would be a terminus predominantly GWR with LMS arriving intermittently. There were to be five baseboards each 1200mm long x 750mm wide. Four of them would be boxed in pairs for transport with the fifth placed on top.

Pannier tank arriving with a scratchbuilt B Set. This is a good view of the station roof with its wrought ironwork.



◀ The dray waiting to be loaded ready for another household delivery.

Classic GWR style station building, loosely based on Ross-on-Wye. ▶

Photographs by Len Weal.

The fiddle yard would be 2400mm long x 750mm wide, hinged in the centre to make its own box. Entrance to the fiddle-yard would be through a skewed road bridge. The layout has a number of key buildings spread throughout its length, on the viewing side as well as the operating side, these being the station, goods shed, cottages, signal box and engine shed. Long sections of straight track would be avoided, and track would be Peco.

Penfold Priory

Benedictine monks arrived here in the 12th Century, settling and establishing a prosperous religious centre at an important river crossing of the borderlands. The township grew alongside the monastery and in successive centuries with its town charter, developed into a thriving brewing and agricultural centre. By the 1840s the good



burghers of Penfold saw the emerging railway as further means to economic development with the wider world and the town's growth. Through the growth of the railways the township now has a cross-country terminus station of which to be proud, facilities for general goods, livestock, agricultural merchandise and produce. With an attractive market and history it is a tourist visitor destination, and as a religious centre, still attracts modern-day pilgrims.

The era is circa 1930s/40s in GWR days with LMS having running rights. The trains enter the scene through the overbridge, with the loco shed facilities on the left, passing the signal cabin and

coal yard and coming into the busy terminus (note the architectural gem of a station building), with goods shed, loading and cattle dock and branch bay platform.

Baseboards and construction

The construction of the baseboards is quite straightforward. The top is from 10mm plywood, and is screwed and glued to a frame of 75mm x 25mm softwood. The board is braced on the underside using 50mm x 25mm softwood, screwed and glued across the board. All screws are countersunk and covered in DIY filler. Once all boards had been made, two were clamped together and holes were drilled to accept the turned brass bushes, which were glued in place with epoxy resin. The 8mm bolts are a close fit in the bushes, maintaining alignment of the boards.

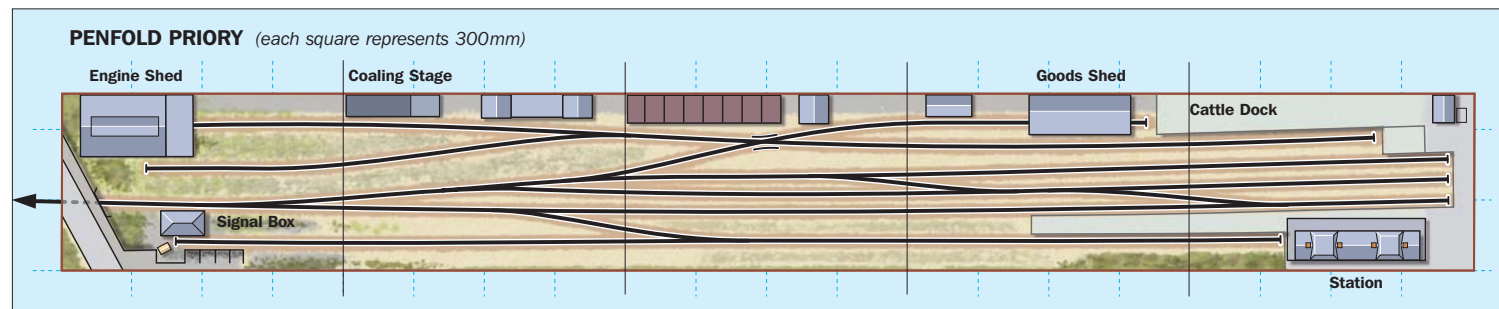


◀ The motor cyclist club meeting at the entrance to the goods yard. The six-wheel milk van has been loaded and is ready to go.

'Manor' No.7825 Lechlade Manor arriving with a mixed goods. Note the stonework on the retaining walls. The undergrowth has been achieved by using layer after layer of material.

▼





The fiddle-yard was built by Graham Yates, who has since moved away. It was constructed from 10mm plywood on a 100mm x 25mm softwood frame, the big difference being that the plywood was screwed and glued to the bottom of the softwood forming an open-top box. The two halves were connected by two pairs of hinges, the same as those on wallpapering tables. The fiddle-yard can be hinged so that it forms a box for transport.

Martin and Wendy have parked the car, and are discussing the best route to the Priory.



The inside of the box is fitted with runners that allow the top boards of the fiddle-yard to be slid forwards or backwards to line up the tracks. The top boards of the fiddle-yard are split into four sections. Three can be slid forward or backwards, and the fourth is fixed with two roads on the front of the layout and a three-road manual turntable on the rear. Each of the movable boards has five roads, and all the roads can be isolated electrically. Alignment between the boards is obtained by lowering a bolt into a series of holes drilled into a fixed cross-brace screwed to the base of the fiddle-yard under each of the movable top boards. The layout is supported by a number of legs, made from 50mm square timber with cross-braces screwed and glued in place. A length of 100mm x 20mm timber is screwed on top to give a level base for the boards. The fiddle-yard is set up first, supported by three legs, all of which are braced back to the frame of the fiddle-yard, giving a stable freestanding section to allow the individual baseboards to be erected. Each of the baseboards is supported by the bolts into the preceding board, and the other end is supported by its own set of legs. Angle braces are then fitted from the legs back to the baseboard to lock the baseboards and legs in place.

Electrics and lighting

The layout has been divided into nine sections and is wired for cab control via two controllers. Either can be selected by a series of switches allowing the sections selected to be driven independently of the others. At various points, mostly at the ends of the roads in the station, isolated ends have been installed to allow the operators to leave a loco isolated; useful if the operator has



Archie relaxing during a quiet spell.

Close-up of Penfold box with roof removed showing the fully-detailed interior.



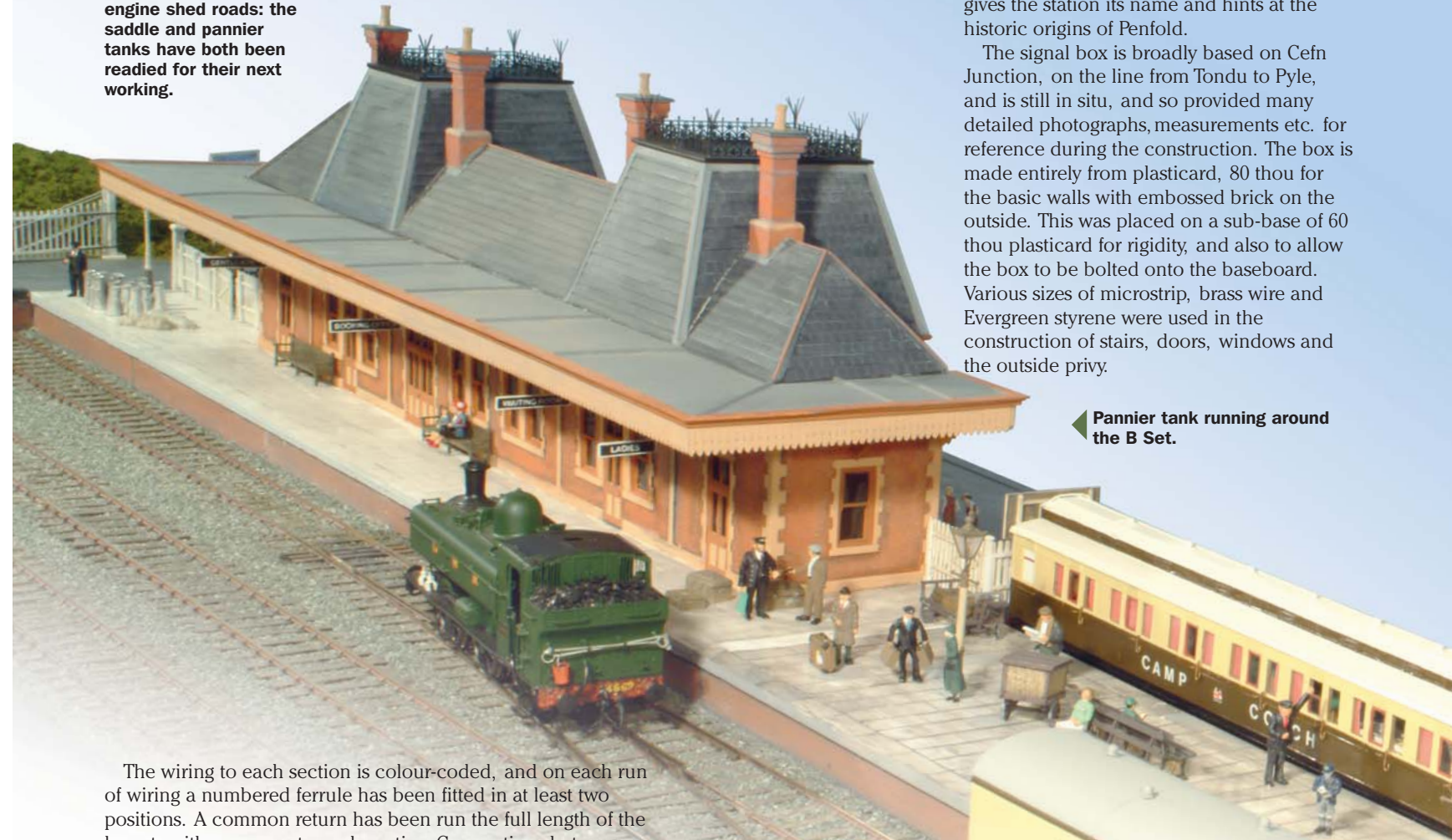
missed that a loco has been left in the headshunt. Others are positioned on the roads leading to the loco shed.

The fiddle-yard has its own control panel and power supply. By operating a switch to select layout or fiddle-yard, the latter can be driven independently of the layout, and by using the roads and turntable on the end board, the stock does not need to be touched.

'Manor' No.7825 Lechlade Manor about to be fed and watered.



Locos filling the engine shed roads: the saddle and pannier tanks have both been readied for their next working.



Pannier tank running around the B Set.

The wiring to each section is colour-coded, and on each run of wiring a numbered ferrule has been fitted in at least two positions. A common return has been run the full length of the layout, with spurs run to each section. Connections between boards and to the control panel are by 'D' connectors.

Lighting is supplied by twin spotlamps supported on individual poles, screwed to the rear of the baseboards.

Buildings and scenics

All the buildings are scratchbuilt and, while fixed to the baseboard, can if needed be removed. They are positioned throughout the length of the layout, to allow the public to look in between them and maybe see some detail they may have overlooked.

Out of the fiddle-yard, the trains appear into the scenic section of the layout via a steel girder road overbridge and stone-faced embankment. The loco shed is just on the left. After making large amounts of stone walling either from moulds, or individually made pieces for our previous N and OO

Busy time in the engine shed. While saddle tank 2021 shunts vans into the goods shed, Bob the tramp looks on enviously at the tea break taking place at the coaling stage.



layouts, no more would be made, but here we are again, this time working in O.

All the sections were individually-sized pieces of plaster made to a plan of the area, left to dry and then scribed as dressed stone, sealed with a thinned emulsion to form a surface on which to paint on the various washes of greys and browns. The mortar lines were then flooded with a darker colour. The finished sections were glued in place with PVA glue following the plan.

The greenery is then built up to soften the stonework and bed it into the landscape. Note the fox preparing to keep the rabbit population in check. The road will eventually take us to Penfold and its station, whilst the pathway heads to the Priory ruins which give the station its name and hints at the historic origins of Penfold.

The signal box is broadly based on Cefn Junction, on the line from Tondy to Pyle, and is still in situ, and so provided many detailed photographs, measurements etc. for reference during the construction. The box is made entirely from plasticard, 80 thou for the basic walls with embossed brick on the outside. This was placed on a sub-base of 60 thou plasticard for rigidity, and also to allow the box to be bolted onto the baseboard. Various sizes of microstrip, brass wire and Evergreen styrene were used in the construction of stairs, doors, windows and the outside privy.



▲ Scratchbuilt camp coach at the end of the bay.

The roof is 60 thou plasticard with embossed slates added. For the guttering U-shaped Plastruct was used, while the finials and roof vents are made of brass, turned by a good friend. Finally the box was painted with acrylic paints for the walls and roof, and Railmatch paints were used on the windows, doors guttering etc.

▲ A general view of the scratchbuilt dock and surrounding area.



▲ Not exactly a hive of activity, at the provender store, the shunter waits patiently for loading to be completed.

Well-earned rest at the coaling stage. ▶



with the liberal use of weathering powders for the final finish.

The roof, which is detachable, reveals the fully detailed interior of levers, bells, token and tablet equipment, normally found in every signal box, as well as Harvey (the cat) in residence in his favourite position. Provision has been made for lighting to be added in the future.

The engine shed is based on Brimscombe, has a shell made from 6mm MDF and is faced with Slater's dressed stone Plastikard. The water tank



▲ Fully detailed interior of the camp coach, the Lydiard family waiting for a cuppa. We are trying to encourage Mal to get out more.

was made from 60 thou plasticard. Windows are etches from Modelex. The water crane is from Duncan Models.

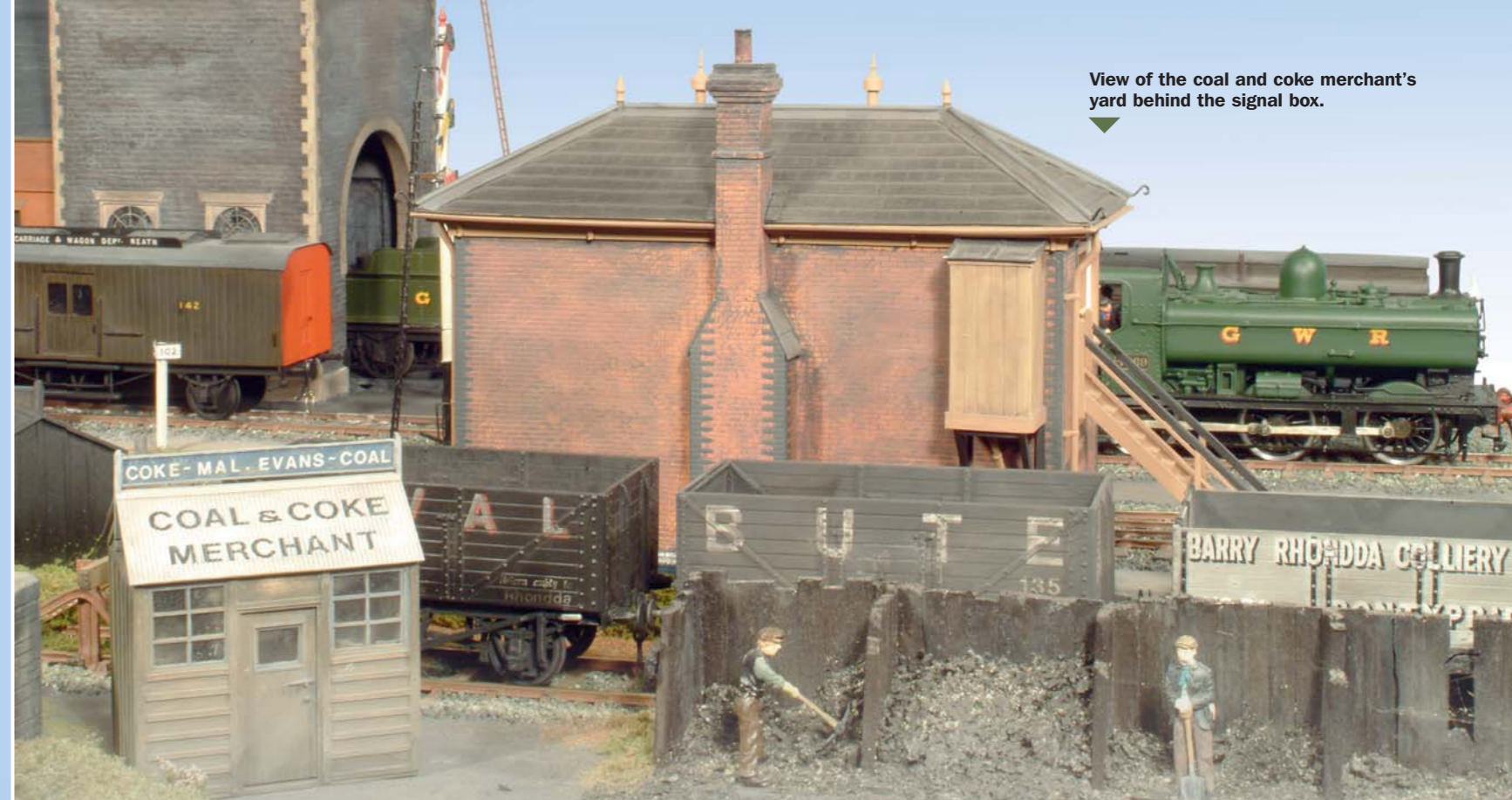
The idea for the coal stage was taken from the one at Honeybourne and was made using stripwood, 4mm ply and corrugated plasticard.

The foundry is again made from plasticard in exactly the same way as the signal box. The building, which is not based on an actual foundry, was developed to disguise the point levers in use on this part of the layout and so determined the unusual alignment of the kiln. The chimney is detachable for ease of transportation.

The cottage/terraced row of houses was built originally by the railway company for employees. Wykes Row now forms part of a lively community. Children play games safely on the street, but can still be a nuisance as witnessed by the arrival of the local constabulary. Mr. Lowe whose family began the local shop at the front of their terraced house sweeps the front, but still has time for a chat. Everyone has a good view of the trains coming and going, and many still earn a living from the railway working in the nearby stables, goods shed, loco shed or on the line.

Completely scratchbuilt with a foamboard shell, giving lightness but strength, it is then faced with embossed brickwork using a typical contact adhesive. The individually-made doors and sash windows are then placed in their openings. Slates are strips of plasticard overlapping with scribed verticals. Once built the painting and detailing of buildings and scenery is most important using many light washes of colour, plus the details of lamps, people and adverts which give atmosphere to the scene.

The goods shed is in typically GWR style, and was built at a slight angle to the rear of the baseboard to be a little bit different. It was constructed using an internal frame of foam-board, covered first in 20 thou plain plasticard inside



View of the coal and coke merchant's yard behind the signal box.

and out, and then covered in Slater's brick Plastikard. The inside platform is fully detailed complete with timber crane and loads waiting to be picked up.

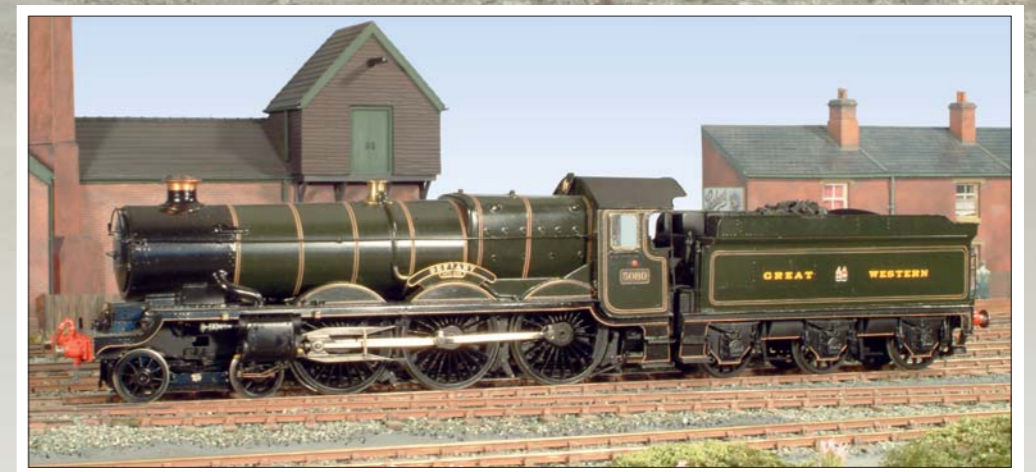
The station building is loosely based on two GWR stations, Radley and Ross-on-Wye. References were taken from *A Pictorial Record of Great Western Architecture*. A plan was drawn up and building commenced using 80 and 60 thou plasticard for the shell of the building, and this was then faced with Slater's brick Plastikard. The windows are 50% Phoenix and 50% scratchbuilt using 80 thou strip. The roof has a 6mm MDF shell and was faced with Slater's roofing. The awning is again 6mm MDF faced with 40 thou plasticard. The valancing was made from Slater's planking. The ironwork on the roof was obtained as an etch from the Oxford 0 Gauge Group after seeing something similar on its test track layout at an exhibition in Swindon.

The platform is made from thin batten faced with 4mm ply and then covered with strips of paving cut from 40 thou plasticard. A recess was left in the platform for the whole station building to be dropped in. Large sheets of plasticard were obtained from Nick at Modeller's Mate.

The cattle pen is based on a GWR design, using concrete posts and second-hand signal rodding for the railing. This replaced the original all-wood structure in the mid 1920s. Livestock has been transported in and out of the station since its inception. Today it serves a large hinterland, in this mainly agricultural area. The posts are made from square plastic rodding and the railings from brass wire.

A trip down the line

Emerging from under the skewed bridge, with its superb stonework, looking back



▲ 'Castle' No.5080 Defiant standing by the foundry.

onto the bridge, Bob is wondering where to settle for the night and the fox is on the prowl; the rabbits had better watch out. To the left the loco shed with water tank and coaling stage keeps the locos serviced. The inevitable grounded van acts as a canteen/store for the area, and more importantly, disguises the isolating switches for the shed roads.

To the right are the signal box and the coal merchant's yard. After the coaling stage, at the foundry, the cat has a lie down after a hectic night's mousing. Still on the left can be seen the row of cottages, all kept in good order by the occupants. The goods shed is kept quite busy with the despatch of farm produce and the local brew, as well as receiving various items for the town businesses. Joe the foreman is keeping a close eye on things.

At the cattle dock, a load is being moved from the pens. Martin and Malcolm are taking a break. Finally, the bay is passed on the right and Peter the stationmaster is on

hand to check on the arrival of the next service. He keeps the area absolutely spotless. The station is a work of art, the town leaders really wanted to make a statement, just look at the roof railings and the quality of the brickwork. Passengers wait for their train.

Locomotives and rolling stock

All the locos are kit built, some with added details and changes such as different pickups and all have been built and painted by the members. Rolling stock is predominantly kit-built, but there are some scratchbuilt items, such as the B Set, camping coach, inspection coach and the GWR three-coach rake.

When you see us at exhibitions, come and have a chat, we are always ready for a good talk. We really are trying to get out more, and one of our outings with *Penfold Priory* will be at Warley.



Plan of the month

Windrush

A terminus in the Cotswolds in 4mm scale

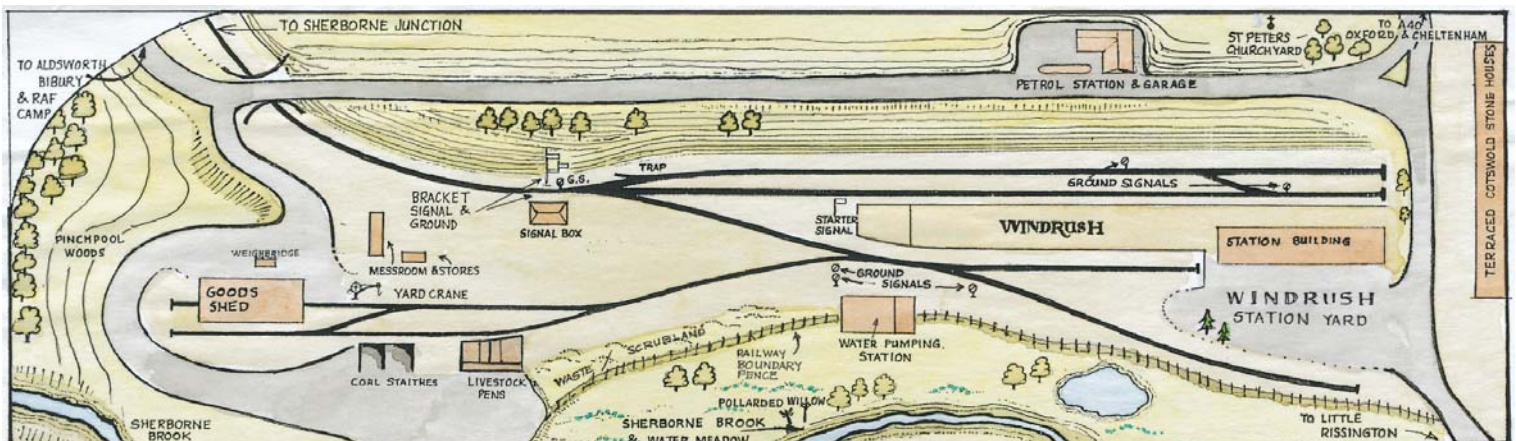
HARVEY WHITMORE set this rural scene in the early BR years.

It is the post-war period – Britain starts to recover from those dark years and a new age of enlightenment provides the population with hope for the future. There are changes on the horizon; the BBC Home Service and the more popular Light Programme start to wane as the dawning of the television age beckons. Wartime fashion-wear passes from sight and

slowly but surely, foodstuffs not seen since the late 1930s start to reappear. None of these events seems to have disturbed the tranquillity of the Cotswold village of Windrush, even the phasing out of food rationing passes by unnoticed because it never really existed in such deep rural farming areas. The governing bodies of Westminster and their new measures

and laws in the early 1950s seem a million miles away, but in any case such constraints never really affected the community during or after the war!

To me born in 1946 and having recollections of the 1950s, it still seems like yesterday yet it is getting on for 60 years ago. My colleague Tom Couling is from the same era and



Left: atmosphere with an equine flavour. Windrush is only 12 miles from Cheltenham, the home of National Hunt racing, Gloucester loco Collett 0-6-0 No.2291 is detached from the horseboxes and returns to its one-coach train.

Right: the auto trailer and 0-4-2T is held in the bay platform to be made ready for an early afternoon departure from Windrush.

Photographs by Ian Manderson.

I suppose it underscores the reasons why we produced this model jointly for exhibiting and try to operate it in, it is hoped, a seam-free manner. In those early post war years, a trip to the seaside was by coach that probably took several hours or if you were really lucky, by train. It covers my life so far and I suppose validates my continuing love affair with railways and the model that is *Windrush*. I hope this article will allow the reader a similar feeling as if he or she was actually there right now.

Our scene is therefore set in the post-war period with the railways under the influence of a nationalisation plan that has been in existence for just a few years. I am not going to set an exact date because of various reasons but the motive power that may be seen at the head of such BR(W) period trains could sometimes still bear the GWR initials under the grime. The RAF personnel seen on the station are still wearing forage caps, a legacy from wartime and early post-war years, but more about their involvement later.

Windrush is a real village, in the Cotswolds, not far from Cheltenham, but closer to Northleach. In my childhood days, it was merely a signpost along the A40 whilst travelling in a Black & White coach en route to London. Windrush, a small stream that meanders through the Cotswolds, slowly gathering momentum near the village itself and eventually turning into the Thames. In that sentence is all you will probably ever know about the place, unless you take the turning from the A40 into the lane that leads you to the village. Little did I think, when travelling on that coach, that one day I would devote so much of my spare time to the world of Windrush in 4mm scale.

Atmosphere

Some people see our model and think of the Edward Thomas poem *Adlestrop* where a GWR train stopped unexpectedly. The quiet of the Cotswolds descended and the sounds of bird-song together with the fragrant smell of hay-cocks, meadowsweet and willow herbs created a unique atmosphere that epitomises our part of the country.

The word atmosphere really sums up our model. It is not in any way perfect but it does provide the viewer with something that seems to typify the Cotswolds. Essentially, the railway looks like an intrusion into the countryside rather than the other way around. All too often we see model railways over populated by too much trackwork and too little scenery.

It is, however, neither appropriate nor is it justifiable to criticise other models that provide so much pleasure to so many people, so I'll put the soap-box away. In my many years experience of this hobby I have seen a lot. I



used to decry the tail chasers piously, complain about pre-war private owner mineral wagons pulled by a BR loco, moan about this, that and t'other. I have learnt that you cannot throw stones from inside the greenhouse and that there is room enough for all categories of this fascinating hobby of ours to be enjoyed by the public as well as us.

Our layout has its limitations and what might seem an ideal exhibit by one person could easily be viewed differently by another. It is all about opinions. That is the reason why *Windrush* enjoys a larger than life daily quota of trains. In reality, if a railway had ever reached Windrush, I doubt if there would be more than four trains a day, including goods.

The objective

In another magazine I explained the history of the layout's origins but now I bring to the reader's attention some of the rationale and characterisation after converting it into an exhibition layout.

The layout design is essentially based upon one of the original Peco layout plans for small railways. In this world of sophistication I have learned that we can all take a step back and look at one sadly overlooked ingredient: simplicity. This is what you will find in those Peco plans. Everything has a purpose and a justification for being there. There is no point in creating unnecessary sidings where they would never have been needed. Keep it simple. This solves so many problems from wiring to signalling. It also helps to provide you with a bit of space to include the scenery as already mentioned.

Windrush was never served by a railway. In the Victorian railway boom years, plans existed to connect the town of Northleach by rail with Banbury to its east and Cheltenham to its west. It never came to fruition, but if it did, then perhaps Windrush (just a handful of miles away from this proposed secondary main line) might have been a branch line thereto.

There are very little outgoing goods from the village and its community. Livestock is

probably the most likely main outward-bound movement, although nearby RAF Windrush would probably have seen a proportion of ground equipment arriving and leaving for the main line. At the time that our model depicts, the A40 is the nearest main road, but still remains a single carriageway virtually all the way between Cheltenham and London. The railway line therefore provides the most realistic way of moving goods as well as passengers. Nearby, RAF Windrush was a wartime construction that at its peak had approximately 1,000 personnel i.e. Officers, NCOs and Other Ranks on staff. You will not find it in the Ordnance Survey maps because it was a grass field with a steel mat runway some 1000 yds long, eventually extended to 2000 yds. It was a satellite station to RAF Little Rissington; part of Flying Training Command assigned to 23 Group. During its wartime use, Airspeed Oxford and Avro Anson training aircraft would probably have used it. It was actually closed shortly after the war, but in our 4mm world, it still functions, or just about! Its post-war use may have seen DH Chipmunks, Boulton-Paul Balliols and possibly even Vickers Valettas. If the onlooker sees *Windrush* at an exhibition, he or she may well notice suitable ground equipment loads arriving by train. We shall not introduce anything as crass as huge fuselage, tail and wing sections arriving by rail.

The trains

Ten trains a day serve Windrush starting with an ex-GWR B set empty stock (ECS) arrival from nearby Sherborne Junction. It takes early morning passengers to catch the businessmen's trains for Northleach whereupon connections for Cheltenham, Burford and Oxford can be made.

During the course of the day, a two-car corridor train will arrive and depart and the observer may also catch a glimpse of an auto trailer working during the off-peak time. The two-car corridor will be 'strengthened' at the junction into a four-car, or C set (as known in old GWR parlance), for stations to Cheltenham and



Gloucester. All passenger vehicles and locomotives conform to Western Region practice. Some examples carry tail traffic such as horse boxes etc (remember we are close to Cheltenham and National Hunt racing predominates around here). Later in the programme, the early passenger train departures return, perhaps with some of the people that commuted to Northleach earlier!

Goods arrivals will see a daily coal train. Such trains are normally hauled by ex LMS 3F and 4F 0-6-0 locos from the Gloucester area. You will see several loaded wagons full of coal. Remember that we show life in the 1950s, so there is no such thing as North Sea gas. Most people used solid fuels to heat their homes. Coal merchants would be keen to get to the station goods yard after a delivery had been made, to get on with the unloading of wagons thus avoiding a demurrage charge. This was imposed if the wagon was not unloaded promptly.

Other goods arriving included open wagons with tarpaulin-covered loads, goods vans supplying everything from foodstuffs, paint, builders merchant supplies, even explosives for nearby quarries and as already mentioned, various types of machinery for the RAF Station. As this area is largely agricultural land, we may occasionally see a delivery of farm equipment.

Empty livestock wagons arrive and the cattle pens are emptied and subsequently disinfected. Transportation of animals to the markets of Gloucester and Oxford would occur twice weekly. It is probably the only outward-bound 'export' from Windrush. In medieval times, the Cotswolds supported thousands of sheep; Cotswold lions as they were known. The quality of their wool was unsurpassed and it was traded internationally. In the 1950s, little had changed although some farms had converted to dairy cattle and pig farming was gaining in popularity.

When you see the movement of these trains,

you will notice that again, everything is done for a purpose. Loaded wagons arrive; empty wagons are collected by the goods engine and returned to the Junction. The livestock departures are similarly treated although care is taken to ensure that any such populated vehicles are positioned nearest to the engine as it departs.

Shunting

As far as we are concerned, this is an exact science. There is a right way and a wrong way. Until the day ever arrives whereupon we can get 4mm scale-sized personnel to uncouple scale sized chain, we have to look at other options. For our purposes, the choice was easy, as both Tom and I use Model Signal Engineering Sprat & Winkle remote action coupling/uncoupling units all set to a specific standard in accordance with the manufacturer's instructions. It is true that there are more

unobtrusive designs, but in all honesty, we have yet to find anything that beats them. The latest variant with the delay latch allows a certain amount of flexibility hitherto unknown and provides the user with a lot more operational scope. We do not use the smaller 3mm sized coupling/uncoupling units that some people seem to recommend. Our philosophy is that the manufacturer designed the couplings that we use for our particular scale and we are more than happy with them.

We refuse actively to operate three-link couplings. We do use them in a passive role where specific wagons remain permanently coupled. Our eyesight and wobbly hands/fingers mean that we cannot see to uncouple them! Moreover, we think that the public don't want to see the proverbial hand of God with shunting pole fiddling back and forth in the forlorn hope that one day, we will manage to join or part wagons! We admire those brave souls who still use this technique of coupling and agree that they do look good, but oh dear, what a pain to use. It would have been so uncomfortable to operate such devices with *Windrush*, to lean and strain your arms over obstructions such as signals, buildings and trains then, in full view of the public fumble about with a 'shunting pole'. Moreover, it would have destroyed the 'theatre' image and probably would have meant the inability to have the

Above left: an LMS mixed-traffic 'Mickey Mouse' arrives with a mixed freight from the junction at Sherborne.

Below: an immaculate Pannier tank, displaying the post-modernization plan BR totem pushes a less than immaculate wagon from the headshunt into the goods yard.

Above right: the last weekend's engineering work sees spoil debris in the Grampus wagon, as Gloucester 3F 0-6-0 No.43645 pulls its train into the headshunt.

Right: the only time you will see an operator presence is when it is time to load or unload wagons in the yard.



depth of field realism that *Windrush* provides whilst ruining the possibility of a realistic backscene.

It is a compromise solution, whereby we actually set up some wagon rakes with an intermediate set of three-link chains (because they do look good – let's be honest) but retain the Sprat & Winkles where appropriate. There is another reason for having some three-link vehicles, because at times the Sprat & Winkles work too well, uncoupling when and where you don't want it to happen. This has taught me one very important rule: If you use the standard permanent magnets, then make sure you place them inch-perfect. In hindsight, electromagnets would have provided the answer, but you learn by your mistakes. The answer therefore is to set up your rake of wagons so that you always have the Sprat & Winkles where you wish to uncouple and where it isn't necessary, use three-link.

Remote uncoupling also encourages you to be more exact about the type of locomotive you employ for shunting. In order to be used on *Windrush*, all locos have to be capable of creeping at the slowest possible speed. Any jerkiness can result in the operator having to waltz the loco back and forth until uncoupling has been achieved...much to the frustration of the operator and the consternation of the public, or is it the other way around? Essentially, positioning the vehicles that need to be uncoupled accurately takes practice and confidence in the loco that you are using and the controller that you have. Gaugemaster standard units without any feedback frills are used, and as you can more or less do all the required movements from one upright position, there is really no need for a hand-held controller. Strangely enough, both Tom and I are of the same opinion that desk/panel-mounted controllers are more suitable for our purposes than hand-held units.

I mention that shunting is a science. Maybe that is a subjective comment, but with *Windrush* it does require some thought. On arrival a goods train makes use of the main



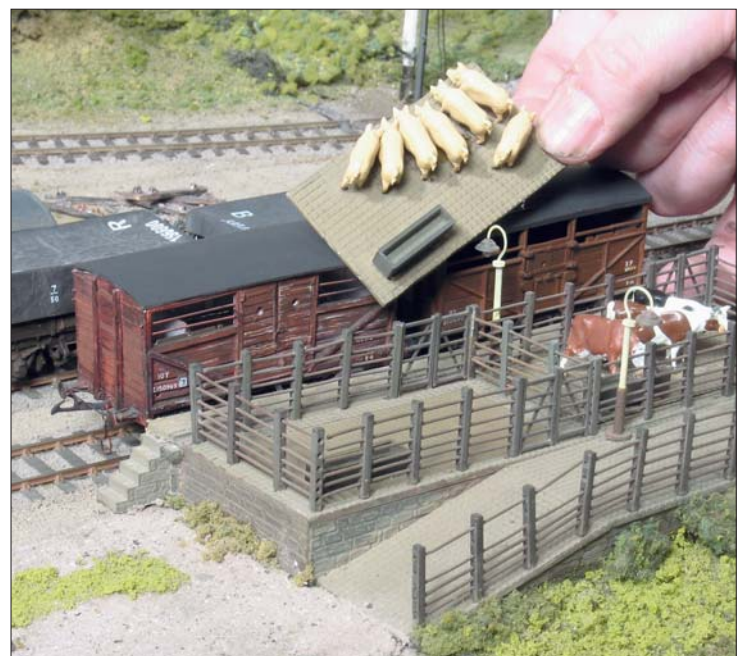
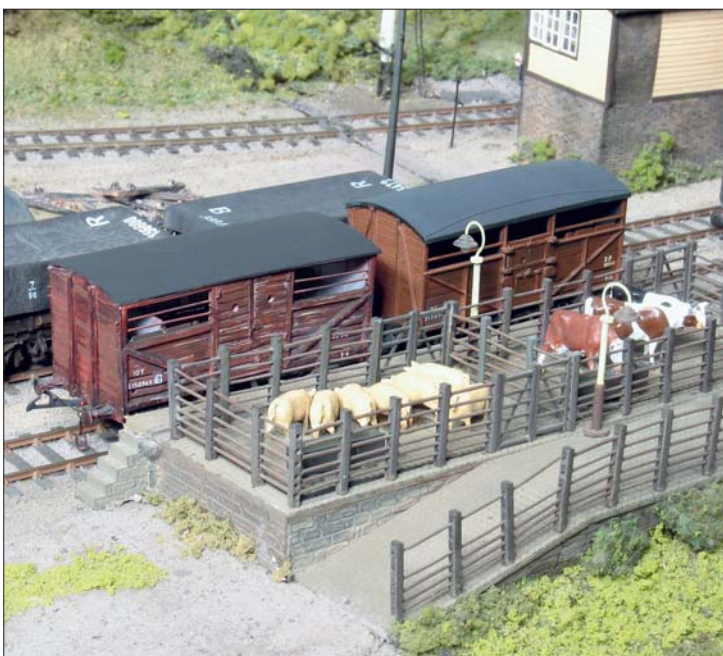
passenger platform and the loco is detached from its train. In order not to be stranded, the number of wagons in a train is restricted to about four or five plus brake van. The loco heads forward into the kickback and the points are set so that it can run around its train and detach the brake. The brake is then taken up into the run-round loop kickback and there it will remain for the time being. The loco will then reposition itself back to where it brought the train in, but will now propel its wagons back to the signal box and will await the calling on bracket signal to gain access to the goods yard.

Although the goods yard is very simple, you still have to think about what you are doing. The aim is to take away the empty wagons and leave the arrivals for unloading. This is not as easy as it seems because both sidings are dual-purpose, coal and cattle in the 'open' siding and other merchandise in the goods shed

road by the lifting crane. It stands to reason that if you have empty coal wagons and perhaps livestock ready for removal and departure, you must arrange the vehicles correctly so that they are in the right position when ready for departure. Moreover, the wagons that you brought in have to be left in a convenient position for unloading.

By and large, this is achieved 'hands free'. All being well, the only time that the public will see us and the only time (we hope) that we have to touch a wagon or load is when we remove a wagonload or 'populate/unpopulate' the cattle dock.

All loads are removable from the wagons except for livestock. So far we have not figured out how to get pigs, sheep and cattle into a van, so until we do, you will see that we actually have made false floors for the cattle dock. Two as 'Empty' and two as 'Full'. We switch them as required!





Left: ex-GWR 2-6-0 No.5321 from Taunton shed gets a passenger train under way to its home location via Cheltenham, Gloucester and Bristol Temple Meads. It will be 'strengthened' at Sherborne and again at Gloucester.

Below: LNER J25 0-6-0s were borrowed by the Great Western during the Second World War and at least one was shedded at Cheltenham during that period. Mainly they were repatriated in the late forties, but it seems as if one has been overlooked.

The locomotives

In the main, this is a Western Region branch line but the two principal MPDs for supplying locos would probably have been Gloucester Barnwood (ex-LMS) 22B and Gloucester Horton Road (ex-GWR) 85B. By the mid-1950s, both depots came under WR control.

The Barnwood engines are mainly worn-out 3F and 4F freight locos. Occasionally something more modern, such as an Ivatt 2MT or even a BR Standard Mogul from Saltley gets commandeered.

One dear old 0-6-0 loco that we use is an LNER J25. During the war years, the GWR handed over to the War Department Railway Operating Division a large quantity of Dean Goods 0-6-0 locomotives. They embarked to France with the BEF (British Expeditionary Forces) who sadly had to abandon them at the time of the Dunkirk evacuation. It left the GWR desperately short of motive power and to make up the deficiencies, surplus engines such as some J25s found themselves a new lease of life in the West Country. Several examples were based at Worcester and photographic evidence shows at least one example shunting at Cheltenham. Admittedly, these locos were repatriated to the north-east during the late 1940s at about the time when nationalisation took place. By that time, the GWR or Western Region had sufficient quantities of its own 2251 Class 0-6-0s to carry on where the J25 and Dean Goods engines left off. We choose to believe that an odd example is still at work in the west!

The Windrush branch is a WR 'blue disc' route and thus any loco within that power category would become a candidate for operation. In terms of passenger, parcels traffic and some freight, various types of ex-GWR engines are used. In the main, 0-6-0PT Panniers, 2-6-2T Small Prairies, 0-6-0 2251 Class and 2-6-0 Mogul tender engines are used.

Tom takes care of the ex-LMS engines and I look after the ex-GWR ones. His engines are usually kit-built or heavily modified (usually beyond all recognition) proprietary. Mine are

all made in China by Bachmann. There are surprisingly different operating techniques between the two types. With the Bachmann engines, a feather-light control touch is needed. The kit-built and modified ones usually take more juice and are geared in the 40:1 ratio, ready for shunting moves.

The rolling stock

Essentially, the majority of passenger and freight vehicles are pre-war examples. As this is a branch line, it is very unlikely that you would see the most up-to-date types on *Windrush*. Passenger stock is ex-GWR and as already indicated B set, auto trailer, and when appropriate, corridor stock would be drawn from cascaded main line sources. In all probability, these vehicles originate from designs by Collett or his successor, Hawksworth. Modified proprietary models are used to provide us with our complement of passenger trains. Parcels vehicles are from the same source of origin and are

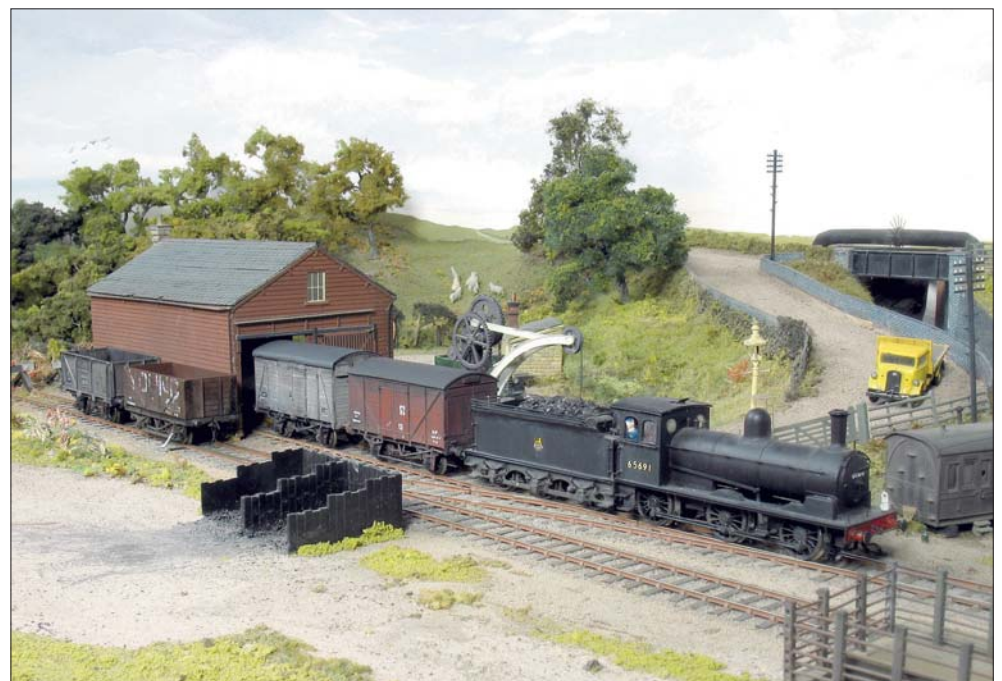
mainly modified proprietary types. There are some kits-to-be-built Hawksworth coaches under construction, but not yet in service with our layout!

Goods vehicles and other (non-revenue earning) stock is again from pre-war days. Mostly, goods trains can consist of vehicles from various sources, ex-private owner or from the Big Four companies. Bearing in mind that this is a Western Region area, the brake vans employed are more often than not, ex-GWR Toads. However, shortages of WR brake vans can see other types employed every so often.

In the post-war years, the extensive nationalisation building plan is well under way. However, orders to construct replacement freight vehicles for those worn out and beyond economical repair are slow to materialise. Such a new generation of freight vehicles is yet to be seen in our branch line traffic, apart from perhaps, a BR-built brake van. The majority of the wagons and vans we use are of the pre-war type or design. In fact you will no doubt notice the occasional ex-private owner mineral wagon used in coal traffic and similar ex-Big Four stock in general use. We rely on kit-built freight vehicles, mainly equipped with Jackson type wheels. For back-to-back reliability, we find them most suitable for our needs.

To be continued.

The layout is booked to appear at the Wigan show on 9 and 10 December. See Societies & Clubs for details.



Ballyconbeg

Baile an Chuain Bhig

Irish prototype modelling in 4mm by WEXFORD MODEL RAILWAY CLUB, described by DAVID BRYAN.

Ballyconbeg – or in Gaelic Baile an Chuain Bhig, which translates into Town of the Little Harbour – is an OO Irish outline layout of the Wexford Model Railway Club, designed and built by club members. The layout was conceived as a showcase for club members' mostly scratchbuilt modern image Irish outline models (of which more anon) and depicts current Irish railway practice in a realistic rural coastal setting, with models representing many types of stock currently in use with Iarnród Éireann (Irish Rail).

Although *Ballyconbeg* is in itself a fictional creation, all the buildings seen on the layout are based on real structures. One of the main features depicted on the layout (looking from left to right) is the village of Ballyconbeg, with its mixture of traditional shop fronts and modern convenience stores. Then we have the station with its working scratchbuilt station lights. Next along is the small harbour that provides the layout with its name and is complete with its trawlers and a fish processing plant. Further along is the depiction of a Bord na Móna (Irish Turf Board) modern narrow gauge line. Interspersed throughout the layout are depicted smaller buildings of traditional and modern construction that attempt to recreate a dichotomy very noticeable in modern Ireland, which is the contrast between the traditional and the modern.

Baseboard construction follows the traditional method of 2" x 1" wooden frame construction, although this is covered with 1/4" ply only where tracks are to be placed. Leaving the baseboard open in this manner allows for the easier representation of the rolling Irish countryside so typical of the area being modelled.

Scenery is constructed using tried and trusted methods. Polystyrene is cut to shape and given a thin skim of wall filler dyed green, which is in turn overlaid with various flock powders. Roads are wall filler suitably smoothed and painted an appropriate colour. Trees were made from scratch use various methods, all a variation on the tried and trusted method of twisted wire. Both semaphore

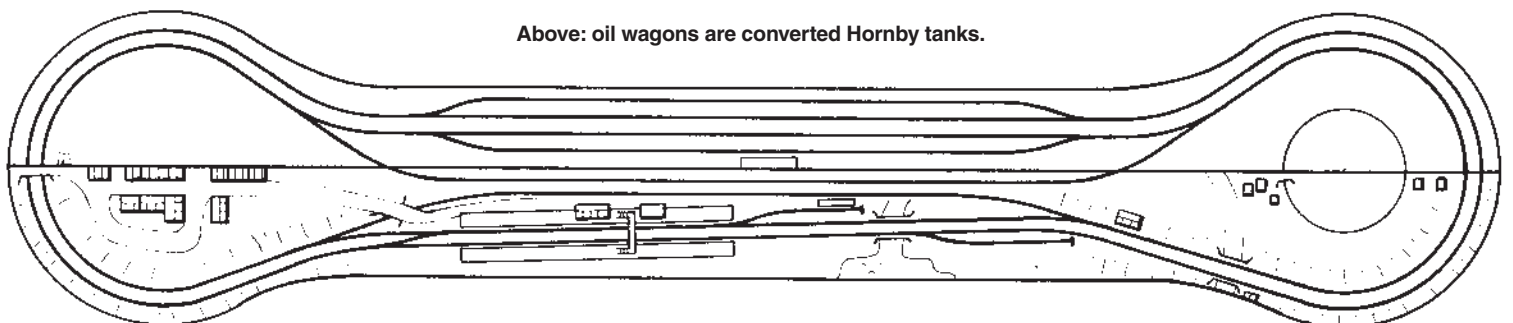


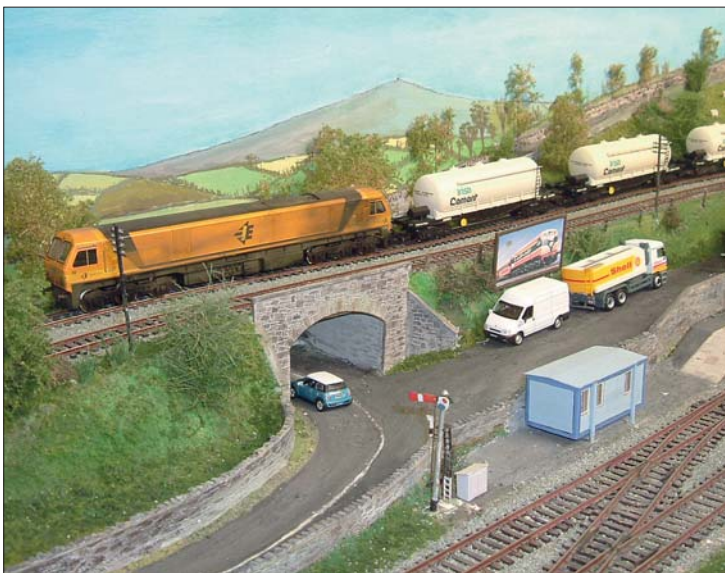
and colour-light signals are depicted on the layout, and all are scratchbuilt from brass tube and odds and ends. All the signals operate and

Top: 071 Class Co-Co No.074 passes the camera with a container train.

are a good representation of current IE practice, although with the current massive government investment in the railways, semaphore signals will very soon be a thing of the past on IE.

Above: oil wagons are converted Hornby tanks.





Rolling Stock for *Ballyconbeg*

Item	Constructed from
<i>Irish Rail locomotives</i>	
A Class	Scratchbuilt and Q Kits-built examples, on converted Class 55 chassis
121 Class	Scratchbuilt and Model Irish Railways (MIR) examples, on modified Athearn chassis
141 Class	Scratchbuilt and MIR, on modified Athearn chassis and modified Lima Class 33
071 Class	Scratchbuilt and MIR examples, on modified Athearn chassis
201 Class	Scratchbuilt and MIR examples, on modified Athearn chassis
<i>Northern Ireland Railways locomotives</i>	
Hunslet Class	MIR kit, Lima DMU chassis
071 Class	MIR kit, modified Athearn chassis
<i>Irish Rail railcars</i>	
2600 Class	Scratchbuilt, Lima DMU chassis
2900 Class	Scratchbuilt, Lima DMU chassis
New push-pull	Scratchbuilt, chassis modified HST power cars
<i>NIR railcars</i>	
80 Class	MIR kit, Lima Class 33 chassis
<i>Coaching stock</i>	
Mk.I	Converted Lima Mk.IIbs
Mk.II, two liveries	Lima models
Mk.III	Lima models
Executive livery	Lima models
NIR Mk.II	Lima models
<i>Freight stock</i>	
IE beet train	4-wheel stock – scratchbuilt on a Lima chassis, bogie stock – scratchbuilt on a 40' container chassis
IE ballast wagons	Scratchbuilt on a Lima chassis
IE ore wagons	Used on workings from Tara Mines – scratchbuilt on a Hornby chassis
IE keg wagon	For Guinness traffic – MIR kit
IE oil wagons	Converted Hornby oil tanks
IE timber wagons	Both laden and empty – scratchbuilt on a 40' container chassis
IE liner wagons	Scratchbuilt on a container chassis
IE spoil wagons	Scratchbuilt on a container chassis
IE pallet wagon	Scratchbuilt on a container chassis
IE cement wagons	Bogie stock – MIR kit, pallet cement wagons are scratchbuilt on a Lima chassis
IE brake van	Scratchbuilt on a Lima chassis
NIR brake van	Scratchbuilt on a Lima chassis
NIR ballast wagons	Lima conversions
<i>Miscellaneous Stock</i>	
Bord na Móna loco	Scratchbuilt on 009 chassis
Turf wagons	Scratchbuilt on N gauge bogies
Tracklaying wagons	Scratchbuilt on a Pacer chassis
Track machines	Scratchbuilt on a Pacer chassis

At a very early stage it was decided that this layout's track gauge would be the standard 16.5mm, rather than the 21mm that accurately represents Ireland's 5'3" track gauge. There are a number of reasons for this decision but the primary factor was that there were large quantities of 16.5mm stock already built by club members and little desire was shown either to construct new stock or adapt existing stock to

21mm. Therefore standard Peco code 100 flexible track is used in conjunction with Peco points and point motors through the layout.

The trackwork is ballasted throughout with granite chippings, using the standard PVA/washing-up liquid method and the rails are painted an authentic track colour to create an accurate representation of the permanent way.

All buildings on the layout are scratchbuilt

from waste cardboard, and while most of the buildings are constructed in three dimensional form many of the buildings, particularly those close to the backscene, are modelled in half-relief with only their front facades being modelled. All the buildings on the layout are based upon real structures. For example the signal cabin at the main station is modelled on that in Arklow; the smaller cabin is based

Opposite page, from top: a varied selection of motive power runs on the layout, including examples of IE classes 201, 141 and A, plus one of the NIR Hunslet-built machines.

Right: access to the signal box is via the footbridge – a distinctive arrangement.

Centre right: the townscape.

Bottom right: NIR 071 and Mk.II coaches.
Photographs courtesy Wexford MRC.

on an example that once stood at the now closed Wexford South Station. Similarly the cement store is a representation of standard CIE cement stores that were constructed at various locations around the country in the early 1970s. The pub in the centre of the layout is a model of a real pub located close to Wexford town.

Club members feel that the juxtaposition of models of real structures into a fictional setting helps to imbue the layout with an authentic atmosphere. If *Ballyconbeg* has a *raison d'être* it is to provide an appropriate setting for the large quantity and indeed variety of Irish prototype models constructed by club members in the last few years. At exhibitions one could expect to see all varieties of rolling stock currently in use in Ireland, and not just Iarnród Éireann trains but also Northern Ireland Railways as well. Whilst the main types of stock are listed in a separate table with building methods and donor vehicles, here I would like to detail what is involved in scratch-building Irish rolling stock.

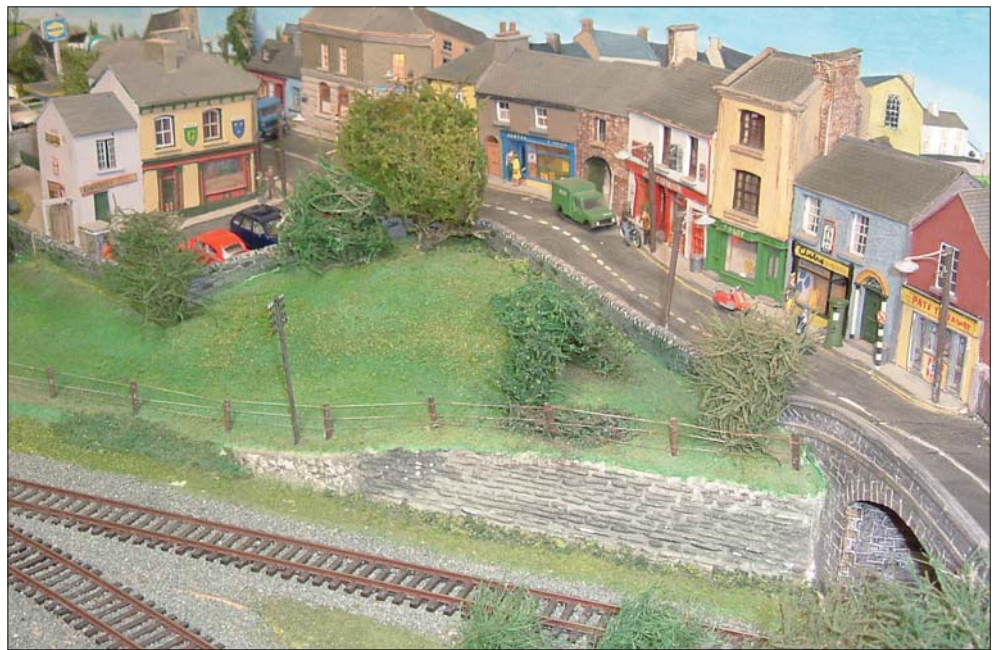
Firstly I should point out that even where proprietary rolling stock is available, vehicles are generally upgraded by repainting or with the addition of internal or external lights, passengers or other items to improve their appearance. The scratchbuilt IE cement wagons are constructed on an adapted Bachmann chassis. The cement tank itself is cast in liquid plastic from a mould that was created from an oak former with additional detail made from plasticard, strip and rod.

Ballyconbeg up to now, has only been exhibited at exhibitions around Ireland, but the layout will make its UK debut at the forthcoming Warley Show at the NEC in Birmingham over the weekend of 2 and 3 December, where Club members are looking forward to renewing old friendships and indeed forging new ones.

Anyone interested in joining our club should come along any Tuesday night (19.30 to 21.30) and similarly, UK-based modellers who find themselves visiting Ireland are invited to visit us at our club premises at Rathspeck just outside Wexford town where they will be made most welcome and can take the opportunity to view our other club layouts.

The layout in both its construction and exhibition has provided hours of enjoyment for club members and we sincerely hope that it will elicit a similar response from those who view it at the Warley show in the NEC Birmingham over the first weekend in December.

Other exhibition managers interested in having the layout at their show should contact the club secretary: email Bryfam5@eircom.net



Freelance G scale signal cabin

Scratchbuilt in plastic and wood

A generic structure inspired by Great Central and Furness prototypes, built by **MIKE GARFORTH**.

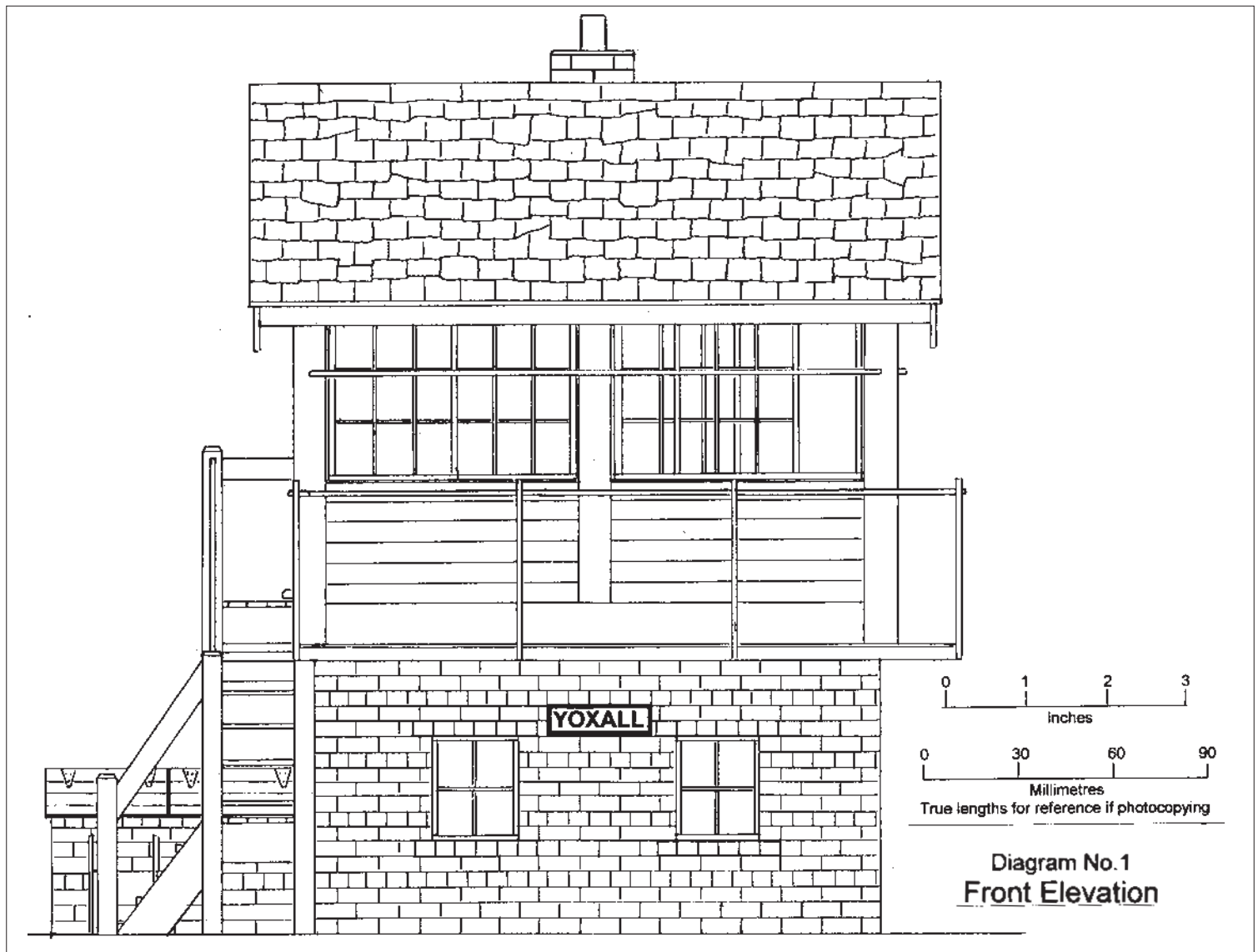
One of the many advantages of having grandchildren is that you get the opportunity to build models for them. Such was the case with this project. I have, for the past 25 years, been an avid modeller of North American railroads but have always had a yen to model some of the typical British railway buildings and line-side features. Thus with three grandsons, two in this country and one in Belgium, and all with model railways, the opportunity to branch out into slightly different spheres proved too great.

Andrew, and his brother Daniel, share a garden railway with their father, and they also manage to spread their LGB™ track between their bedrooms and across any other available



floor space. Their locomotives and rolling stock may not be entirely British in outline but when you are nine and six, that is no great problem. Thus I decided to indulge myself and build a generic British signal box that would serve both the garden and indoor layouts.

The initial impetus for the project came about during a visit to the National Railway Museum at York in 2002. There was an excellent display on signalling with a life-size two-dimensional mock-up of a signal cabin interior. It looked too good not to be used as the basis for a model, thus out came my trusty 35mm camera and I had a couple of shots of a typical signal box interior. My good friend





and computer-literate buddy, Jack Halliday, enlarged the 35mm slides into exact 1:24 scale print images, the basis of my model. More of those images later.

A visit to the Great Central Railway in 2003 provided the opportunity to capture images of the signal box at Rothley, which to me looked

Above left and right: the signal cabins at Rothley and Ravenglass provided much detail information on typical boxes.

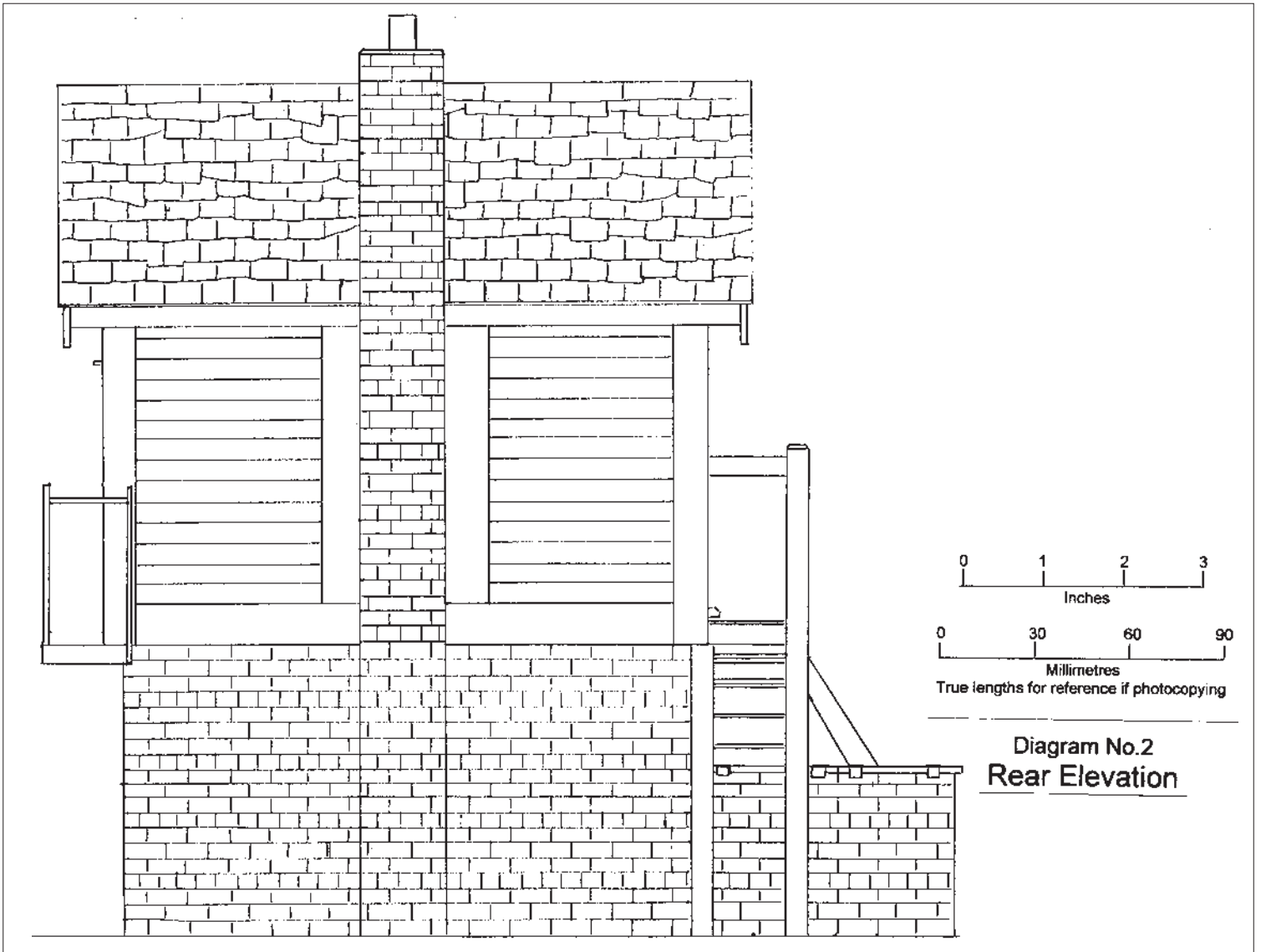
Photographs by the author.

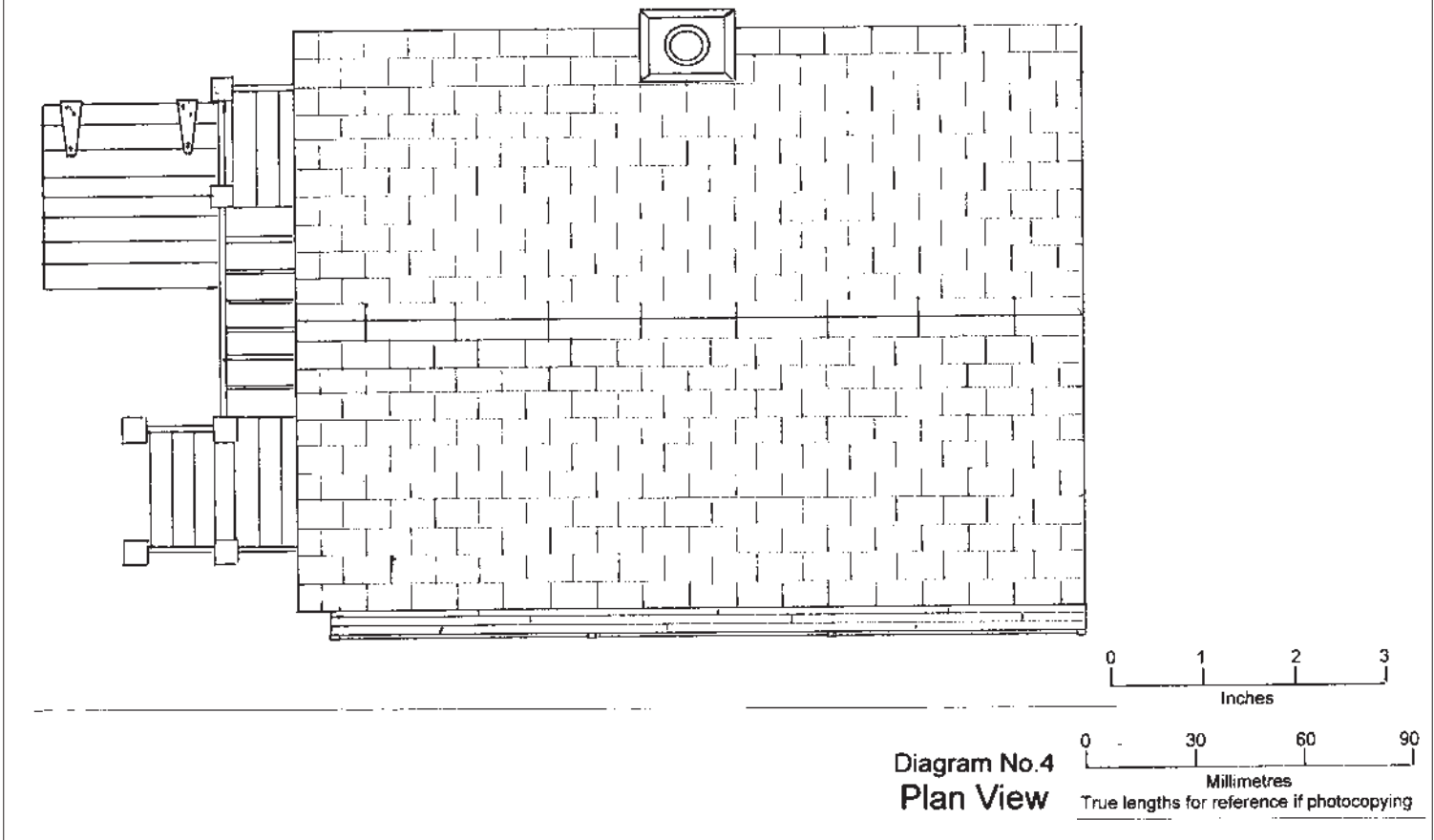
very much like your typical British signal box. A visit to the preserved Furness Railway box at Ravenglass provided a couple of photographs of a working box interior and thus I had enough visual information to start doodling away and come up with my own version of a generic box.

As with all projects there were a couple of limiting or desired factors that I had to take into account. Firstly it had to look right. Secondly I wanted it to contain a couple of operating lights as I know that young boys like

operating things in the dark as proved by their fascination with torches. The interior was to be fairly complete including a set of levers, and finally, the model should stand a fair amount of handling and be able to withstand a typical British shower of rain.

The drawings included with this article do not contain precise dimensional data, but should you wish to photocopy them I have included a standard measure of 3" or 90mm. Thus all you need to do is enlarge the drawing (by 200%) to get an exact 3" or 90mm.





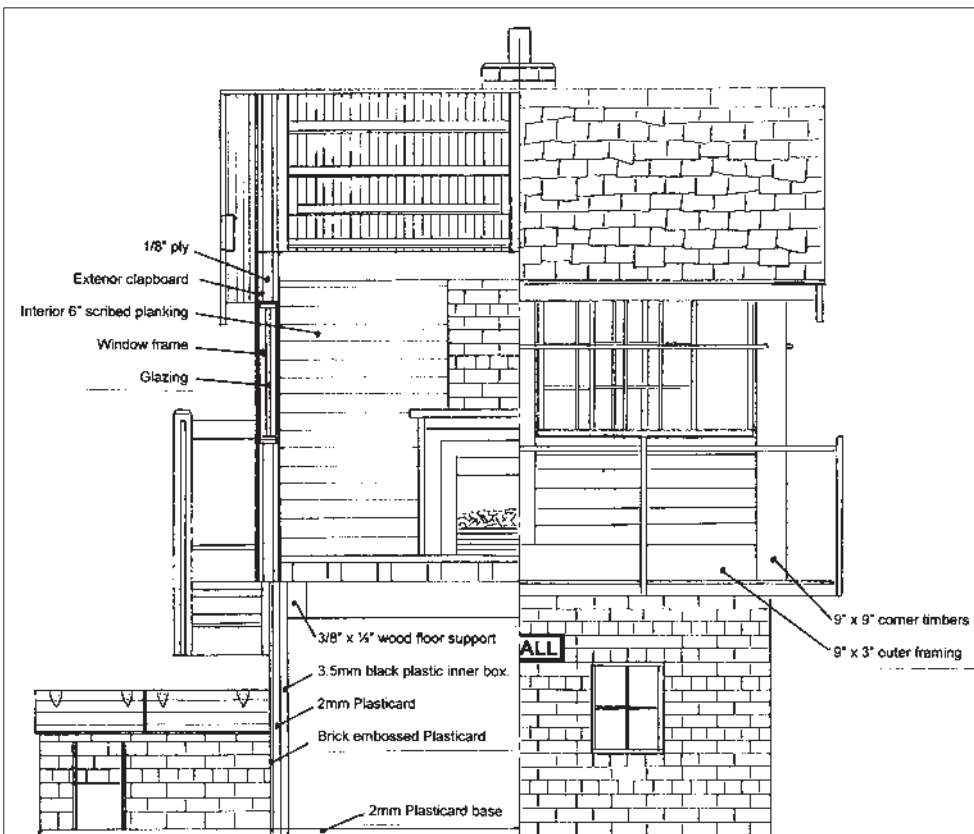
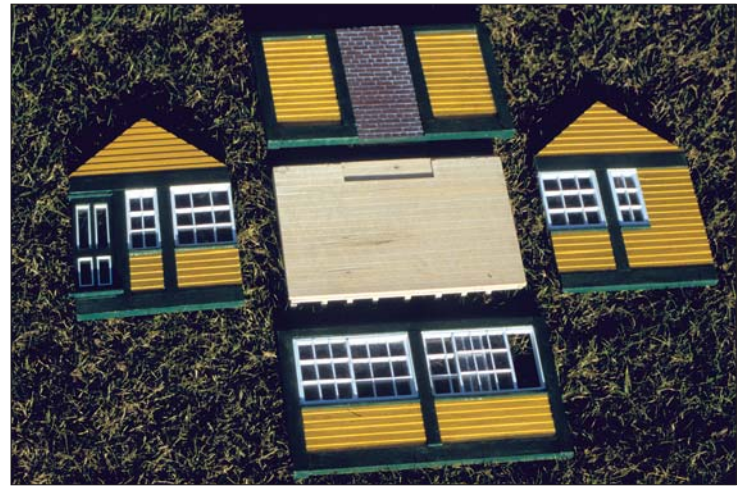
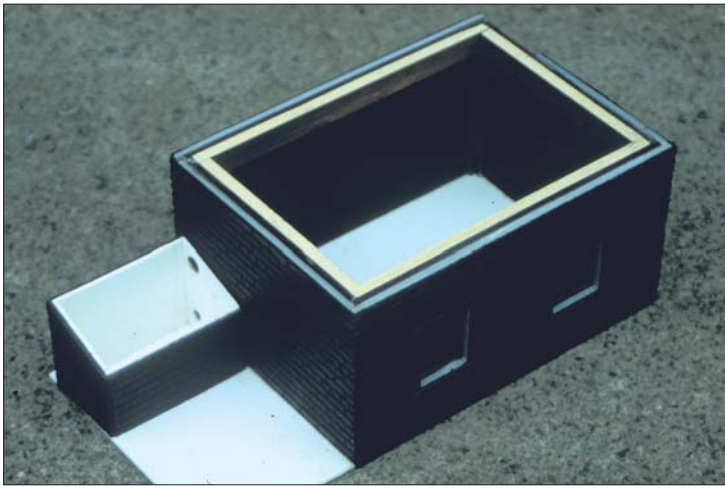


Diagram No.5
Half Front Sectional View
Section line through building centre line.

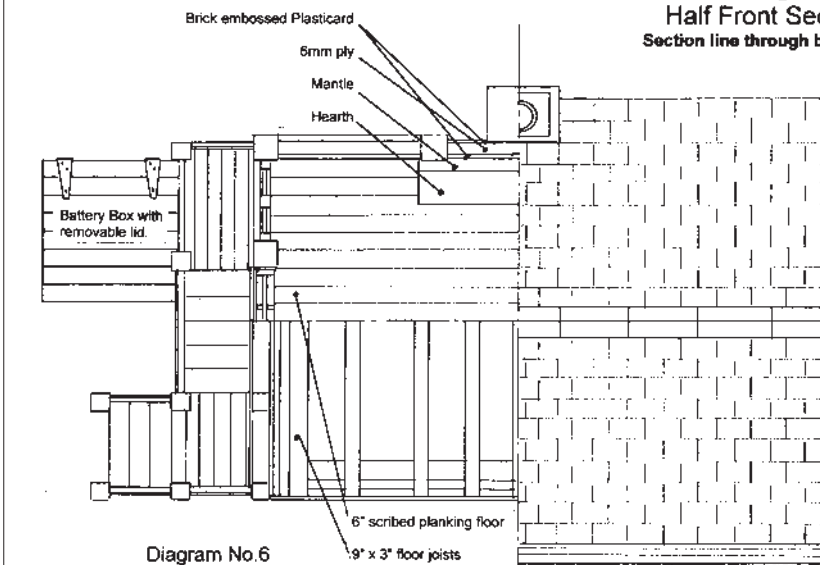


Diagram No.6
Half Plan Section
Section line at floor level on upper section
& at floor beam support level below floor level.

Drawings 5 & 6 not to scale

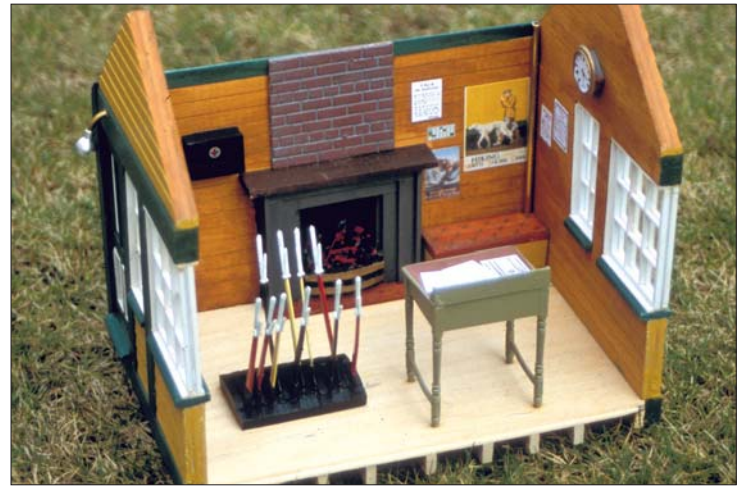
The model was constructed as four basic units; the base structure, the cabin, the roof, and finally the stairway. I hope that the photographs illustrate the general form of each unit.

The base structure was built on a base of 2mm plasticard. There is an internal box built of 3.5mm black plastic sheet. I obtained a fairly large sheet of this from a local plastic sign-making company. To this is glued an outer sheath of 2mm plasticard, and finally this was covered with 1:24 scale brick embossed plastic (from Brandbright). I did not want the windows to be see-through so the window openings are not cut into the inner black walls. Thus the end result is a black window appearance, just what you would expect from the under-floor area of a signal box! The door and window frames are constructed from plasticard strip.

I glued a strip of 3/8" x 1/2" wood around the upper edge of the inner walls to give a firm base on which to glue the cabin unit later.

Also at this stage I added the coal and tool bin unit. This is in reality the battery box with a removable lid with the on/off switch inside. The four 1.5v batteries are located in a holder that can easily be removed for battery changes. I did make sure there was sufficient wire to enable the holder to come free of the bin. I also ran the wires into the base unit and ensured a clear hole up through the wood strip to permit the wires to enter the upper cabin. The lighting system was tested at this stage, just to make sure it worked, simple though it is.





Top left: the complete instrument shelf fitted to the inner front wall before final assembly.

Top right: the detailed interior with lever frame, desk, fireplace, clock, first aid kit and bench seat etc before final assembly of the cabin.

Above: view through the rafters from the rear.

Above right and below: the finished model.

Photographs and drawings by the author.

The brickwork was painted by firstly covering all the walls with Humbrol No.70 matt brick red finish and then, when completely dry, applying a light coat of acrylic 'cement' (white acrylic paint darkened with a slight touch of black) and immediately wiping most of it away with a cloth to leave the cement joints highlighted. It is not a bad idea to practice the technique on a spare piece of brick sheet first.

Next in line for building was the cabin. This,

as is shown in the photographs, consists of five parts, four walls and a floor. These are all built in wood. Certainly, the building would spend some of its life in the great outdoors, but experience has shown that the North Eastern scale lumber (basswood) used can withstand a fair amount of good damp British weather!

In describing the construction of the cabin, roof and staircase I have used full size dimensions, thus you would need to select the appropriate wood or plastic to suit whatever scale in



which you are working. I adopted my normal approach to the cabin walls by firstly cutting out what would be the middle of the wall sandwich from 1/8" ply. To this basic form I then used exterior grade white glue to hold in place the outer framing of 9" x 3" timbers. I should add at this stage that my normal practice is to paint all wood fully with acrylics before assembly as this ensures good coverage and eliminates the need for fiddly paintbrush work later on. The clapboard was then fitted between the frames on the outer surfaces and 6" scribed planking used to cover the inner walls. The end result was walls a good scale 9" thick, sufficient depth upon which to build the windows. The corner posts made of 9" x 9" timbers were fixed to the front and rear walls only at this stage. On the rear wall the plastic brick sheet was applied and painted before the clapboard and framing were added.

The floor was now constructed using 9" x 3" joists and scribed 6" planking. The hearth was fitted to the floor and the fireplace added to the inner rear wall so it rested on top of the hearth. I was now ready to try a test fit of the walls and floor using some long rubber bands to hold things in place whilst I checked all was OK before progressing to the next stage, the windows.

First step was to fix a basic frame of 8" x 1". I then fixed an inner frame of 2" x 2"s, and next was a glaze of 1/16" clear Perspex followed by an outer 2" x 2" frame. Note that on the two large windows in the front wall the frame members also include the vertical centre pieces. You will see from the photos that I opted to make one window partially open which serves two main purposes; firstly it gives a clear view into the detailed interior and secondly it does give a more 'lived in' appearance to the structure. Finally the glazing frames of 2" x 1" were now added.

Another test fit to ensure that the frames had not caused a problem where they met the corner posts, and I was ready to add the internal details. The lever frame and desk had been



Above: the cabin has finally come to rest on the garden railway in Yoxall, its namesake location. One of Andrew's dad Dave's locos passes Yoxall box.

fundamental in initially determining the floor space required. These and some of the signal box telegraphic details had come as a kit from Back 2 Bay 6 (see supplier listing). Painting the levers was greatly helped by having the colour photographs taken a couple of years earlier – forward planning! I added a few sheets of notes to the desk top and a shelf to hold the telegraphic equipment along the inner front wall.

I did drill holes in the floor to hold the desk legs securely in place and then added some cyano cement to ensure that it would not work loose. The lever frame was glued with cyano to the unpainted floor.

The enlarged photograph from the NRM display mentioned at the start of this article now came into its own. I cut out the telegraph, bell alarm and first aid box fronts and glued them to wooden cabinets. The line of dials and indicators was simply glued to the shelf front and the clock fixed to the side wall. I added a few scale posters and railway notices to the walls and a glowing fire to the fireplace, real coal with painted-on flames! The brick chimney breast was also added to the inner rear wall.

One final check to ensure that all fitted together well and I glued the four walls together and when dry added the floor and glued that in place. Now it was time to tackle the chimney and roof.

The chimney stack is simply a piece of 2" x 3/4" wood covered with plastic brick sheet with a 3/8" dowel as the chimney pot. This was then glued to the rear wall ensuring that it was vertical with an engineer's square.

I wanted the roof to be removable – no good having all those interior details in place if you can't see them! After some thought I opted to fit the roof support beams (rafters) to the cabin itself and have the roof as a simple drop-on unit. I built the three roof 'A' frames from 9" x 4" timbers, glued one to each end wall and one centrally across the cabin. I then fitted the central internal 6v grain of wheat bulb into a plastic light shade and connected it to the wires already in place. The 3" x 2" rafters were now added, thus you saw the interior through the rafter gaps, quite an effective view.

The roof was constructed in halves, each with a basic 1/8" ply inner to which was added scribed 3" planking internally and, when joined, plastic slating to the outer. The internal planking was painted flat white. The slates were painted Humbrol No.96 matt RAF blue and then weathered with thin washes of various acrylic colours until I achieved a reasonable weathered appearance.

The wood trim was then added to the roof. I did add secondary end bargeboards to form a snug fit against the cabin end walls to ensure that the roof had a good fit onto the cabin and did not move about. I then made three name boards and used some rub-on lettering to produce the name Yoxall. Please don't go looking at your old railway atlas – there was never a railway to Yoxall but that is where the owner lives, the advantage of freelance scratchbuilding!

The external access platform was constructed using plastic angle with plastic tread, wooden support posts and a metal handrail. The final stage was to add the staircase. This was built onto the cabin and base using 6" support posts, 2" x 6" handrails, 2" x 6" planking and 3" x 9" steps.

Last but not least came Charles, the friendly signalman waving to the passing train crew, an SLM 1:24 scale figure from Back 2 Bay 6.

Now all that remains is to build a matching country station for Daniel!

Suppliers

North Eastern Scale Lumber, 99 Cross Street, Methuen, MA01844, USA.
www.northeasternscalelumber.com

Back 2 Bay 6, Unit B26, Maw's Craft Centre, Jackfield, Ironbridge, Telford, Shropshire TF8 7LS. 01952 884785. www.back2bay6.com

Brandbright, The Old School, Cromer Road, Bodham, Holt, Norfolk NR25 6QG. 01263 588755. www.brandbright.co.uk

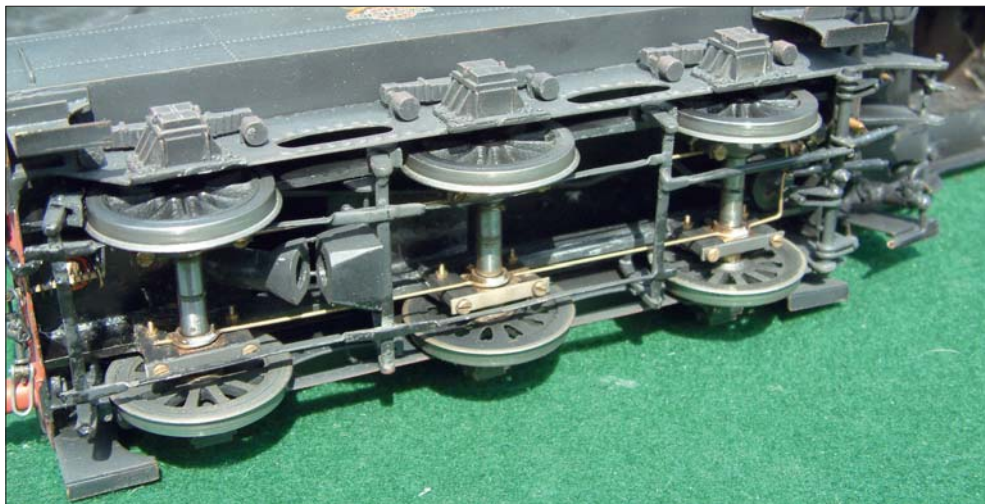
Efficient 0 gauge DCC

Reliable running for larger locomotives

PHIL BECKEY and CHRIS HODDINOTT outline their current collection ideas for digital-fitted locos.

Reliability and smooth running are the hallmarks of an efficient model railway whichever gauge you use. Different gauges present different advantages and problems, but a look at 0 gauge DCC presents an opportunity to use more engineering-based modelling skills to help improve overall reliability. As a prerequisite to more sophisticated locomotive improvement work, the track must be well-laid and in good condition for the modifications to be effective, whether indoors or out in the garden.

DCC is still relatively new and as it develops, it continues to become more sophisticated, but certain more obvious and basic requirements prevail. A free-running gearbox and precautions such as using plastic brake shoes to prevent electrical shorts, help to keep the



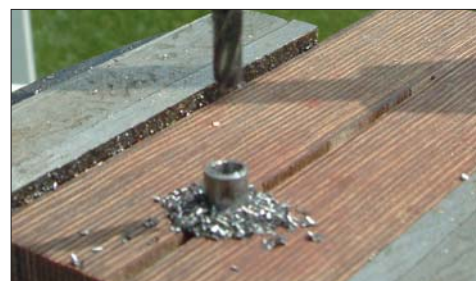
Above: the underside of the finished tender showing the split axles in situ. This is what to aim for.



Left: the plastic brake shoes fitted to help prevent electrical short circuits.



Lower left: the spring suspension ensures a good contact between wheel and rail. Any unevenness in the track will be accommodated by the suspension.



Right: the axle in a pre-drilled block of wood awaits the drill. Secure the wood in place to retain the same vertical axis for the drill bit.



Lower right: a 'POP' rivet and a section of one ready to be used.

Bottom: the bare assembly ready to accept the axles.

Photographs by the authors.

wheels turning. When using DCC, total electrical insulation of the motor from the chassis is required so that all the current supply is passed through the decoder module. Nothing must be live on the loco. But a more detailed study reveals that the sum of several construction features has a combined effect.

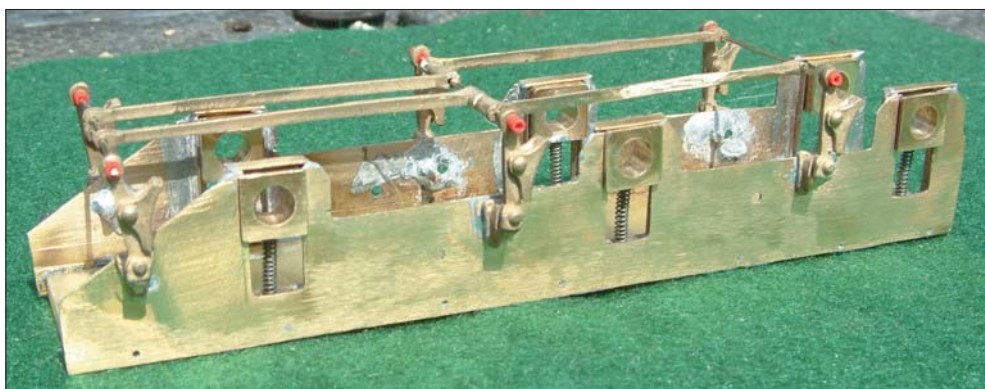
Consider the supply of current to the locomotive. This has to be constant and reliable. Spring pick-ups are not fully reliable on a garden railway where the track is sometimes subject to adverse conditions, nor on an indoor layout where, perhaps, finer control is needed. The American system of using one side pick-up on the engine and the opposite side pick-up on the tender was also problematic owing to electrical shorts when double-heading. Plunger pick-ups are also less efficient owing to excess friction.

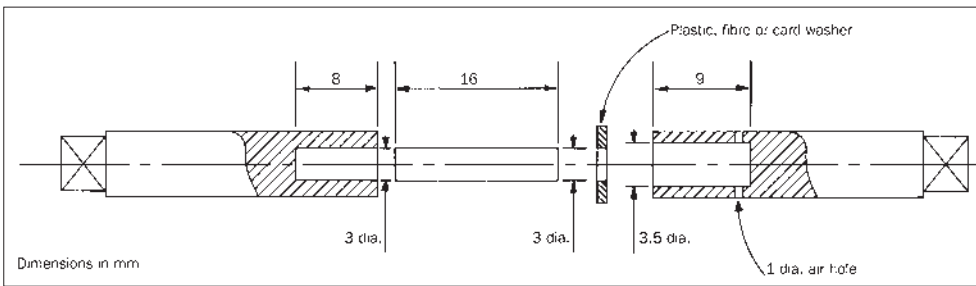
To guarantee a good result, sprung wheel suspension is high on the priorities to make

sure that the wheels are in continuous contact with the track. Slater's manufactures a plastic hornblock/hornguide system to provide wheel suspension and axle insulation from the chassis. When the axles are installed in the tender, the track current will flow through the

wheels, via the hornblocks which are connected to the DCC module. The use of tender-only pick-ups and suspension is worth considering and found to be satisfactory.

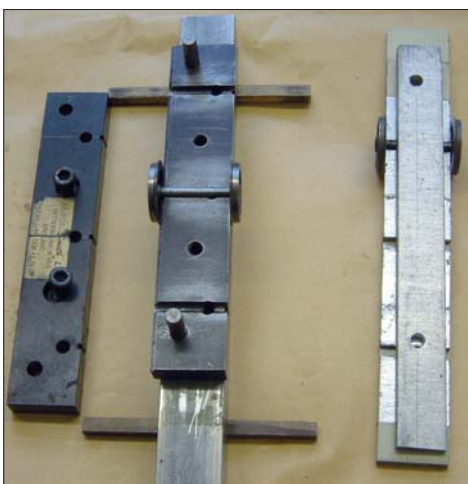
The wheels on the same axle must be insulated from each other to prevent an electrical





short circuit across the track. To achieve this, a split axle insulated at the joint is required. The combination of suspension and split axle will ensure a reliable current supply to the loco.

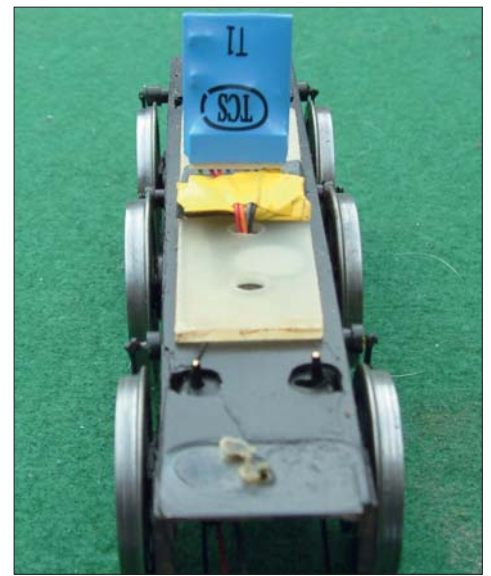
This is how to make a split axle. Cut the axle in half. Obtain a 'POP' rivet with a shaft diameter of 3.0mm. Cut off a 16.0mm length of rivet shaft. Secure one half of the axle vertically in a pin vice. Alternatively, mount a piece of wood on the pillar drill table and drill a hole in it the same diameter as the axle. Put one half of the axle into the hole without moving the wood. This should now be a good interference fit to hold it securely. The hole drilled in the axle will now be exactly in the centre. Drill a hole of 3.0mm diameter to a depth of 8.0mm in one



half of the axle. In the other half of the axle, drill a hole of 3.5mm diameter to a depth of 9.0mm. In this half of the axle, drill a 1.0mm hole through the axle at a right angle to the axis, near to the bottom of the hole. Insert the rivet shaft into the 3.0mm hole as an interference fit. Slide a plastic, fibre or card washer over the shaft to separate the halves of the axle. The washer will also help to reinstate the axle length lost at the initial saw cut when the axle was cut in half. Put some resin glue on the shaft and insert it into the other half of the axle. The 1.0mm hole allows air and excess glue to escape and enable the shaft to reach the bottom of the hole.

Now use a jig with a clamp to ensure axial alignment whilst the glue sets. The jig must be 29.0mm across to maintain the necessary 0 gauge back-to-back distance. Make sure the wheels contact both sides of the jig. The jig, therefore, achieves two purposes. Jigs for this purpose are commercially available, but a competent modeller should be able to make up a functional replica.

To make a jig, use two pieces of metal, Perspex or other composite block material cut to a width of 29.0mm to give the correct back-to-back dimension. Separate them with a piece of thin card and then clamp them together. Measure the diameter of the axle and drill two holes of that diameter across the jig joint in the same plane as the card. Unclamp the jig and remove the card. When the jig is tightened during use, the space created by the absent card will help the jig to grip the axle securely. Drill some holes through the jig both



Top left: sectional drawing of the split axle.

Above: the decoder mounted on the tender chassis.

Above left: the finished split axle.

Below left: the Perspex jig and wheel gauge showing the axle clamped in the centre and the nuts and bolts through the two halves.

Bottom left: a commercially available jig that also acts as a back-to-back wheel gauge.

Below: a flashback to *Tucking Mill*, and the similar BR Standard Class 5 4-6-0 that followed Stanier's design (photo: Phil Beckey).

sides of the axle holes to accept nuts and bolts to tighten the jig around the axle.

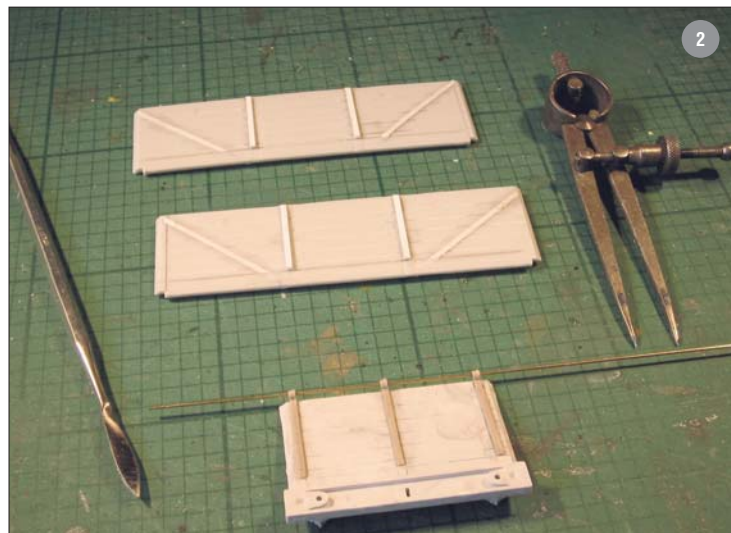
The whole tender chassis makes an efficient current collector for its DCC Black 5 locomotive. The TCS control module draws approximately 1 amp when the motor is pulling hard. The locomotive has functioned well for more than a year in Phil's 'Somerset & Dorset' garden layout *Tucking Mill* which featured in RAILWAY MODELLER in March 2005.



Wagon kits in 7mm scale

Representing two different technologies, plastic and resin

NEIL BURGESS has constructed two coal wagons for his North Staffordshire Railway-set layout.



This article sets out to describe an approach to constructing wagons in 7mm scale from kits, using pre-grouping coal wagons as examples. The first is constructed from a Slater's plastic kit for a Gloucester 6-plank end-door wagon to the 1887 Railway Clearing House specification (ref. 7036).

The second is from a resin kit and depicts a 'dead' (or 'dumb') buffered coal wagon from the 1870s, examples of which could still be seen in daily use up to 1913, beyond which date the RCH had prohibited their use in traffic stock. The kit was produced by Mark Smith, a fellow member of the North Staffordshire Railway Study Group, in a small production run mainly for his own use, but it is typical of many such products of the 'cottage industry' of small-scale kit production.

The Slater's plastic kit

Photo 1

This shows the components of the Slater's kit out of the box. These kits are deservedly recognised as excellent examples of the plastic mould-maker's art, though there are some areas which can be improved upon, as will be illustrated below.

It is possible to detect a certain amount of flash on the two sets of brake gear and axle-guards, although this can easily be cleaned off with a sharp knife and a small file. The two resealable plastic bags contain the sprung buffers and the 3-link couplings. As can be seen there is virtually everything to build the completed model.

Photo 2

What Slater's doesn't provide in this kit is any interior detail beyond the three hinges for the end door, though other kits vary in this



respect. What is needed is to scribe the planking lines and to add the interior ironwork.

The planking is done using first a pair of spring dividers (right), taking the dimensions of each plank off the outer faces of the sides. The dividers are then run along the side, using one leg to gouge out the plastic for the joint line. Work from the top downwards, remembering that opening end doors often have different plank widths to the sides and fixed end. The tool on the left is sold in artists' suppliers for wax sculpting and is here run along the grooves to remove all the plastic swarf.



Remember to mark the vertical joints where the side doors cross the lower planks, using a small engineer's square and a scribe. The finished side needs careful sanding to smooth down the surface and remove the plastic debris.

The ironwork – what modellers tend to call 'strapping' – is actually of two different types. The vertical ironwork on either side of the doors are the side knees and on the prototype these are fairly hefty items with cranked ends which go down through the wagon floor and are bolted onto the back of the solebars. They keep the sides from collapsing outwards when the wagon is filled with coal, and on end-door wagons there are two end knees which perform a similar function in respect of the end doors. On the model it is only necessary to represent these above the floor and here it is done with 80 thou x 60 thou Evergreen styrene strip. The knees tapered in thickness towards the wagon top, so when the solvent was set they were gently sanded until they were around 30 thou thick. Bolt detail could be added if required, but I have never found this necessary; the presence of the knees is enough.

The diagonals are washer plates and are, as the name implies, like a long row of washers linking the bolts which hold the side planking together. This type of wagon has internal diagonals and these are shown here, made from 40 thou x 10 thou styrene strip. Similar washer plates were also added behind the door hinges, though they are not in place here.

Photo 3

The other detail lacking on this kit is a representation of the floorboards. These could have been represented by scribing the floor as



shown in Photo 2, but I simply added a piece of Evergreen 40 thou thick x 188 thou V-groove planking. Take care to ensure that the planks at each end are the same width. The styrene was cut slightly large, attached with solvent and then trimmed back to size.

Photo 4

Once these details have been added I assembled the wagon body. It is a tribute to Slater's mould-makers that these kits go together very easily with no awkward gaps or ill-fitting corners. This view shows the assembled body with the end-door hinges stuck in place.

I replaced the plastic hinge bar in the kit with 0.7mm straight brass wire, onto which the hinges and end knees are threaded before being attached to the end and the sides. This ensures correct alignment and no ill-fitting hinges. The hinge bar is trimmed to length when everything has set.

Photo 5

Wagon buffer heads and couplings are chemically blackened rather than painted – this ensures that they don't 'gum up' into a solid mass. For this I use Carr's 'Metal Black' for brass – it works better on the steel parts than the firm's 'steel' formula. However, it is corrosive to steel and in order to stop the chemical reac-



tion I dunk the blackened parts in lubricating oil and allow them to dry out on a piece of kitchen roll.

The price label on the half-empty bottle indicates that it was bought from the much-lamented Max Williams of Lawrence Hill, Bristol, which ceased trading around 15 years ago; showing that a little chemical blackening solution goes a long way.

Photo 6

At this point the kit is ready for painting. The body is given an undercoat of car body grey primer and the underframe details are cleaned up on the sprue and then sprayed with car aerosol matt black.

Here the axleboxes have been added to the axleguards and the axle bearing inserted from behind before spraying. The two wooden doorstops have been added to the solebar on the side the brake gear will be fitted; on this wagon only one side has brakes, which was a common arrangement before the Great War and even into the 1920s. If brakes were fitted on both sides, two pairs of stops would be needed.

Photo 7

For lettering the wagon I chose one of Dragon Models' sets of pressure-release transfers, and

shown is the complete sheet. However, the lettering is intended for use on the later 1907 RCH type wagon, which has longer sides, and so the transfers as supplied don't fit.

Most wagons had the lettering applied between the end ironwork, so that it didn't cover the corner plates, so a certain amount of juggling with the letters was necessary to fit them onto the 1887 wagon. This was done by cutting up the sheet into several separate transfers and closing up some of the gaps to fit the space available. Cutting up was done with scissors, since pressure in the wrong place from a steel rule might cause the lettering to attach to the cutting-out surface.

Photo 8

This shows how the lettering was eventually applied. The body was first brush-painted with Humbrol No.106 matt grey, then the ironwork picked out in matt black. As can be seen the 'Ltd.' was omitted from Potts' name – it was not unknown in reality for lettering styles to vary over time – and the other details were moved up the wagon body so that they 'sit' properly on the sides.

The lettering for end-door wagons like this is 'handed', the word 'Macclesfield' being longer on one side than the other in order to fit between the vertical ironwork.



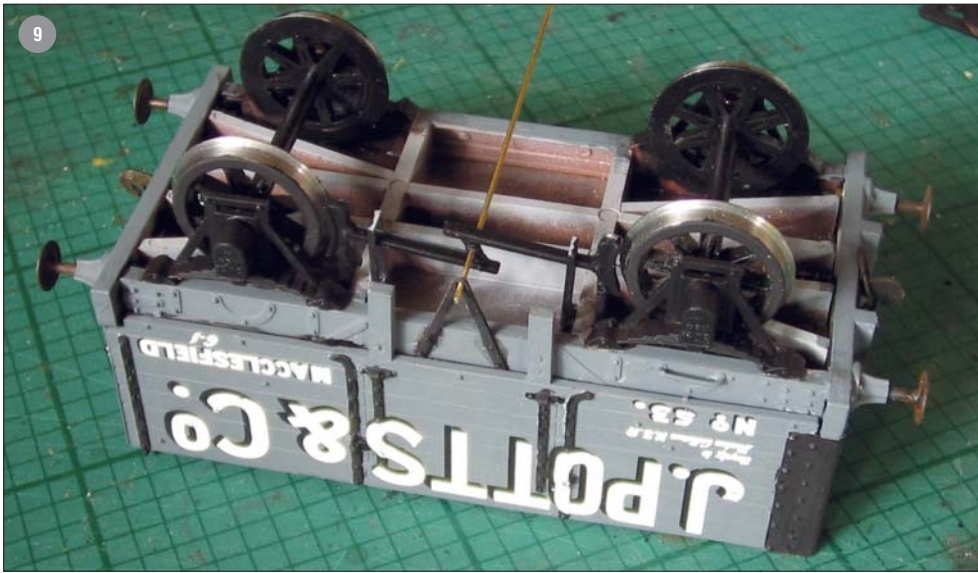
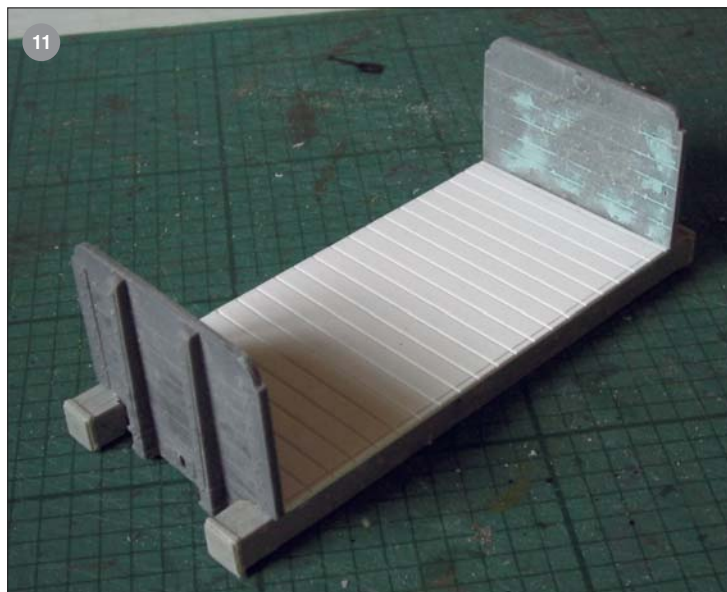
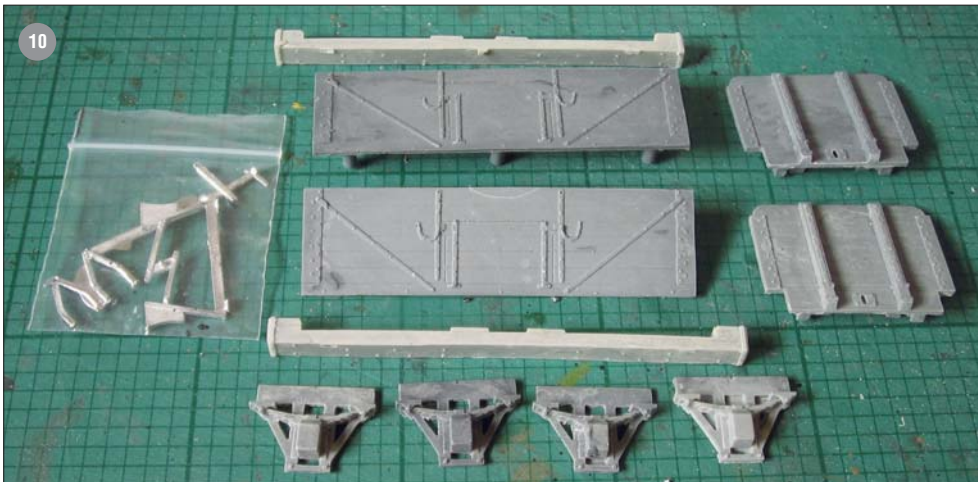


Photo 9
When the body is dry and the lettering applied, the running gear, buffer heads and brake gear can be applied.

It can be necessary when fixing the W-irons to the solebars to scrape off a small amount of paint where the surfaces are to be joined, since this helps the solvent make a good strong bond. Here the outer V-hanger is being lined up with the pivot in the brake gear using

some 0.7mm brass wire. When the outer hanger is fixed, the inner one can be threaded onto the wire, glued in place on the back of the solebar and the wire cut to length to form the pivot.

As noted earlier, this wagon has brakes on one side only, but after 1910 increasing numbers of wagons would have been fitted with brakes on both sides, either on construction or at major repairs.



Mark Smith's resin kit

Photo 10

Compared to the Slater's kit, there is more for the builder to add here, but this is because many of these kits by small-scale suppliers are intended as builders' aids, rather than complete kits. Even so, there are well-cast parts and plenty of detail.

Photo 11

Construction began by filling some of the small holes caused by bubbles in the resin with model filler – the green smudges on the ends – and gluing the ends and solebars to a floor made from the same Evergreen V-groove sheet used on the Slater's wagon.

Epoxy resin was used to hold everything together here.

Photo 12

The sides, as supplied, had six prominent sprues attached to their inside faces, where the resin had been fed into the mould. These needed removal, using side-cutting shears, and the resulting 'pips' filed down. A small amount of filling was also needed here, as on the ends.

The side knees looked a bit under-nourished, so I added new ones, also from the 60 thou x 80 thou styrene strip, with the taper sanded down after they were attached. Note the rebate in the ends, allowing the sides to fit snugly up to the ends. This needs to be remembered when marking out the floor.

Photo 13

The only constructional difficulty I encountered was that the solebars were too close together to allow the W-irons as supplied to sit vertically to them. This was rectified as shown in this view by removing the casting above the spring hangers and gluing new supports of 60 thou x 40 thou styrene behind them.

This cures the problem, although it could equally have been achieved by filing out a rebate in the back of the solebars. A certain amount of fettling like this may be necessary on these kits, but this hardly raises problems if the construction of the model is well thought-out in advance.

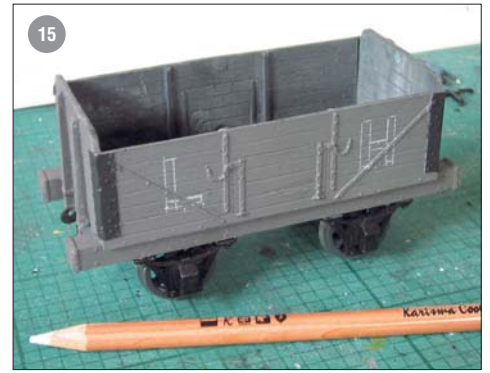
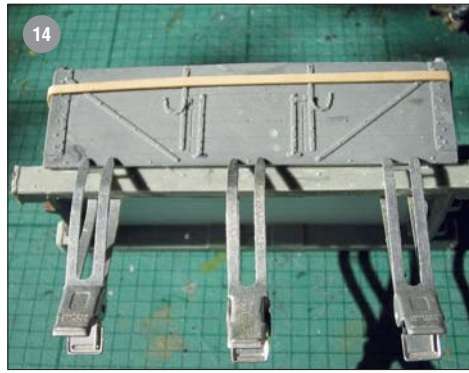
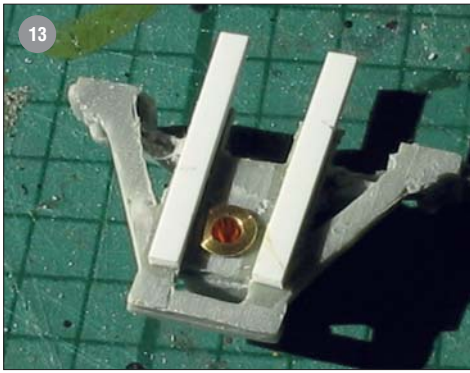


Photo 14

The sides were attached one at a time to the ends and solebars, care being taken to hold everything in place while the epoxy set. The rubber band may have bowed the sides away from the solebar, so three hair clips were used to keep it hard up against the floor.

Photo 15

The running gear was added after painting the basic bodywork, as with the Slater's wagon. The body colour was Humbrol No.98, matt chocolate brown, with black corner plates and running gear.

On this wagon the lettering, depicting a fictitious livery for (the actual) Longton Hall Colliery, was applied by hand. Here the main lettering 'L H' has been applied in outline using an artist's white pencil crayon. These are useful for chalk markings on rolling stock and for marking out on black plastic sheet, though they do need keeping sharp.

Photo 16

The main lettering was blocked in using a No.000 paintbrush and matt white paint; when this dried, the shading was added using the same brush and matt black paint. The smaller lettering, *Empty to Lane End, NSR*, the fleet number, load and, eventually, the tare weight, was applied using thinned matt white paint and a mapping pen. This can be a bit fiddly to begin with, but practice and care can produce acceptable results. The brake lever and rack have yet to be added.



Photo 17

The finished wagons after weathering. The older dead-buffered wagon would have been close to the end of its career by 1912 and is more heavily weathered than the newer one.

Weathering was by brushes using enamels, but care was needed with the Dragon transfers on the Potts wagon, since they are affected by white spirit and tend to bubble if too much is

applied. The secret is not to panic, leave well alone and when everything dries out the transfers will return to normal.

The Longton Hall wagon eventually received a new brake handle from nickel silver strip when the whitmetal one supplied with the kit broke.

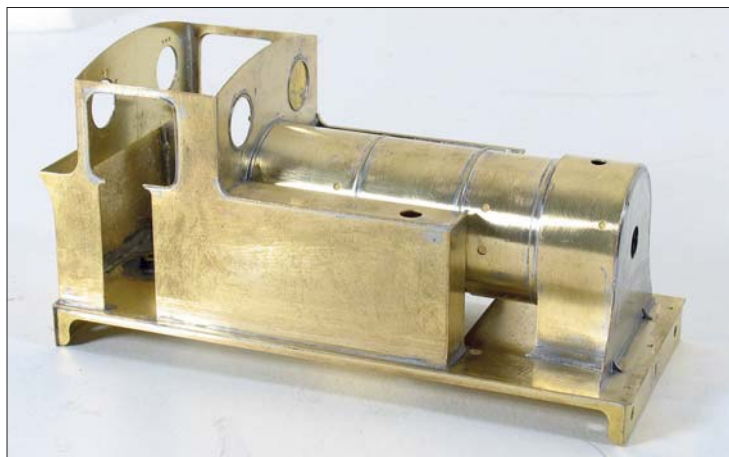
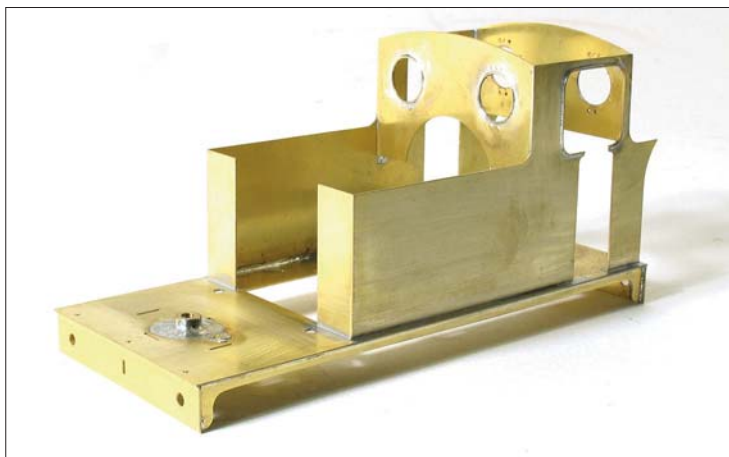
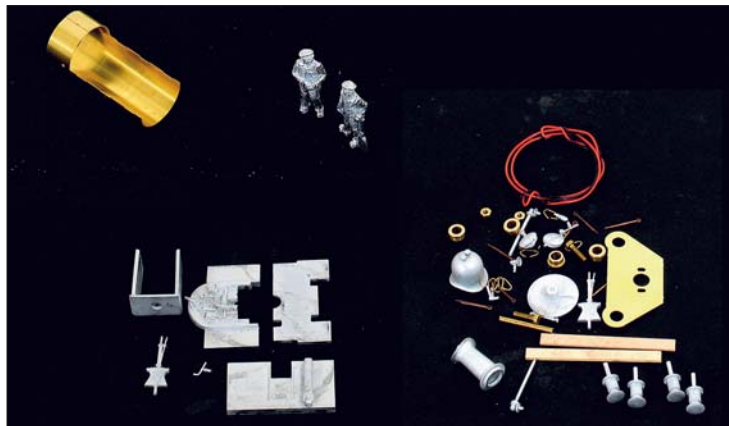
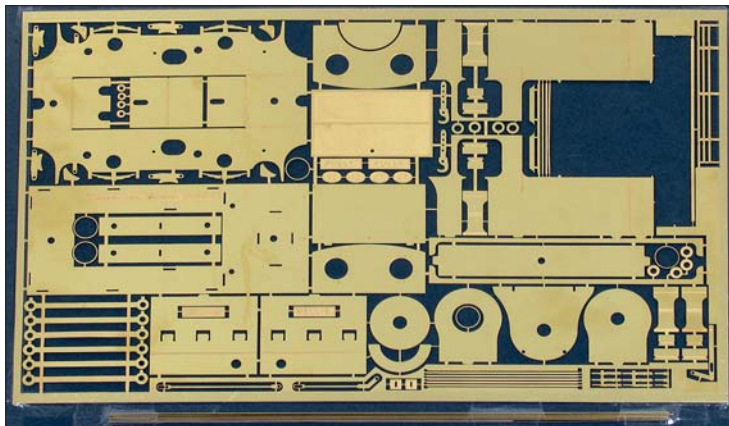
All in all, a satisfying project, adding two interesting wagons to my 7mm layout.



'Nellie' in 0 gauge

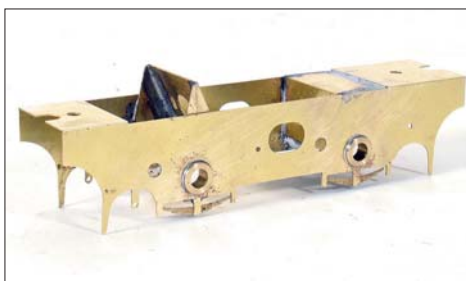
The Connoisseur Models starter 0-4-0T in 7mm scale

ANDREW BEARD has constructed the review sample which was featured in the October issue.



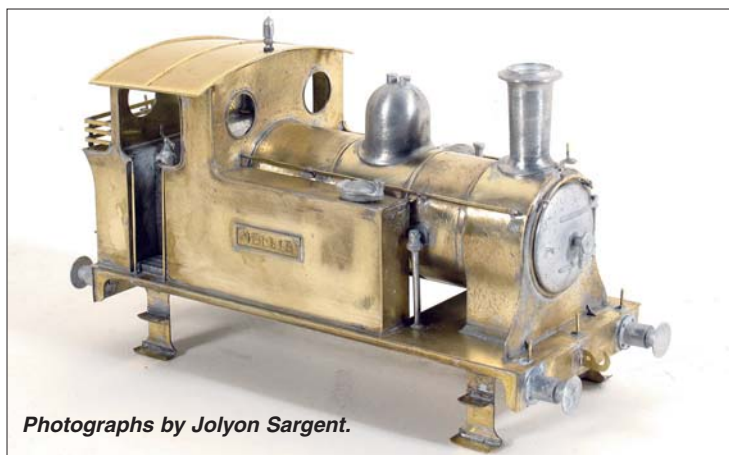
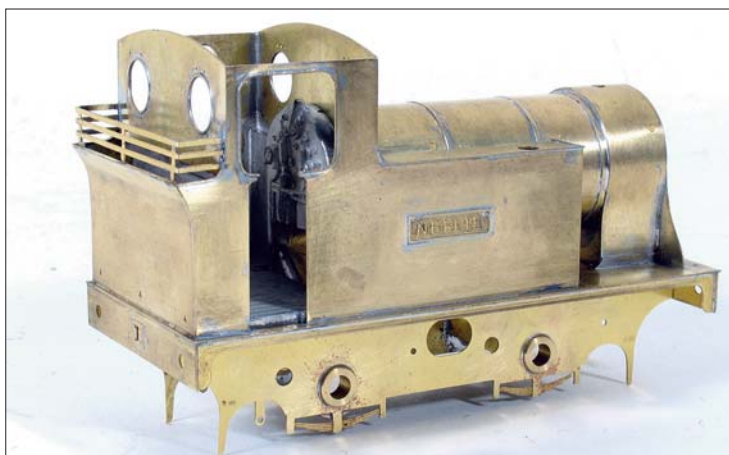
Connoisseur Models first produced this kit in 1989. After many years it has been reworked and as a review sample was sent to us we decided to have a go at building it.

All the parts, whether etched or cast, have a minimum of flash and require only a small amount of filing to give an excellent fit. The instructions are very good, and run to 24 pages of A4, giving hints and tips on the best way to tackle some of the more fiddly aspects of the



assembly. Each stage has a reference photograph which should be used in conjunction with the assembly details, and in this way construction is made very straightforward.

The assembly starts slightly unusually with the bodywork, then alternates later on with the chassis before returning to the bodywork and then back to the chassis. We followed the main stages with only minor deviations and adaptations which suited our assembly sequence.



Photographs by Jolyon Sargent.



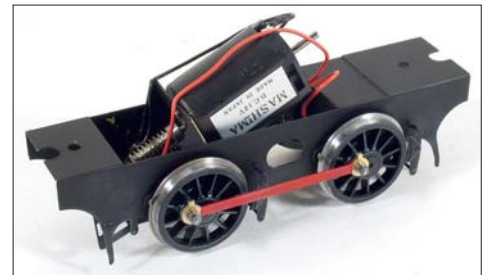
Starting with the main bodywork we soon had the footplate, cab, bufferbeams and valances soldered together using only a 25 watt soldering iron and 145 degree solder. The side tanks/cab sides are a tab and slot fit in the footplate which assists greatly with getting everything square and in the correct position. Care taken in getting this part of the assembly correct means that the boiler will fit in place as intended.

The boiler is a sub-assembly which has alignment marks on it and the smokebox, which when lined up will ensure that the boiler will sit correctly on the inner side tank tabs with the smokebox sitting level on the footplate. The boiler bands also have etched locating lines on the boiler to assist with placing them in the correct position.

It is best to assemble the basic chassis at this point to check it fits the bodywork. As the gearbox is soldered in place in the chassis, we fitted the motor that we would be using in order to check that the angle at which the gearbox was to be positioned would allow clearance in the bodywork. When we were satisfied, the gearbox was soldered in place. This then allowed the cab interior to be soldered in position using low-melt solder. Assembly continued with fitting all the detailing parts to complete the bodywork. We made the cab roof removable as suggested in the instructions which made painting the cab interior very easy.

The kit is supplied with nameplates for *Nellie* and *Polly*, which would usually be glued in place after the painting stage, but we decided to deviate slightly here by soldering the *Nellie* plates in position.

Completion of the chassis involves fitting the brakegear and the sprung pick-up housings (Slater's part number 7157). The bodywork and chassis were thoroughly washed and left to dry and then spray-painted using aerosol grey primer followed by satin black aerosol. Doing this obscured the *Nellie* nameplates, so we made a mask from a scrap piece of plastic sheet and the nameplate surface was then polished with very fine wet-and-dry paper to reveal the name and border.



The buffer beams and nameplates received a coat of cream primer applied by brush followed by a red topcoat, before the nameplates were given a final polish, again using the plastic mask to protect the paintwork. Cab detail was also brush-painted, with handrails and buffer heads being picked out in Humbrol Metalcote which can be polished when dry. The chassis was assembled using Slater's coupled wheels and a Mashima motor, which runs very smoothly. The kit even comes supplied with a footplate crew which were painted and then glued in position.

In conclusion this kit is a pleasure to build and for only £50 plus wheels, motor, pick-ups and gears is an excellent starting point for anyone wanting to have a go at an 0 scale loco kit.

Available from

Connoisseur Models, 33 Grampian Road, Penfields, Stourbridge, West Midlands DY8 4UE. Telephone 01384 371418.



Victory

A Kerr Stuart industrial locomotive in 7mm scale

CHRIS KLEIN constructed the *Agenoria* kit to join his growing collection of 0 gauge motive power.

'There lurks in my workshop a growing collection of 7mm scale locomotives to which will soon be added an Agenoria Kerr Stuart 'Victory' 0-6-0 tank locomotive kit that is progressing nicely'.

With these words I concluded a description of Abersoch Mark 2, my 4mm scale interpretation of the Cambrian Railways in BR days published in the December 2005 edition of RAILWAY MODELLER. Well, I am pleased to report that the Kerr Stuart has emerged from the workshop and is available for revenue-earning service.

Prototype Notes

Ten locomotives of the Victory Class were constructed by Kerr Stuart & Co Ltd at its California Works in Stoke-on-Trent in 1917. The origins of Kerr Stuart & Co lie in the Scottish firm of James Kerr & Company, founded in Glasgow in 1881. This company was a dealer in all forms of railway plant and it sub-contracted its locomotive work to Hartley, Arnoux & Fanning of Stoke-on-Trent, John Fowler of Leeds and Falcon Engine and Car Works Ltd of Loughborough. In 1893 Hartley, Arnoux & Fanning were taken over by James Kerr & Co, the firm becoming known as Kerr Stuart & Co. Ltd.

The outside-cylindered 0-6-0 side tank engines – works numbers 3066-3075 – were built to an order for the Railway Operating Division (ROD) of the Royal Engineers (RE). Two outside cylinders 17" x 24" drove 4' diameter wheels and were actuated by inside Stephenson's link motion. The locomotives were capable of generating over 19,000 pounds of tractive effort. On completion, the



Photographs by the author.

locomotives were delivered to the Inland Waterways and Docks Department at Portsmouth. After hostilities ceased they were sold by the War Office in 1919 and ended up in collieries, docks and some of the pre-Grouping railway companies.

Three engines subsequently found their way onto the GWR's stock book. Two arrived via the Alexandra (Newport & South Wales) Docks Railway (ANSWDR) where they had carried Nos.34 and 35. Following the ANSWDR's absorption by the GWR at the Grouping they were given diagram A.68, but after modifications at Swindon in 1923/4, which included fit-

ting of the *de rigueur* safety valve bonnet, the diagram was changed to B.13. The GWR running numbers were 666 and 667 and being comparatively modern engines built to a full main-line specification they passed into British Railways ownership and lasted until 1954 and 1955 respectively.

The third of the GWR's Victories was acquired from the Brecon & Merthyr Railway where she was No.35. Upon Grouping this locomotive was given diagram A.102 and was renumbered 2161. She too went to Swindon and was reallocated to Diagram B.13 bringing her into line with her ex-ANSWDR sisters, though, oddly, she kept her Ross pop safety valves. 2161 did not last long on the GWR and in 1929 she was sold to the Ashington Coal Co., eventually coming into National Coal Board ownership. She was scrapped in 1951.

One of the class found her way on to the East Kent Railway, part of the impecunious light railway empire of the legendary Lieutenant-Colonel Holman Frederick Stephens RE. Works No.3067 and ROD No.610, she was given the number 4 and the cab roof was raised by 4". Running number 30948 was eventually allocated by British Railways, but was never carried as the locomotive was scrapped in 1949.

One other notable member of the class was *Francis* (works 3068), which was given a Giesl ejector by the National Coal Board in the 1960s. This locomotive and 3066 were the last survivors of the class and were scrapped in 1968, having outlasted their maker, which went bankrupt in 1930, by many years.



The kit

The Agenoria 7mm scale kit comprises nickel-silver etchings for the chassis and brass etchings for the superstructure and cylinder wrappers. Fittings are mostly whitemetal castings. Wheels, motor and gears must be purchased separately, though Agenoria's proprietor, Peter Stamper, can supply them with the kit if asked. I used the recommended Slater's 28mm 12-spoke wheels (code 7848E) and a Portescap RG7 motor and gearbox.

The generous dimensions of the locomotive will allow the fitting of a wide variety of motors and gearboxes. The instructions comprise 10 pages of notes and clear exploded diagrams. The kit comes in a stout box of sufficient size to house the finished model, always an important consideration when buying a 7mm scale kit.

The chassis

The chassis is nickel-silver and is designed for slot and tab construction. It can be built in rigid, sprung or compensated form. The four coupling rods are laminated from two parts each and are articulated. I chose three-point compensation with the motor driving the rear axle. The chassis around the axles is half-etched to allow easy cutting away for the hornblocks. You will need to drill a hole in the chassis frames exactly half-way between the compensated axles. The height above the axles will depend upon the diameter of the rods and tubes used for the compensation beam, bearing and axle.

For accuracy and ease of work, tack-solder the chassis frames together and mark and drill the hole for the compensation axle in one operation. One of the photographs shows the compensation set up. Sharp-eyed readers who ate their carrots at school will observe that one end of the beam has had a piece of tube soldered to it. This was necessary to level up the chassis due to a previously un-noticed miscalculation.

The instructions suggest electrical pickup made from phosphor-bronze strip contacts attached to top-mounted copper-clad paxolin strips and bearing down on the treads of the wheels. I decided to fit copper-clad mounts on the underside of the chassis and attach sprung 0.7mm nickel-silver wire contacts bearing on the inside rims of the coupled wheels and



which are all but invisible from normal viewing angles. If you choose to use sprung plunger pick-ups you must measure, mark and drill the locations yourself as no guide marks are provided on the kit.

Beyond that, the chassis is straightforward and builds up easily. Mine ran smoothly at the first attempt, which I attribute to the accurate registration of the etched slots and tabs and using reamers and broaches rather than drills for opening wheel bearings and coupling and connecting rods.

The superstructure

The superstructure is uncomplicated and calls for little comment. Before starting, you must choose whether you are building GWR No.666 or 667, which had riveted, square-cornered tanks or one of the remainder of the class, which had plain tanks and rounded corners. The boiler and smokebox wrapper are pre-rolled, but the firebox needs to be folded up and I found it helpful to anneal the main part before bending. The rear of the bunker was also annealed to ease bending to shape.

Slabs of roofing lead were fixed inside the side tanks to provide ballast. Cab fittings are best described as vestigial, but I decided not to add extra details as they are effectively invisible. I replaced the cast brass whistle with one turned from brass rod in a drill clamped in a vice – one day I will buy a lathe.

Finishing

The model was thoroughly cleaned before painting. Grey car primer was sprayed on first and allowed to harden thoroughly. The main coat of green was Humbrol matt 88 applied with an airbrush. The black and red parts of the superstructure were brush-painted with Humbrol matt colours. When the paint was hard I sprayed the entire superstructure with a satin finish polyurethane varnish giving a nice ex-works finish. This was not to last for long as I wanted the model to represent the usually filthy condition of locomotives in colliery use.

So remembering that 0 gauge locomotive kits are expensive, I girded up my loins, stiffened the sinews, summoned up the blood and re-read the methods described by Martyn Welch in *The Art of Weathering*. A general dirt colour mixed from Humbrol enamel paints was sprayed over the superstructure from an airbrush. I then took cotton buds soaked in enamel thinners and rubbed the body in small circles to simulate the vain attempts of the shed staff to keep the engine clean.

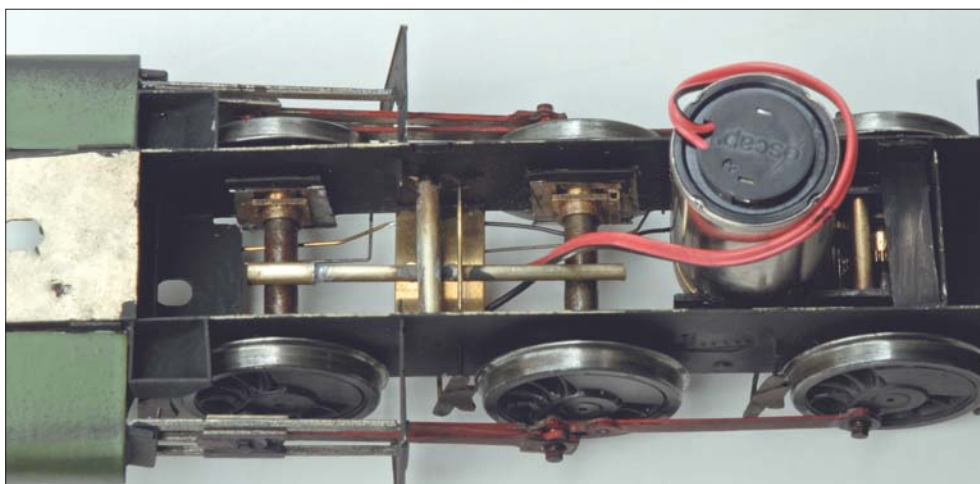
Some judicious dry-brushing helped to highlight details, whilst a thin wash of rust-coloured paint was run into various nooks and crannies. Some oil cans and fire-irons were attached to the tank tops and footplate to complete the engine.

Conclusion

I am pleased with the model. The kit assembles well and I would certainly recommend one of Agenoria's inside-cylinder kits as a suitable project for anyone who is new to etched metal locomotive kits.

I should add the usual disclaimer that I have no connection with any of the manufacturers mentioned in this article other than as a satisfied customer. Meanwhile *Francis*, for such is she named, has to make do with trundling up and down three yards of track temporarily laid alongside the hidden loop on *Abersoch*. She deserves better and one day I will build that South Wales colliery line.

**Agenoria Models, 18 St. Peter's Road,
Stourbridge, West Midlands DY9 0TY.
Telephone 01562 886125.**



Blagdon extended

A 00 gauge light railway station

FREDERICK ELLIS achieves where the GWR failed.

Readers may well recall the article on *Blagdon* in RM October 2005 and also my promise to inform you about the intended extension thereof. This has finally been completed and I am happy to report, went off without a hitch.

The extension that had been envisaged was to include a cattle dock spur and make the layout into a through station with the means to convert back easily to its original guise.

To recap on the earlier issue the GWR built the prototype line with a view to connecting to the GW main line at Farrington Gurney or possibly Pensford. Unfortunately funds ran short and therefore the line terminated at Blagdon.

The extension of the layout was basically to provide a more interesting mode of traffic for the viewer and more to do for the operator. Obviously I am glad that in some way *Blagdon* is able to achieve its true end.

Construction

The project was reasonably straightforward from the outset. My father was kind enough to build the wooden frame and the fiddle yard for the new board and I am eternally grateful to him. The next step was to fix a small piece of chipboard to the top of the frame that would provide the base for the new scenery; a large concave section was then cut to allow the fiddle-yard, in the form of a train-table, to spin around. The board was then connected to the adjacent original board by means of the same hinge method outlined in the previous article. The small embankment that marked the end of the original layout was cut away to

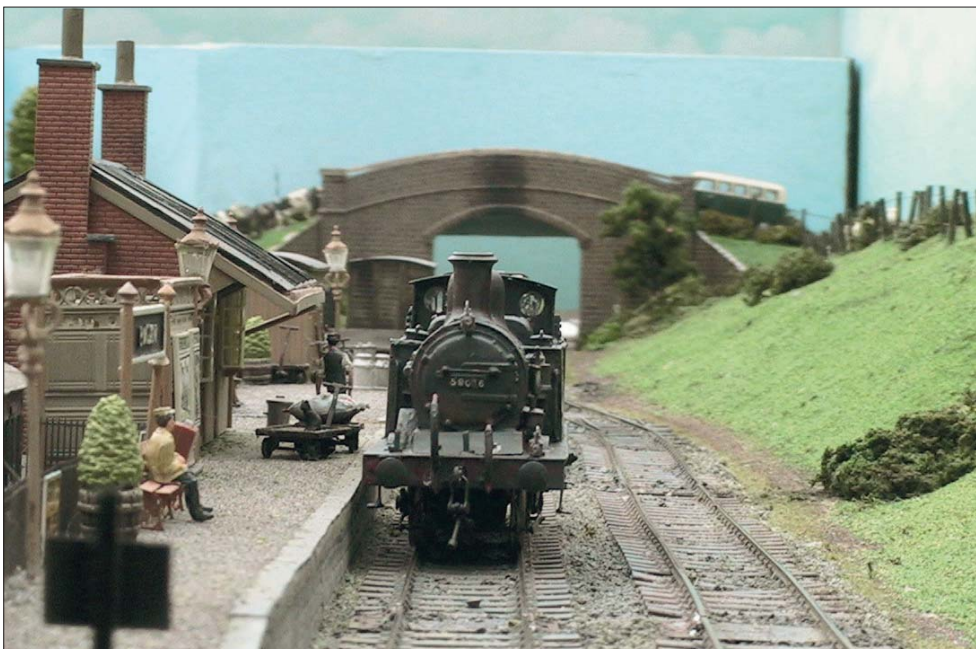


reveal the actual baseboard itself, then a scratchbuilt point (a joint effort between my father and me) was placed in position across the two boards and cut at the appropriate point. The point itself was fixed in position on the new board and the adjoining piece of track that was to form the cattle dock spur was fixed onto the original board.

Pieces of clear plastic were then inserted between the two boards in order that the scenery would not spill over accidentally on the original board. Then a Peco overbridge and the associated wing-walls were glued onto the new board around 4-6" from the

board end. After this had dried solid we were able to begin landscaping! The basic formation of the rest of the scenery was built around the overbridge from pieces of polystyrene which was glued in place and formed a reasonably strong base. On top of this some DIY filler was spread, which then enabled the formation of the landscape proper.

After the compound had dried a road was then marked out. Off this road was also marked a small cart-track which goes over the bridge. The road was painted with wagon grey, which was later darkened to match the road surface on the old boards.



Left: No.47310 emerges from under the overbridge.

Below far left: Johnson 1P No.58086 stands in the station, with a good view of the overbridge in the distance.

Below left: a view of the overbridge with the road leading to the sleepy village of Nempnett Thrubwell. Also we have the classic scene of cattle going one way, a car the other. No doubt some of us have been there!

Right: Churchward Mogul No.6338 approaches the overbridge with freight for Pensford.

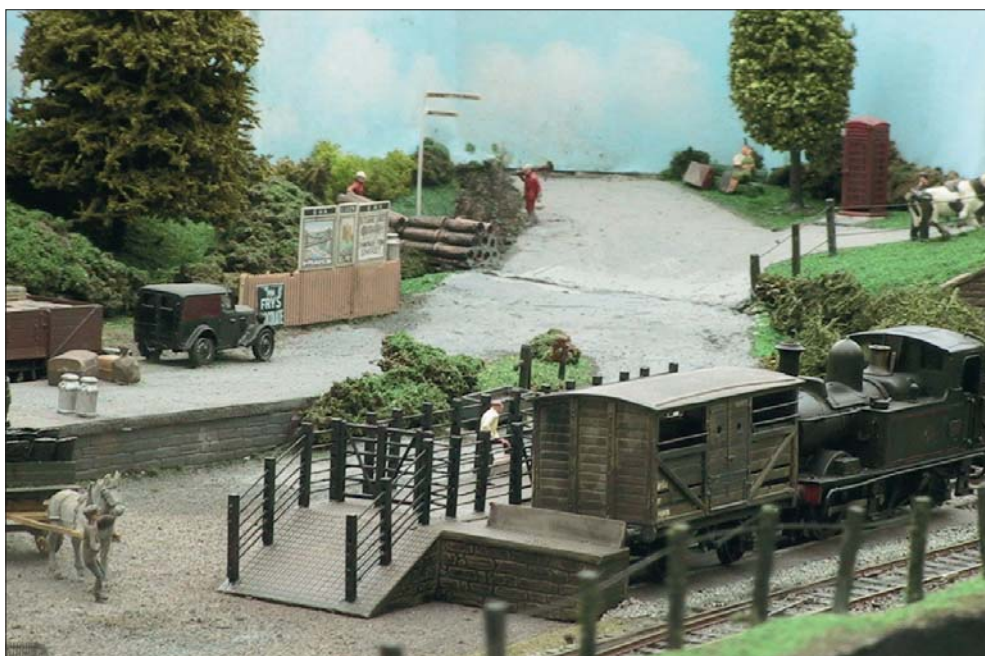
Centre right: a good view of the new cattle dock and extension, showing the roadway going off towards Blagdon village, or over the bridge to Nempnett Thrubwell.

Below: view of the lorry/wagon scene in the yard, 'Hackling and Hudson, Builders of Blagdon Ltd.' A fitting tribute to those who gave their time to build this layout.

Below right: Johnson 1P No.58086 arrives with a local passenger.

All other areas surrounding the road were covered with PVA glue and then scattered with a mix of several different flock and grass powders which had been left over from redoing the scenery of the original boards when they first came into my possession. Pieces of rubberised horse-hair were used to create bushes and were also sprinkled with the flock mix. By the bridge portal you will notice an apple tree, possibly grown from an apple core discarded from a passing train.

Now the real fun begins! Extra bits of detail were added to increase the atmosphere of the new board. As you will no doubt notice I have created every motorist's worst nightmare on the narrow bridge road i.e. you are trying to go one way and a herd of cattle is being driven the other way straight into your path! Poor old fellow. My father then finished off some extra 'scenes'; the most noticeable is the pipe-laying gang. He cut a trench in the grassy area at the back and created a long mound of soil along





Above: 3F No.47310 approaches the station, engine and brake.

Above right: 3F No.43194 ready to leave with a passenger train and a 6-wheel milk tank.

Right: a view of the revised station entrance. The road is being resurfaced by the workers who have not yet started on the station yard approach road.

Below: 3F No.43194 emerges from the over-bridge returning from Penford.

Below right: No.5747 shunts the cattle dock.

Photographs by the author.

the parapet of the trench. Two sets of the excellent Harburn Hamlet pipe stacks were placed near the workers in a small attempt to obscure as much of the board join as possible. In reverence to the original builders of *Blagdon* my father also built and put transfers on the side proclaiming, 'Hackling and Hudson, Builders of Blagdon'. He also found a spare wagon kit and filled it with various bits and pieces and a plank between the two vehicles...although the two builders in question are nowhere to be found. If they have any sense they will be down the pub enjoying a nice pint of Butcombe Cider!

The cattle dock is a Ratio kit that was cropped to fit the available space. The original intention was to introduce a signal box and signals to the station but this has been aban-



doned in favour of retaining the original atmosphere with just a run-round facility rather than a passing loop.

What does the future hold?

I hope to exhibit at as many shows as possible, whether large or small. I will be more than happy to discuss any aspect of either the lay-

out or the real location at a show. Anyone interested in hosting *Blagdon* at their show should contact me via RM and I am sure we shall be able to accommodate you.

By the way, I forgot to thank Martin Hudson for his assistance rendered to Dave Hackling in the construction of the original layout. Sorry Martin!



Return to Tapley

Developments on this scenic OO layout

COLIN CHISEM presents an update to his article, which appeared in the November 2005 issue.

Since my first article appeared, I have been active again with the modelling tools and have made a few changes to the layout. Firstly, however, let's take a closer look at some aspects of the original before the changes were made.

Buildings and structures

Both the station building and the goods shed are based upon those which existed at Portesham station on the Abbotsbury branch, although not exact replicas. There is an excellent book available containing superb photographs of these buildings, and I worked from these photographs, estimating dimensions for the models.

Both the buildings were produced using Wills' embossed sheet, a good Stanley knife (with a good supply of spare blades), a steel rule, a set of needle files – and plenty of patience! Window frames, downpipes, guttering, doors etc are all added separately and, to complete the model of the station building, signs from the Tiny Signs range were added.

The station building at Portesham was fitted with an awning and, although this is missing from the original model as seen in my first article – and in the photographs presented here – the error has now been addressed. To date, I haven't been able to locate any decent wrought-iron awning brackets but their absence is not obvious – unless one looks very closely.

The goods shed is a more straightforward structure. Again, photographs of the building are available and so there is no problem.



In my first article, the corrugated iron lock-up graced the station platform, but it has now been removed and placed in the goods yard. This little model was produced in much the same way as the other buildings – the curved roof being made using the cardboard cylinder from a spent toilet roll. This is cut in half and covered with corrugated sheet from the Wills range. Windows, door, downpipes and guttering complete the model which, when painted and weathered, contributes to the overall GWR atmosphere I'm trying to create.



The signal box featured in my first article is a modified Ratio kit. Its base has been replaced with light stone to go with the goods shed and station building. In constructing the station platform, I came across a single piece of wood which, upon further examination, proved to be just the right thickness, so I've used this and detailed it by facing it with Wills sheet and covering the surface with very fine scatter material – it's important to use really fine stuff here, otherwise passengers standing on the platform would have to suffer the uncomfortable indignity of standing on a bed of 'rocks'!

Station fencing from Ratio has been used, and the classic enamel signs added. I resisted the temptation to use too many – another cameo which is often overdone.

The two platform ramps are made from stiff card and detailed as before. A set of four Mike's Models gas lamps add further atmosphere and the platform was completed by 'edging' with a strip of plasticard. A station nameboard completes the scene.



The small cattle dock located at the down end of the platform is a butchered Ratio kit, and the yard entrance gate is also from Ratio. The station and goods yard sign located just to the right of the yard gate was produced from a

station nameboard, painted black and white and lettered using Letraset rub-on lettering.

The only other structural feature is the occupation bridge which is a modified Peco kit, painted and weathered. The country lane which passes over the bridge was made from a strip of lino turned upside down as the reverse side had a somewhat uneven finish. To paint this, I used light stone Humbrol, together with other 'stone-like' colours, so that the final effect is very light-coloured which fits in well with the overall scenery.

I've spent some time in detailing the lane itself as I didn't want the bridge to act merely as a scenic break, but to contribute to the overall scenic picture. A gap in the hedge leading into a field, together with a cameo scene of a flock of sheep adds interest. The sight of the branch train passing under the bridge and on to the fiddle-yard is very pleasing.





Left: two pannier tanks cross, Nos.8763 and 6412 on freight and passenger trains respectively. The new siding runs alongside.

Below: 4575 Prairie tank No.4593 is busy shunting the new siding.

Right: waiting for the goods to arrive.

Photographs by Steve Flint, Peco Studio.

Changes

Model railway layouts are fascinating things. They never remain static but 'grow' and evolve with the passing of time and, inevitably, *Tapley* has been the subject of change. The most notable and obvious change has been the inclusion of a new siding.

Originally, I just wanted to produce a model of Portesham station, but soon realised that the whole thing could be improved by the addition of a new siding. This would take the form of a dedicated goods siding, serving the goods shed and yard; a medium yard crane standing alongside. I reasoned that, if done thoroughly and carefully, the layout would be more appealing both visually and operationally.

I therefore set about cutting out a piece of

existing track, dropping a lefthand point into the space, and fitting a length of track on to produce the siding. It has to be said that the fitting of a new siding on to an already completed layout does rather enforce the view that a great deal of time should be spent at the original planning stage! Things being what they are though, we do change our minds with time, and I suppose the challenge is good for us.

To accommodate the new siding, I had to 'pull back' part of the scenery. There is, I'm afraid, no other way to do this but to resort to brute force with chisels and hammers etc. Once a space is cleared, however, one can return to the more sane pursuit of artistic modelling.

I decided to place the siding parallel with the loop and running line – again for visual purposes, I ballasted it as described in my first article, except that I inadvertently made the PVA glue/water solution too concentrated. When it permeated through the loose ballast, I noticed that some of the 'crispness' was lost in the appearance of the ballast, but since goods sidings were usually collectors of dirt, grease and general 'gunge', it became a blessing in disguise, so my mistake is somewhat acceptable.

The inclusion of a dedicated goods siding means that the passing loop also becomes a goods loop whereby goods trains can now drift straight into the loop and, on the 'down' end of the station, into the headshunt prior to setting back into the new siding. The siding is wired up electrically to allow a train to stand in the station platform whilst the branch goods drifts slowly into the loop prior to shunting the siding – a pleasing operation.

The trick in putting down a new siding in this way is to make it appear that it is not a recent addition, but has always been there. This requires some colouring and blending work and, when this is done, viewers of the lay-





out are suitably deceived into thinking that it has always been there. Close inspection will, however, reveal one or two telltale 'gaps' in the track where the new paint has been located. These are not too obvious, though, and are partially hidden from view by a large hedge!

When electrified, the point and its new siding work well and there are no derailments during shunting. I had to modify the barrow crossing as it was now required to pass over the new point. This I did using double thickness of plasticard and cutting shaped pieces to lie between the point blades. I'm happy with the overall effect and my hope that the layout would be improved, visually and operationally, has been realised – nothing ventured, nothing gained.

Detail, composition and atmosphere

My original intention in producing *Tapley* was to create a little piece of English history by modelling a railway passing through the countryside. Not everyone's cup of tea, I guess, but we all have our favourite types. I read Barry Norman's book *Landscape Modelling* (Wild Swan Publications Ltd, ISBN: 0906867444) and was inspired to see if I could create something pleasing and convincing. It is not an easy task and many attempts were made.

To achieve a satisfactory overall composition, I moved things around; not just buildings and fittings, but bushes, trees, hedgerows etc. It's amazing the difference this makes to the atmosphere of the model. For example, the conical water tank at *Tapley* has been moved to the 'down' end of the platform and, when

viewed from across the top of a hedge and set against a background of nice green foliage, makes a pleasing statement.

I've used Ratio post and rail lineside fencing quite extensively on the layout. I chose not to include the wires, partly because of laziness, but partly also because, from a distance, it's not all that easy to tell anyway when you look at the real thing.

Conclusion and latest

At the time of writing, the Ratio signal box has now been removed and has been replaced by a scratchbuilt ground frame hut, complete with lever frame which is just visible as one peers through the open door. The token apparatus sits close by and complements the scene.



The Wills yard crane which appears in my first article has been replaced by the classic medium GWR yard crane (a Mike's Model) which adds character and deserves its place, having been in my possession for 20 years.

I have been busy fitting my rolling stock with Bachmann couplings. These are quite neat and not too obtrusive. Not as good as three-link, I know, but a lot easier to negotiate!

I've enjoyed building *Tapley*, and it is a joy to operate. Just to sit down and look at a little bit of the past – the sight of the branch train, a 14xx tank loco with its single trailer, standing in the station waiting for the down goods train to pull into the loop; a bus waiting in the goods yard to connect with the train, it's all very evocative. My new layout will have to wait until *Tapley* loses its appeal – if it ever does!

Many thanks, again, to my father-in-law for his loft, and to Kathleen, my wife, for her patience and support.

Editor's note – an excellent reference for the station buildings is The Abbotsbury Branch by Brian L. Jackson (published by Wild Swan Publications Ltd, ISBN: 0906867800).



Denebridge

Including the Holywell Railway

CHRIS BOYD has mixed 4mm scale standard and narrow gauge prototypes for this 00/009 line.

Up into the loft I went, hauled through the trap-door by my father to see my first model railway. Just a toddler in the 1950s, all I can remember of this 0 gauge layout is that flock was made from sawdust dyed green! Nevertheless, a lasting impression must have been made as I have been a railway modeller ever since and *Denebridge* is my tenth layout. A combined 00 and 009 layout, it has been built in my home over a period of five years. Early retirement, a move to a new house (and an understanding wife!) had given me a 9'6" x 6'7" bedroom to use as a railway room. The graph paper was soon found and planning started.

Built in various gauges and some constructed with my son Andrew, all my previous layouts had been steam era but none modelled on any particular region of British Railways. However, the pull of nostalgia was strong and dictated that my new 00 gauge layout would be based on the area I remembered well from my younger days. A north-easterner, I did most of my after school spotting at either Sunderland or Durham stations, particularly enjoying the spectacular sight and sound of long steam trains being banked out of Durham station and across the massive viaduct.

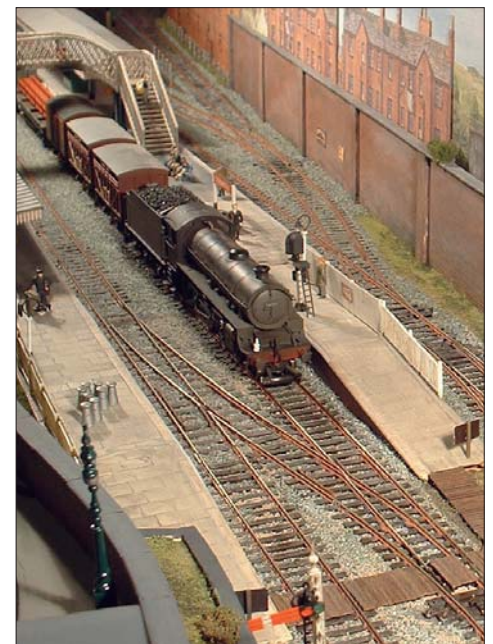
Sadly, modelling Durham and the viaduct in my limited space involved too many compromises. Nevertheless, to recapture at least some of my memories, I decided to go ahead and model the North Eastern Region, albeit fairly loosely, and based on a fictitious location during the steam/diesel changeover period.

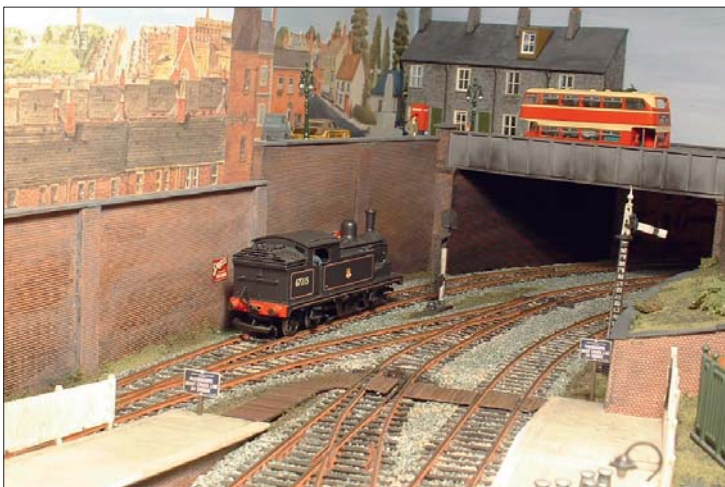


Planning for the 00 gauge layout was complicated by the fact that I wished to incorporate an existing portable 2' x 4'3" 009 layout that I had built at my previous home. Also, I wanted to extend this narrow gauge layout, which was of station to fiddle-yard arrangement, to form a continuous circuit. Many hours had been spent making the narrow gauge lay-

out with its viaduct and gradients and the thought of demolition was simply not on!

My requirements meant, of course, that I would have a layout combining British Railways North Eastern Region with freelance narrow gauge which is, perhaps, unusual. But why not! I like the charm of narrow gauge and the Holywell Railway, as it is named, allows me





Left: the A8 Pacific tank hauls a train of Thompson corridor coaches over the falls whilst a train on the 2'3" gauge passes below.

Below far left: G5 Class 67315 waits beside Denebridge East signal box for its next duty as station pilot.

Below near left: B1 No.61030 Nyala hurries through Denebridge with a freight.

Above left: the G5 arrives from the fiddle yard to pick up its train. The girders of the road bridge have been made from plastic section and weathered with powders.

Above right: the office workers look out of their high windows as a Brush Type 4 diesel passes Denebridge East signal box with a rake of Mk.I stock.

Below: a general view of the Holywell Railway loco shed. Point levers and a suitable amount of grime add to the atmosphere.

to enjoy the benefits of freelance operation. It is my own little railway company and I can run what I want, choose my own livery and design or convert my own locos just as I please. Better still, no one can tell me I have a rivet in the wrong place! Whilst by no means the easiest scale/gauge combination to work with (just try to get a bogie coach on the

track!), 009 does provide a pleasant diversion from 00. By contrast, when I am constructing models of standard gauge prototypes, I do try to get the detail right by studying as many drawings and photographs as I can find.

I am not one for concocting a complicated imaginary history of the area in which my layout is based; suffice to say Denebridge is a fictitious port on the north east coast of England. A short distance from the main British Railways station is Riverside station, home of the Holywell Railway, so named because I once lived in a village of that name. The name Denebridge, however, is imaginary although I have since discovered that there are some Dene Bridges!

Planning and design

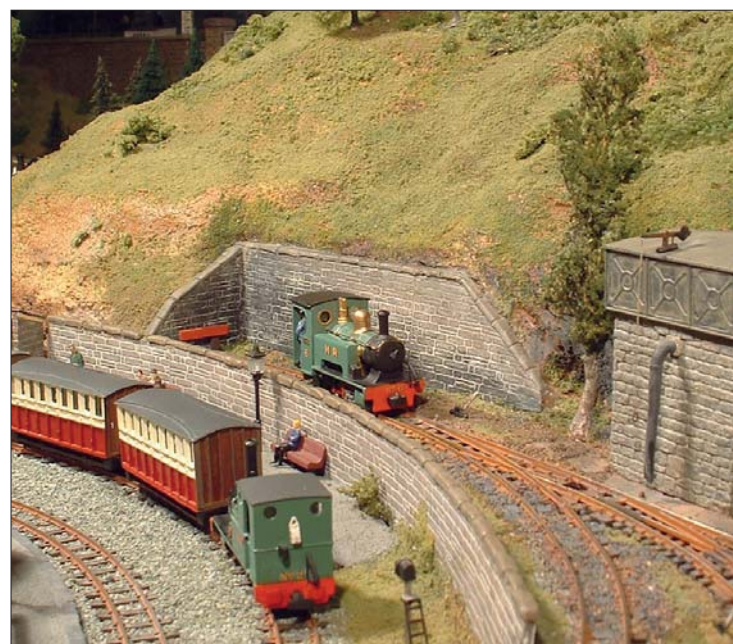
Having over the years constructed layouts located in lofts and garages, with their extremes of temperature, the use of a cosy room within the home was welcome, but how could I squeeze the new 00 layout, my existing narrow gauge layout board, plus my small workbench into the limited space available? I wanted to incorporate a double track continuous circuit in the 00 gauge layout with curves of as large a radius as possible. This was not just for the sake of appearance and to allow

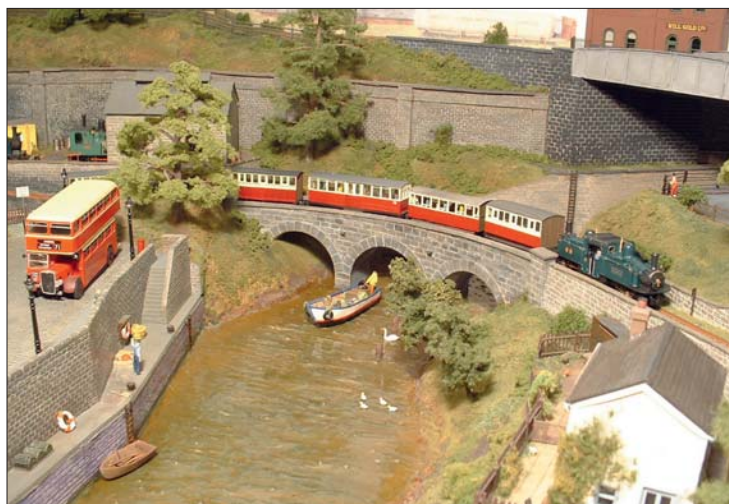
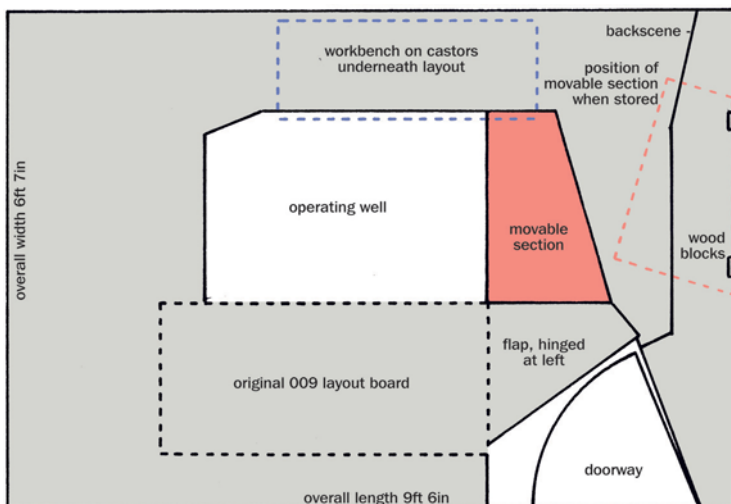
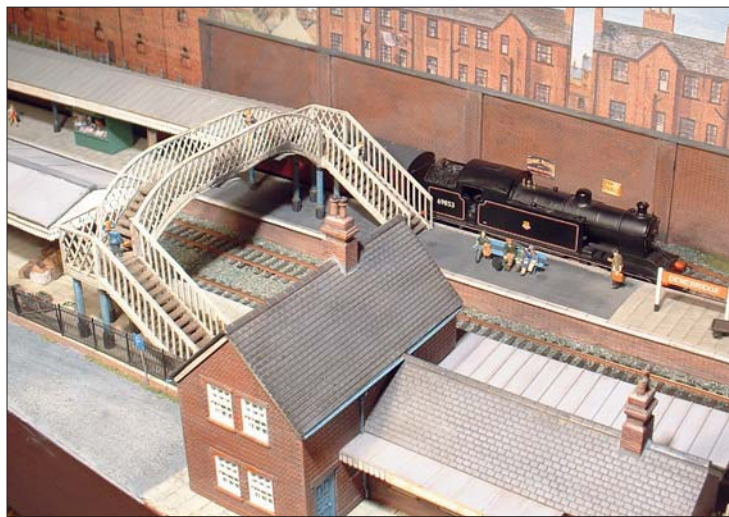
kit-built locos to be run, but especially because I like to sit back and watch fast express trains thundering through a main line station. End to end layouts do not really suit my needs.

As well as a reasonably-sized through station I also wanted to include a harbour served by a short branch and a further line going to a fiddle-yard. A return loop would be incorporated not just to enable trains to reverse direction between the up and down main line circuits, but also so that trains could leave the small fiddle-yard and return to it. Incidentally the reverse loop itself had to be built to tight train set-type second radius curves and as a consequence kit-built locomotives are barred. Perhaps at this stage I should mention that various alternatives to the final design were considered including locating the fiddle-yard and/or the return loop either over or under the main baseboard. However, all these ideas involved unacceptably steep gradients or tight curves.

Below: the Fletcher Jennings well tank waits to depart Riverside station with a train of four-wheel coaches whilst the Kerr Stuart waits to go on shed.

Photographs by the author.





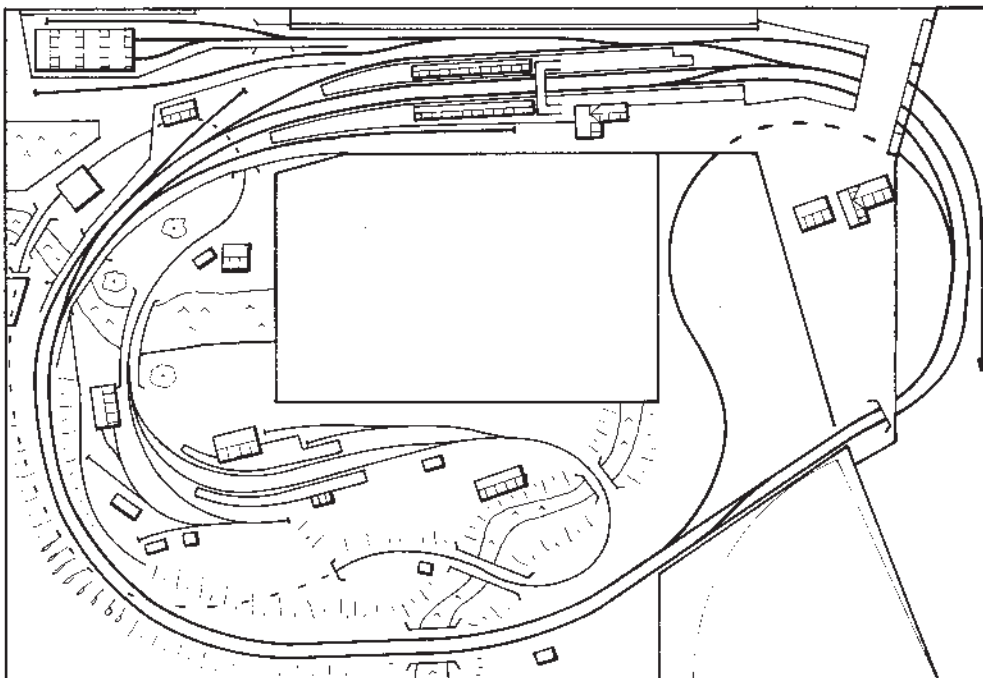
Detailed planning soon confirmed that I would have to stray from prototypical practice in more areas than I wanted. For example I had to omit goods facilities at Denebridge station so as not to compromise the space available for the harbour and also for as much undulating rural scenery as possible. It was decided that, except for the short dock

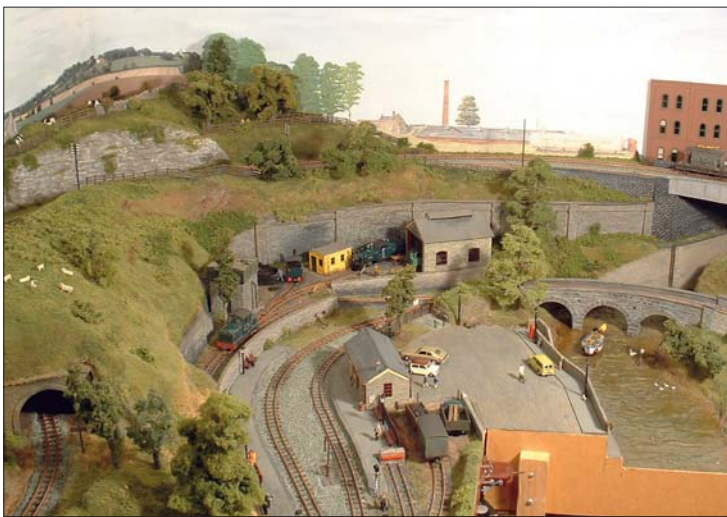
branch, the standard gauge tracks would remain level but that the narrow gauge circuit (part of which was already in place on the existing board) would rise in each direction from Riverside station, before levelling within the tunnel prior to descending back to the station. For added interest the narrow gauge loco shed was also built at a higher level than the

station area. A distinctive and favourite feature on the existing narrow gauge layout was a viaduct and I therefore decided to include a second bridge across another, wider, river. In order to facilitate the largest possible radius, the standard gauge circuit had to be designed to run behind the existing narrow gauge baseboard that was to be incorporated in the scheme.

I knew that I would be living in what was then my new house for only a few years and, as much as I enjoy building layouts, did not want to have to start again completely once I moved home. Consequently I designed the baseboard in the form of four main semi-permanent modules to be bolted together, the existing narrow gauge board being extended to form one of the modules.

A hinged flap across the door and an adjacent removable board to support the return loop, but with no scenery, were also included in the baseboard configuration. As the lightweight removable board supports only the return loop, the rest of the railway can be operated without it being *in situ*. When not in use this portable section is stored over the layout, supported on the upper edge of the backscene boards. I also decided that an area of street covering the part of the return loop that is on the rigid board would be removable so as to facilitate access for track cleaning. I did not really want the visible joints that the removable sections entailed but reasoned that





Far left: Double Fairlie No.8 awaits departure while the Bo-Bo diesel waits in the headshunt. Meanwhile passengers wait for a train due to arrive in the other direction. The water crane is scratchbuilt from brass rod, the grid for the drain being from net curtain.

Above left: a view showing the shortened and lowered Hornby footbridge which has been fitted with smoke shields constructed from thin brass sheet.

Left: the double Fairlie locomotive hauls a train of mixed coaches whilst a Bristol KSW bus built from a Little Bus Company kit, awaits its passengers. The motor boat is a conversion of a cheap resin model.

Above: a general view of the narrow gauge station with the standard gauge running behind. The painted sky background and the digitally produced backscene (seen behind the cows) have been curved to disguise the corner.

Above right: a bird's eye view of Denebridge harbour. A lone barge is tied up – several additional model boats are awaiting construction!

Below right: Nyala passes through Denebridge station on a parcels train.

even the best layouts on the exhibition circuit had to have joins!

The baseboard design allows me to have sufficient space to sit at my small workbench when the removable and hinged sections are not in use. I also decided to mount the workbench (an old dressing table once used by my daughter) on ball-type castors so that it could be pushed out of the way under the baseboard during operating sessions. If all this sounds complicated I can assure you my stopwatch confirms that everything can be set up for a full operating session in less than a minute! I hope that a glance at the layout plan will make clear how everything was shoe-horned into the room.

Construction

The baseboard modules are constructed in the usual way using 2" x 1" timber screwed and glued with PVA. Although some left-over Sundeala board was used to reduce costs, most of the layout was surfaced with 1/2" chipboard. Some areas of framework were left open to facilitate construction of low-lying areas. Both the flap across the door and the

removable section are partially topped with foamboard to reduce weight. As mentioned, the main modules are bolted together. However when *in situ* the flap and return loop rest on small blocks of wood screwed to the edge of the main boards and are aligned using brass hinges with removable pins.

Backscene boards, made from 13" deep MDF, were affixed to the edge of the frame before baseboard installation and baseboard supports are a mixture of 2" x 2" timber and Ikea trestles. In order to ease future dismantling the connected baseboard modules are not attached to the walls but have been built as a tight fit between them and this, coupled with the combined weight of the boards, has ensured stability.

Trackwork and scenery has been laid directly over the joins between the modules and will be severed and rebuilt when the time comes to relocate the layout. From experience I believe this strategy will work but getting everything level is sure to be the biggest headache!

Trackwork

Apart from one SMP turnout, Peco code 75 trackwork with electrofrog points has been

used for the standard gauge and this has ensured a finescale look and reliable operation. A few older items of rolling stock with coarse scale wheels have had to be re-wheeled to enable them to run smoothly on this track but the effort has been worthwhile. Narrow gauge trackwork is Peco 009 with a small amount of Tillig.

Both narrow and standard gauge trackwork is laid on cork and ballasted with granite chippings glued down in the usual way with diluted PVA mixed with a squirt of washing up liquid. Not wishing to wet everything too much I used a bulb pipette, rather than a fine mist spray, to drop the solution gently onto the ballast but this has resulted in the ballast surface drying unevenly in places. Not my favourite job, perhaps I rushed it, but I will have to do better next time. I painted the rail sides a rust colour – another tedious job but worth the time spent.

The turnouts on the standard gauge are operated by either Peco or SEEP solenoids and those on the narrow gauge by wire and tube. As a cheap, secure and easily adjustable knob to operate these wires I use terminal connectors carefully cut out of plastic 3 or 5 amp terminal strips.





Left: a view of the farm with a narrow gauge train approaching. A J72 tank is shunting a van at the main line station.

Below: two cars from whitemetal kits – a Springside Mini and Ford Consul from Mr Parker await returning passengers.

Scenery

Of the many skills involved in making a model railway, scenery construction is probably my weakest. What I do build is based on traditional methods, terrain being constructed using plaster bandage over either polystyrene foam, card or balsa formers or balls of newspaper. This is all covered with DIY filler mixed with brown paint. A removable banana-shaped scenery section approximately 3' long and cobbled together from MDF, balsa and plaster bandage, was incorporated to facilitate access to the long tunnel over the narrow gauge line. I normally only have to remove this section for occasional track cleaning as most stalled locos (and if they are going to stall they stall in the tunnel!) can be pulled out by another stall to the rescue.

Some sections of scenery and several structures (e.g. the farm together with its yard) have been built on their own sub-base and then incorporated and merged into the layout, a small spirit level being used to ensure that buildings are level. It is far less backbreaking to work at the workbench than to stretch for hours into a far corner of the layout. It is probably best to avoid having far corners in the first place!

I have used Woodland Scenics materials for ground cover. However, to add texture, sieved granite ballast is used for most road surfaces. The harbour, river and stream beds are from DIY filler, waves and ripples being formed with suitable brushes used in a sort of stippling action until the desired effect is achieved. The surface of all water is painted with suitable browns and greens and finished with several coats of polyurethane varnish. Perhaps this is now an old-fashioned method of representing water but old habits die hard. Real stone 'rocks' (suitable pebbles purloined from my garden path) are set into the course of the waterfall. Whites and silvers have also been used on the waterfall to give the necessary fast flowing, frothy effect.

The MDF backscene boards have been coloured with emulsion paint to represent sky.

The scenic background mounted in front of the sky is made from commercial backscenes as well as from local countryside scenes photographed with my digital camera. Sections of backscenes, and photographs of, for example, individual trees or buildings, have also been cut out and used separately, in some cases mounting these on card and fixing them in place so as to create a 3D effect.

Trees must be the most difficult things on this planet to model realistically! Mine are from a variety of sources including some home made from sea moss. The sea moss has been mounted on trunks made from cocktail sticks or wire, wound with tape and finally covered with flexi-bark from Green Scene. Some other trees, produced from Woodland Scenics kits, have been given a denser, more realistic appearance by adding extra branches and this simply involves carefully drilling holes in the plastic trunks and gluing in extra branches removed from another similar tree. Some excellent commercial trees are now available and I will probably use more of these in future.

Hedges are made from rubberised horse-hair covered with flock, and bushes are from Woodland Scenics and Heki materials. I recently discovered the useful Heki 'Flor' product and, in the guise of a creeper/groundcover, this has been used as a sort of curtain to disguise the joins around the removable section covering the narrow gauge tunnel. The Heki Flor is only fixed down at one edge and can therefore be lifted and repositioned once the removable section is replaced.

Denebridge is populated with both whitemetal and plastic people and animals from a wide variety of manufacturers. Because of the limited variety of ready-painted people available in 1:76 scale, like many modellers I have resorted to using some H0 models from the likes of Preiser. As a point of interest I have also tried some Preiser 1:72 scale people on the basis that these are nearer to the correct 1:76 00 scale than the smaller 1:87 H0 people. However these folk do appear giant-like, particularly when compared with the over-small H0 people that we have perhaps become accustomed to seeing on many 00 layouts. Careful placing or corrective surgery is therefore essential! I use non-permanent tacky glue to fix my figures and animals in place as I like to reposition them now and then.

Road vehicles are a mixture of kit-built (Springside, Parker, Little Bus Company etc) and ready made and these include old Dublin Dinky and Lesney models. I believe that detail on road vehicles is just as important as on rolling stock and where necessary road vehicles have been fitted with windows, registration plates and other enhancements. Incidentally, although there are numerous buses and lorries, I often wonder why there are so very few ready-built 1960s era 1:76 scale cars on the market.



Right: the Langley Double Fairlie in its Pine Green livery (from a Halfords aerosol) passes by the 'Ship Inn'.

Below: a general view of Denebridge old town area. The terrace houses are Dornaplas with enhanced roofs.

Structures – general

With the exception of some low relief buildings converted from card kits and a Hornby 'Boars Head' pub, which I could not resist buying, all buildings are either scratchbuilt or from plastic kits. Most kits have been altered, some considerably: at the very least I try to improve roofs and chimneys, fit curtains and place people behind windows.

The multi-storey brick office blocks are converted continental kits, the 'Ship Inn' converted Heljan and the small farm originated from a Dornaplas kit. Amongst other things this building has been heightened – it must be easier to scratchbuild! The little hen house is made from plastic sheet and bits left over from kits.

There seem to be miles of retaining walls on the layout – it certainly felt that way when I was making all the coping stones. The wall behind the narrow gauge loco shed, which supports the edge of the removable tunnel cover, is scratchbuilt from embossed styrene whilst those retaining the standard gauge line are from Wills, Metcalfe card or Slater's embossed Plastikard. Because they can be curved easily I used expanded polystyrene retaining walls from International Models for the harbour end of the main line. All retaining walls on the layout are capped with coping stones cut from plastic sheet whilst capping stones on some bridge supports are castings by Exactoscale. The steps down to the riverside pier, and also from the higher town level to the station approach, are made from sections of plastic steps from the Heljan Teignmouth station kit. Fences and gates are the usual plastic products whilst ornamental gates are Scale Link etched brass.

I produced station nameboards for both stations using Microsoft Word.



Structures on the standard gauge line

I have tried to give the main station a North Eastern Region flavour by using appropriate colours together with North Eastern Railway type seats, barrows etc. The platforms themselves are of balsa and card edged with Slater's brickwork and surfaced with Wills Victoria stone paving. However the paving in front of the station building is made from individually-cut plastic flags. The footbridge is altered Hornby, fitted with smoke deflectors filed up from brass sheet, and the station buildings are modified Peco kits. It's a pity Hornby did not bring out its Skaledale North Eastern footbridge and buildings sooner but that's life! The main engine shed is a modified Wills kit and the staircase leading from the terrace down to the shed yard is scratchbuilt from balsa and plastic.

I scoured the country to find some Mike's Models kits of North Eastern watercranes but after discovering that these were out of production settled for what was available. Signalling is not yet completed but those

already installed are a mixture of Ratio semaphore and Eckon colour-light, the latter being left over from a previous layout.

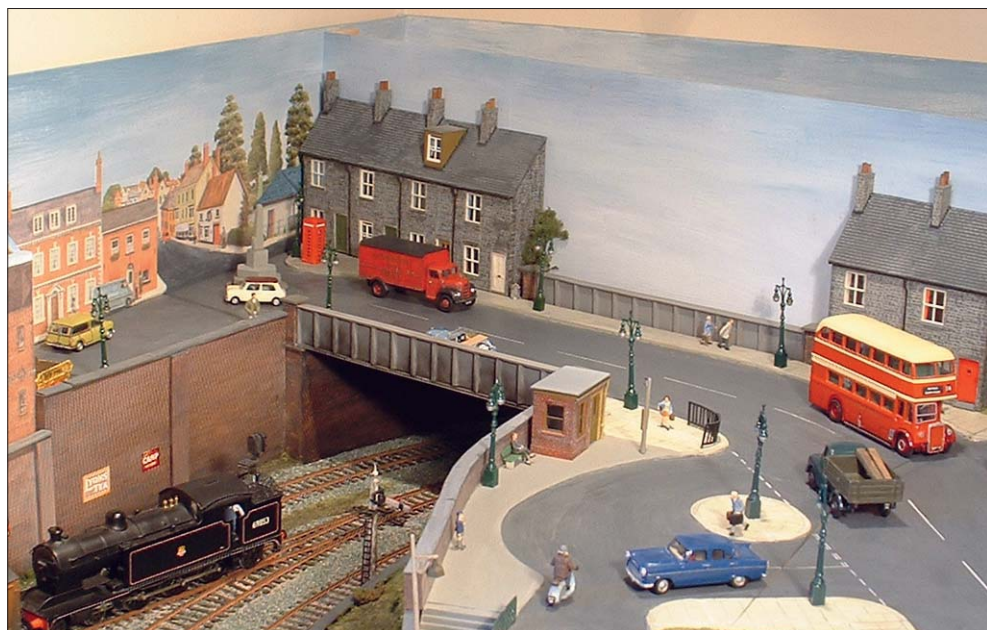
Structures on the narrow gauge line

In order to present a uniform period appearance, Slater's Plastikard (stone course type) has been used for buildings and walling throughout the narrow gauge station environs. The station building is a shortened Dapol product overlaid with these stone sheets and with a new slate roof, and the little ground level signal box is a converted Wills kit similarly stone-clad. However the waiting shelter and the engine shed are scratchbuilt, the same surface material being used but in the latter case over a balsa framework and with a roof from Slater's corrugated Plastikard. Like so many things the doors for this building are still on the drawing board!

Solid balsa has been used for the platforms at Riverside station and this is covered in DIY filler, grey paint and with fine granite chippings for texture. The random-shaped platform edging stones are individually cut from plastic sheet. The water crane between the narrow gauge station platforms is constructed from brass tube with a Mainly Trains handwheel. Semaphore signals in the vicinity of Riverside station include an old converted Triang TT gauge and another built from plastic rod and some left-over pieces from Ratio kits. There are also colour-light signals at either end of the station, one being a converted N gauge and the other built from plastic tube, a washer and various pieces left over from Eckon kits. Waste not want not!

Both viaducts on the Holywell Railway are constructed from plastic. The one near the waterfall utilises Ratio retaining walls for the side faces whilst the larger curved one is from a continental H0 scale kit. This has been altered significantly to accommodate the graded trackbed and fitted with end pillars and coping stones to give it a British appearance.

To be concluded.



A low-relief warehouse

A simple N gauge structure for the back of any layout

RICHARD BARDSLEY rearranges the Peco engine shed kit into an industrial building.

The Peco plastic kit for a single road engine shed is a very popular kit, a popularity that has endured for many years. It was always designed so that several kits could be brought together to make longer and/or wider engine sheds. You see it in one form or another on many N gauge layouts. It was the first plastic building kit I ever made, for my first N gauge layout over twenty years ago, and I still have it. Thus I was able to take some measurements and draw out the sides and two different ends using a CAD program (see Figure 1).

I wanted a low relief warehouse for the rear of a layout and was keeping an eye out for something suitable. Those big windows on the side of the engine shed kit looked just right, and I wondered what possibilities the kit could offer. Having drawn out the main components on the computer, I was able to shuffle them around and get a feel for what could be done. Also, I was able to print out the designs to scale and place them on the layout to see how they would look. Don't worry if you don't have a computer or any CAD software – you can do exactly the same thing with a pen and paper, get a few photocopies of your original, and then cut them up and shuffle them around until you have a design that fits.

What became obvious fairly quickly was that the ends (one with two big doors, and the other with a personnel door and window) could form the ground floor by cutting off the apex, with the sides making up the upper storeys. The sides themselves are five 'units', three of which have windows. Two 'units' are approximately the same width as an end piece

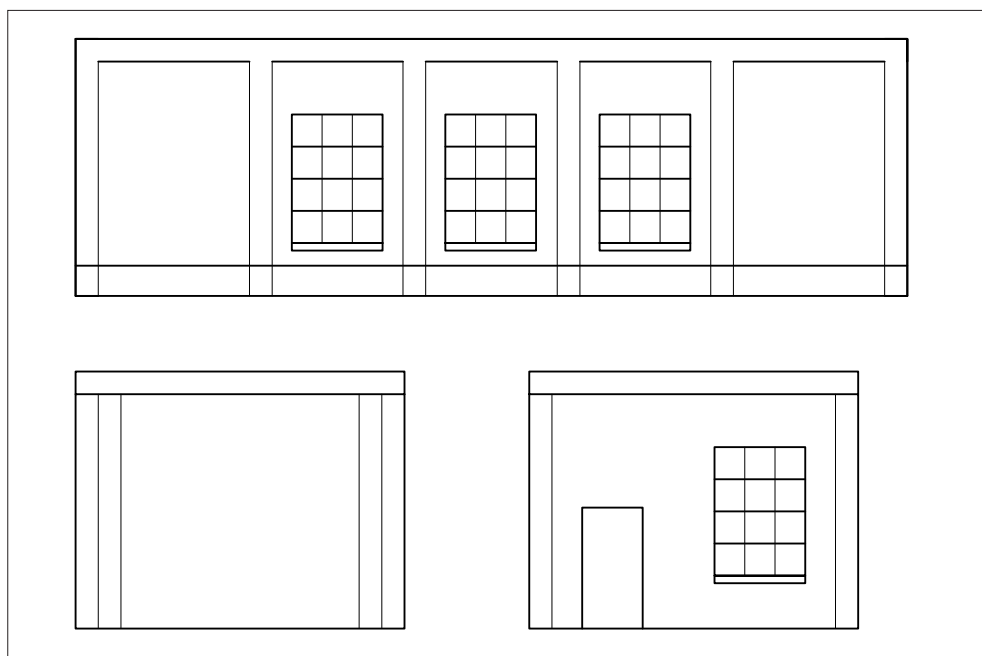


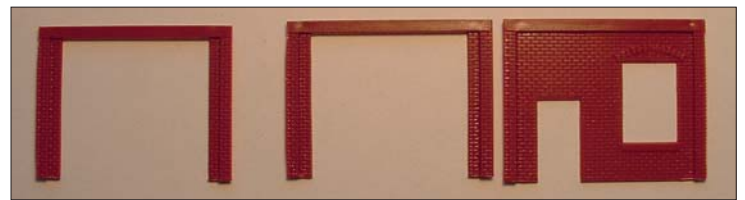
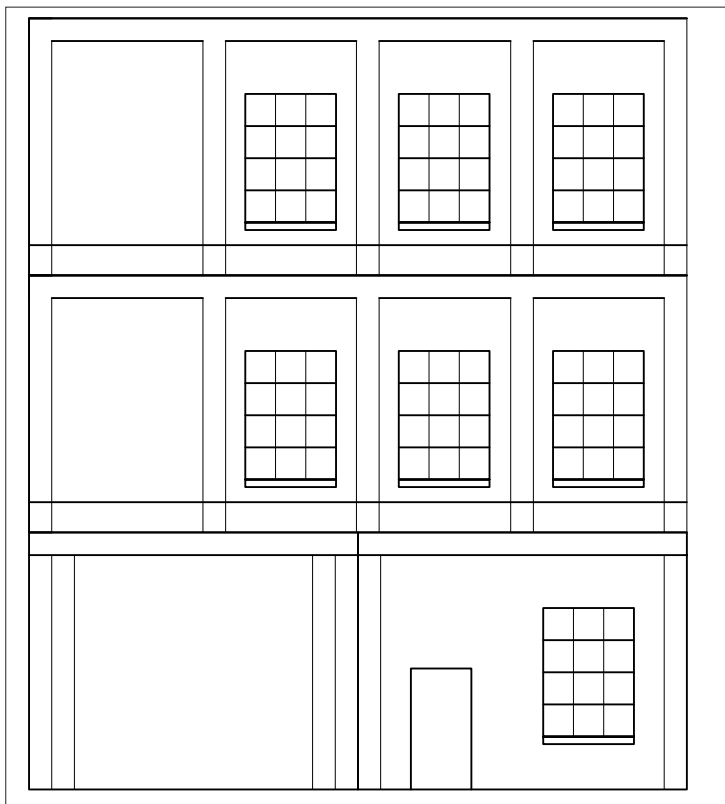
– there's only a few millimetres in it. The next consideration is how many kits to use – certain combinations can be made that use most of the wall pieces with little waste while others are more wasteful.

Figure 2 shows a conversion using just one kit. Putting the two ends as a ground floor matches exactly to the side if you remove one windowless end 'unit'. The removed parts could again be cut in two to make the building stand out by about 10mm. There's further variety in terms of which side you have the double doors and which end 'unit' to remove from the sides.

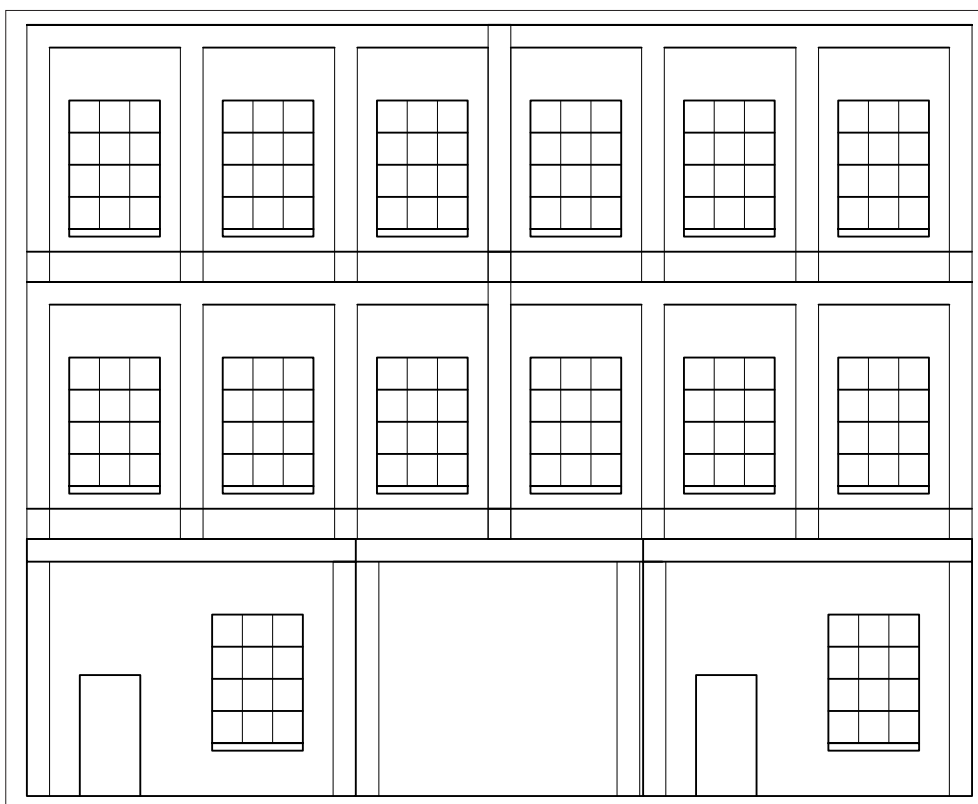
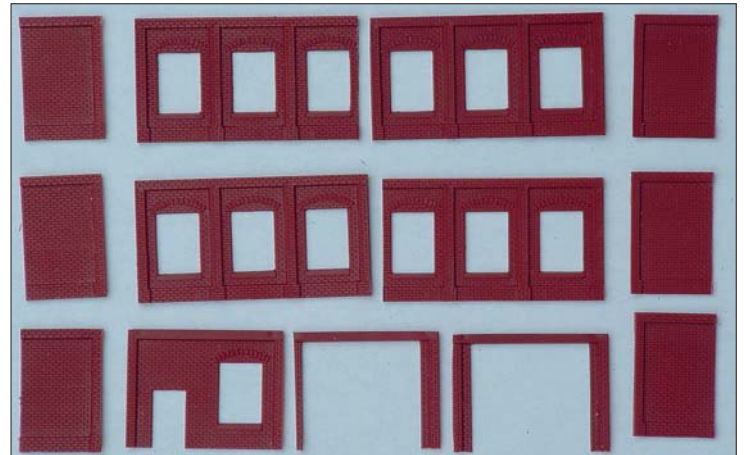
Figure 3 shows two kits combined, and this forms the basis of the model I chose to make. The four sides each have the two outer windowless 'units' removed, and these removed pieces form the sides of the building. Three of the four ends are required and the drawing shows just one set of main doors used, but in the end I chose to have two sets – adding further variety.

All this cutting requires a modest degree of accuracy – you can fettle the resulting parts with a file and some fine sandpaper. You could use a sharp knife and an engineer's square to cut the pieces, but I find it better to use a razor saw in a mitre box to get clean cuts at right-angles. I use the saw and aluminium angle box from the American X-acto range. If one of your cuts is not perfect, you can always disguise it with a little bit of filler, or perhaps a drainpipe can be used to hide the evidence.





Above: the three end pieces with the apex tops removed. Note how the right-hand piece with the window is slightly taller than the other two and needs about two brick courses trimming off the bottom. Below: a new kit of parts! The parts extreme left and right make the new side walls.



Above left: the completed structure.

Left: Figure 1.

Top and above: Figures 2 and 3 respectively. Photographs and drawings by the author.

There's a certain amount of waste from these kits in that you do not require the base or roof parts, but I put these in the scrapbox for other projects. I chose to model the warehouse with a flat roof, but you could reuse the removed apex pieces from the ends on the roof and then use the roofing pieces supplied.

The base parts fit snugly over a piece of Peco track so I have used them to make a 'hard-standing' on a siding in which the rails are inset into a concrete base.

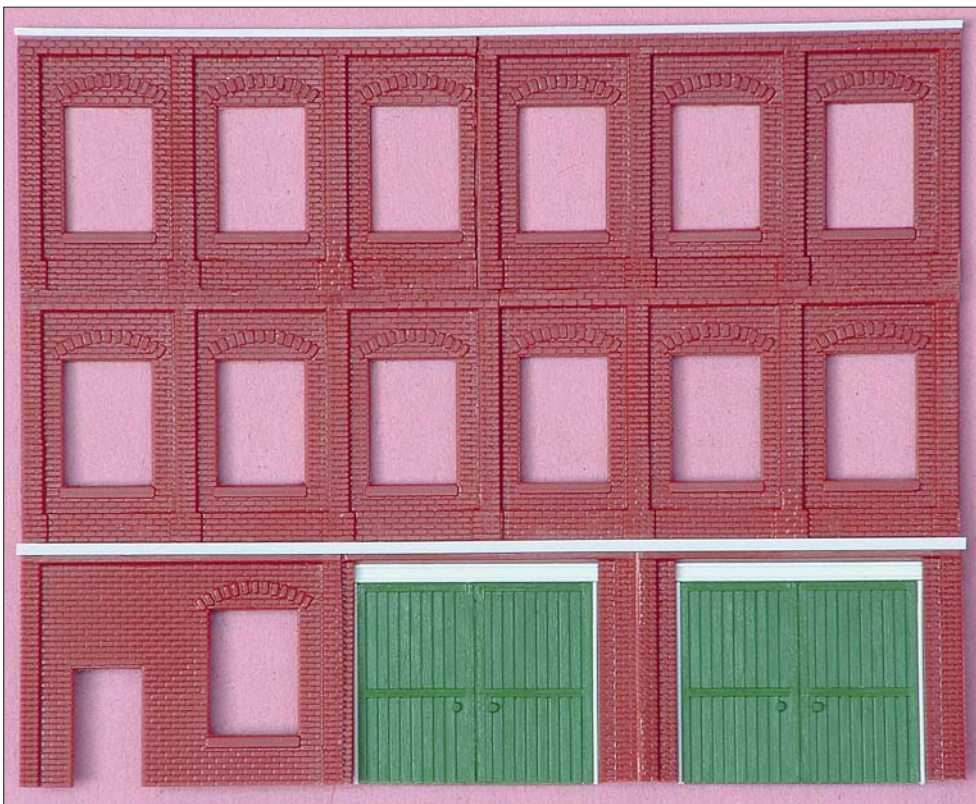
The sides and ends have quite a few mouldings on the back, such as part numbers and projections to keep the glazing in place. I removed all of these with a sharp chisel blade and some sandpaper so that the back of the pieces were all completely flat. This is important as it helps for the pieces to be flat when cutting them and to have them on a flat surface when gluing them back together.

A new kit of parts

Once you have done all the required cutting, you have made yourself a new kit of parts. Check the fit of all the parts before you glue them together as you are putting bits together in a way that the kit manufacturer never imagined! I found that the end with the window and personnel door was fractionally taller than the end for the main doors, so I removed two brick courses off the bottom. Similarly, the offcut 'units' from the side pieces are also fractionally taller than the ends, so they need a bit trimming off the bottom. I also found that six window 'units' from the sides was slightly shorter than the three end pieces together, so the end used in the middle has a slice taken off its left-hand side.

Once I was satisfied that everything would fit together correctly, I glued each piece together with liquid poly. Where the end pieces are joined side to side, these edges are bevelled 45 degrees due to the way the kit is meant to be made – so only a fraction of the full thickness of the pieces touch – therefore I added a strengthener behind in the 'V' between the pieces. I added some microstrip to the moulded beam running along the top of the ground floor to help disguise the joins, and similarly added a piece to the top of the building to represent some kind of coping.

I found that the main doors were slightly narrower than the openings. Therefore, I glued the doors together into matching pairs and added some microstrip to the sides to fill the gap and represent a bit of framing. For a bit more variety, I added some I-beam above the doors to represent a girder supporting the upper floors. In order to make painting easier, I made the doors and framing parts as a separate unit attached to a piece of 20 thou plasticard behind. This was removed for painting and then simply glued in place.



The ground floor, being made from end pieces, has a 45 degree angle at each end, but the two storeys above did not as these were edges that had been cut. The new ends all had 45 degree angles as these were 'units' cut off the ends of the sides. The 45 degree angles make the corners a snug fit. Therefore, I used a HSS Burr in a mini-drill to add new 45 degree angles to the ends of the two upper storeys, constantly checking the fit with the side pieces and finishing off with some fine sandpaper. The sides were then glued on and finally, the building could stand up in its own right.

Painting and finishing

I painted the entire building with several coats of paint to represent a medium to dark coloured brick – I actually used BR post 1964 brown bauxite as I happened to have a tin handy after finishing some wagons. I picked out the window ledges and the previously mentioned coping above the doors and at the top with a mid grey colour to highlight some of the detail.

I omitted any attempt at mortar between the bricks – it is difficult to achieve a good effect in N gauge, as the bricks are so small that the

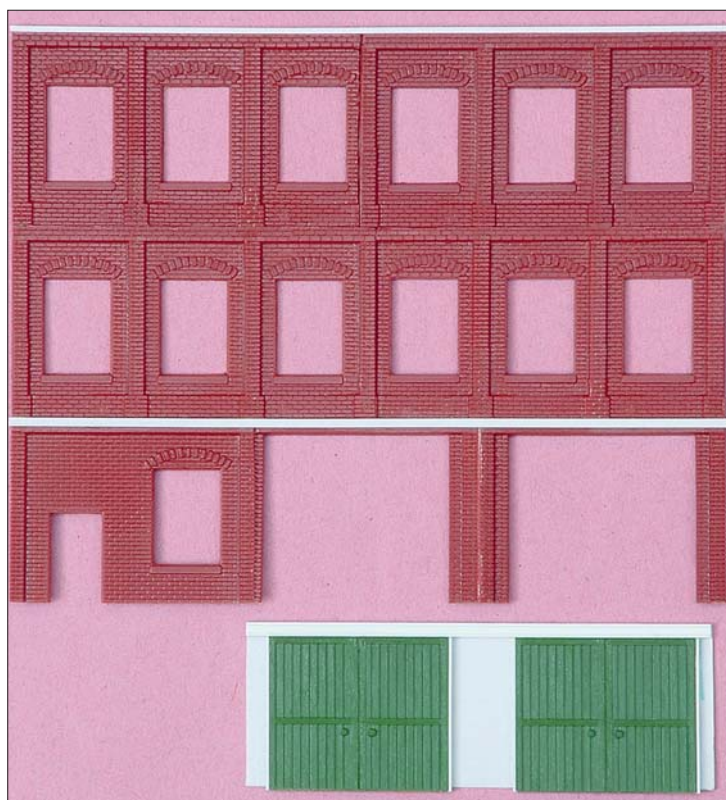
mortar courses are minute. You can give it a wash with something like diluted acrylic paint and wipe off the majority – some moulded brick effects respond to this better than others. From a usual viewing distance (and this is a building for the back of a layout after all) you can't even see the bricks let alone the mortar!

The window frame units and doors were all painted light grey as separate parts – much easier than trying to paint them in place. When all the paint was dry, I glued the windows and doors in place.

If there's one mistake I seem to make consistently when constructing plastic kits, it is to use too much glue when fixing the glazing behind the window frames, with the result that it oozes out over the 'glass'. So this time I was very careful! I used long strips of clear plastic for the upper storeys and a large piece for the ground floor window and applied a few sparing blobs of glue in the gaps between the frames. I then carefully pressed the glazing into place, making sure that nothing oozed out where it shouldn't.

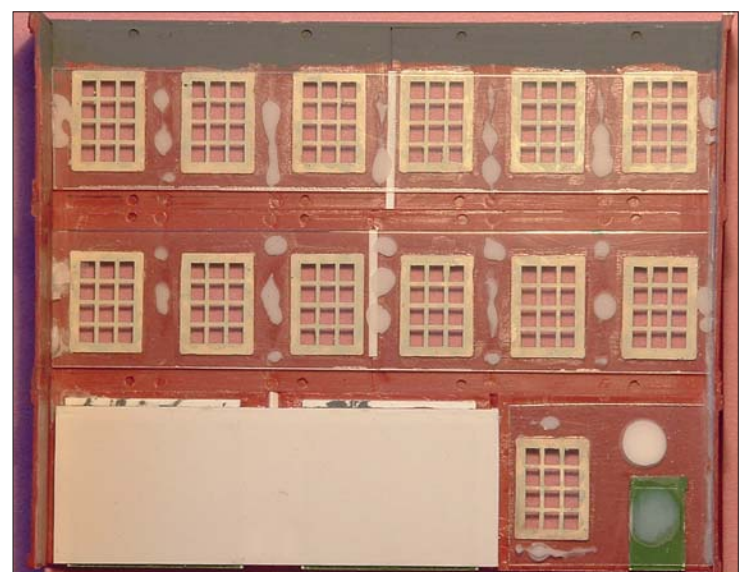
You don't have to fit any internal structure to a building like this, it's enough just to paint the backscene black where it is covered by the building. However, I added a backpiece, two floors and a roof from dark grey card, as with the large windows, you can see in. I have a stock of scrap card of various thicknesses accumulated over the years – it's easy to work with and best of all, it was free.

This was a most enjoyable conversion that only took a couple of weekend's work to complete. When you know the building's origins, you can tell that it came from the Peco engine shed kits, but I hope that at a casual glance, it will not be so obvious. When my layout makes its exhibition debut, it will be fun to see if anyone recognises this low relief warehouse as a reworked engine shed!



Above left and left: the front of the warehouse with the parts glued together. Note the two pieces of plastic strip at the top and above the doors. The main doors have been attached to a backing piece to make one unit. This is easier to paint separately from the main building and can be glued in place after painting.

Below: inside the building showing the glazing material secured with a few carefully placed blobs of glue.



Ramsey

Isle of Man Railway in 4mm scale – Part 3, rolling stock

ALAN CATLOW describes his 00n3 coaches and wagons in the last part of his trilogy.

It is possible nowadays to build a 4mm scale model of every coach that ever ran on the Isle of Man Railway. In the railway's heyday, there were 75 bogie coaches plus 14 six-wheel coaches that had once belonged to the Manx Northern. For my period I am only concentrating on the bogie coaches as the others were out of service by that time.

I have no intention of modelling all the 75 coaches, life is just not long enough and possibly the layout would not have enough space to cope with them all. I have studied in great detail the ones I intend modelling and have completed eleven so far with a few more in the wings.

In an attempt to explain something about the coaches, all the bogie vehicles are classed as 'F's. There are small 'F's and large 'F's. The small 'F's are numbered F1 to F28 and that includes F27 and F28 which are full length luggage vans. The large 'F's are F29 to F49 and they include the six saloons F29, F30, F31, F32, F35 and F36. If you look at pictures of Manx trains you will notice that certain coaches are lower. They are the small 'F's. In addition to this there are the 'Pairs' coaches. These are numbers F50 to F75 and they are the original four-wheel coach bodies mounted in pairs on new (up to 1926) bogie underframes. The Pairs coaches were used to strengthen service trains at holiday times and as school service specials.

There are three manufacturers of kits for this vast selection of coaches. The good thing is



that they all make different ones so as to avoid duplication and they all make them in a slightly different way. As a result it is possible to build them all should you so desire.

If we start with the most modern ones and those most commonly used in most trains, then the Branchlines range is the one to look at. Branchlines produces three large 'F's – F45, F47 and F49. F49 is a brake third and there were eight in operation so you can build them all from that one kit. The Branchlines kits are in etched brass with brass castings and are complete in every way including the wheels.

They include easy-to-follow instructions but after building your first one you may find like me that you can simplify the construction method. One thing I will say at this stage, and this goes for all the manufacturers, the bogies are far too delicate for constant exhibition running so I strengthen these from the beginning.

Roxey Mouldings provides the most variety of coaches. With the Roxey range it is possible to build all the different batches of the small 'F's, the two 'Empress' luggage vans, the six saloons, the Foxdale coach F39 and the elderly Manx Northern six-wheelers. This range of coaches is also produced in etched brass but the roof is formed out of pre-moulded plastic. Wheels are not provided in this range, and seats are only provided with the saloons. So the builder has that little bit more work to do to finish these off. Nevertheless, the end product looks and runs superbly. Certain coaches from this range can now be bought in 7mm scale; Slater's has recently produced correct wheels to run on 21mm track.

Above: a train propelled by loco No.1 *Sutherland* and consisting of the Foxdale coach F39, heads towards Kirk Michael on a short working. The coach is by Roxey Mouldings and needs one extra window cutting out prior to soldering. The loco is one of the present-day kits from Branchlines.

Left: a good selection of Isle of Man Railway stock is to be seen here. Of the two coaches in the bay (the new road) on the left is F54, one of the 'Pairs' coaches and to the right is F37, one of two Hurst Nelson-built bogie coaches delivered to the Manx Northern in 1899.



Photographs by Steve Flint, Peco Studio.



Left: genuine Manx Northern meet. A MNR van sits upon a section of Manx Northern rail. The van is a Branchlines resin kit and the rail was cut from a redundant length in a siding.

Above: No.1 Sutherland shunting goods stock into the correct order.

Below: No.5 Mona waiting to leave Ramsey. A spare brake coach is in the carriage shed.

In order to fill a needed gap, Allen Doherty of Worsley Works has very kindly added to his range the remaining coaches that had previously been left out. To be fair to Allen, these etched kits are sold as 'Scratch Aids' and not as complete kits. But thanks are due to Allen's venture as we now have these part-kits for two different 'Pairs' and two ex-Manx Northern bogie coaches F37 & F38. When these two were introduced in 1899, they were the most modern coaches on the island, with electric lighting from new F37 and F38 – or 16 & 17 as they originally were – could be found regularly on trains working from Ramsey straight through to Douglas, and carried roof boards declaring such.

I would not recommend one of these kits to anyone who has never built an etched coach before. Being a scratch-aid, there are so many parts that have to be made by the builder it can put people off. On the other hand, if this is the only way to create that special vehicle and you have the determination, then the end result is most rewarding. I have built F37 and F54 from this range and have to say they look every bit as good as coaches from the other two suppliers.

Whilst on the subject of Worsley Works, Allen supplies an etched scratch-aid body kit

for the County Donegal railcars numbers 19 & 20 and the diesel locomotive *Viking*.

No matter from which supplier the coaches came, I have painted them all in the blood and custard livery that was to be seen in 1964. They are all brush painted with Railmatch colours and lined in black as per the prototype. The fleet numbers, Guard and '1s' on the doors are all hand-painted as I could not find accurate transfers with the correct shading. In order to seal and protect the finish, I applied a mix of matt and satin varnish.

The sight of a complete train of coaches all lined out in black on the layout, captures to me the Isle of Man Railway at its best.

Freight stock

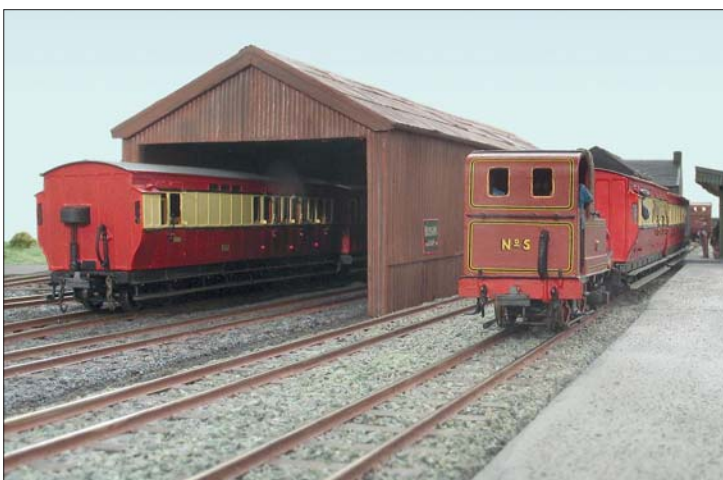
The Isle of Man Railway never ran goods trains as we know them on the mainland. Any goods to be carried were either transported in the guard's portion at the end of the train, in one of the vans, or an open wagon attached to the rear of the train. In other words, mixed trains were run when necessary, with the appropriate van or wagon being shunted into or collected from a siding along the way. This would not have been much fun for the passengers, being

shunted backwards and forwards until the manoeuvre was completed but I suppose they just got used to it as it had always been that way.

As with the coaches, goods stock also had classes. For example the main ones were: two-plank wagons were 'M' wagons, the three-plank wagons were 'H', cattle vans were 'K' and goods vans were 'G'. There were others but so few in number that I have not modelled any. To create a touch of humour with the 'M' wagons, I have numbered them all after motorways, M4, M5, M56 etc!

Branchlines is the only manufacturer to include goods vehicles in its range. The four main classes listed above are all available in kit form; the wagons are all whitmetal whilst the vans have resin bodies on a whitmetal underframe to keep down the weight. In addition to the Branchlines wagons, I have found a second way of producing Isle of Man wagons. Nine Lines produces open wagons for the Southwold Railway. These are much too short for my needs, but by joining one and a half Southwold wagon bodies together on a single underframe, with careful cutting and fixing back together, lo and behold: an instant IoM wagon in plastic. By using both sources I have managed to build up a large number of wagons fairly quickly.

Purely for variety and certainly not accuracy, I built up eight tipper wagons that look the part but would not have been used on the railway. These were constructed from whitmetal but never intended as 4mm models. Malcolm Savage produces many parts for the 5.5mm Association and these tipper wagons were



List of coaches built to date

No.	Type	Builder	Model Origin
F15	Guard/Composite	Brown Marshall 1894	Roxey Mouldings
F30	Saloon	Metropolitan 1905	Roxey Mouldings
F33	Brake Third	Metropolitan 1905	Branchlines
F36	Saloon	Metropolitan 1905	Roxey Mouldings
F37	Guard/Composite	Hurst Nelson 1899	Worsley Works
F39	Guard/Composite	Bristol & South Wales 1897	Roxey Mouldings
F43	Brake Third	Metropolitan 1908	Branchlines
F45	Guard/Composite	Metropolitan 1913	Branchlines
F47	Third	Metropolitan 1923	Branchlines
F49	Brake Third	Metropolitan 1926	Branchlines
F54	Pairs Guard Third	Metropolitan 1923	Worsley Works

Right: *Fenella* draws forward from her train towards the buffer stop against *Bowring Road*. A second *Beyer Peacock*, No.4 *Loch* is about to take on water from the tower. A spare coach, No.F39 – the *Foxdale coach* – is poking out of the corrugated iron carriage shed.

Below: looking from the goods yard towards the station building with No.8 *Fenella* drawing forward prior to running round its train. No.4 *Loch*, still with its *Salter valves*, is on shed.

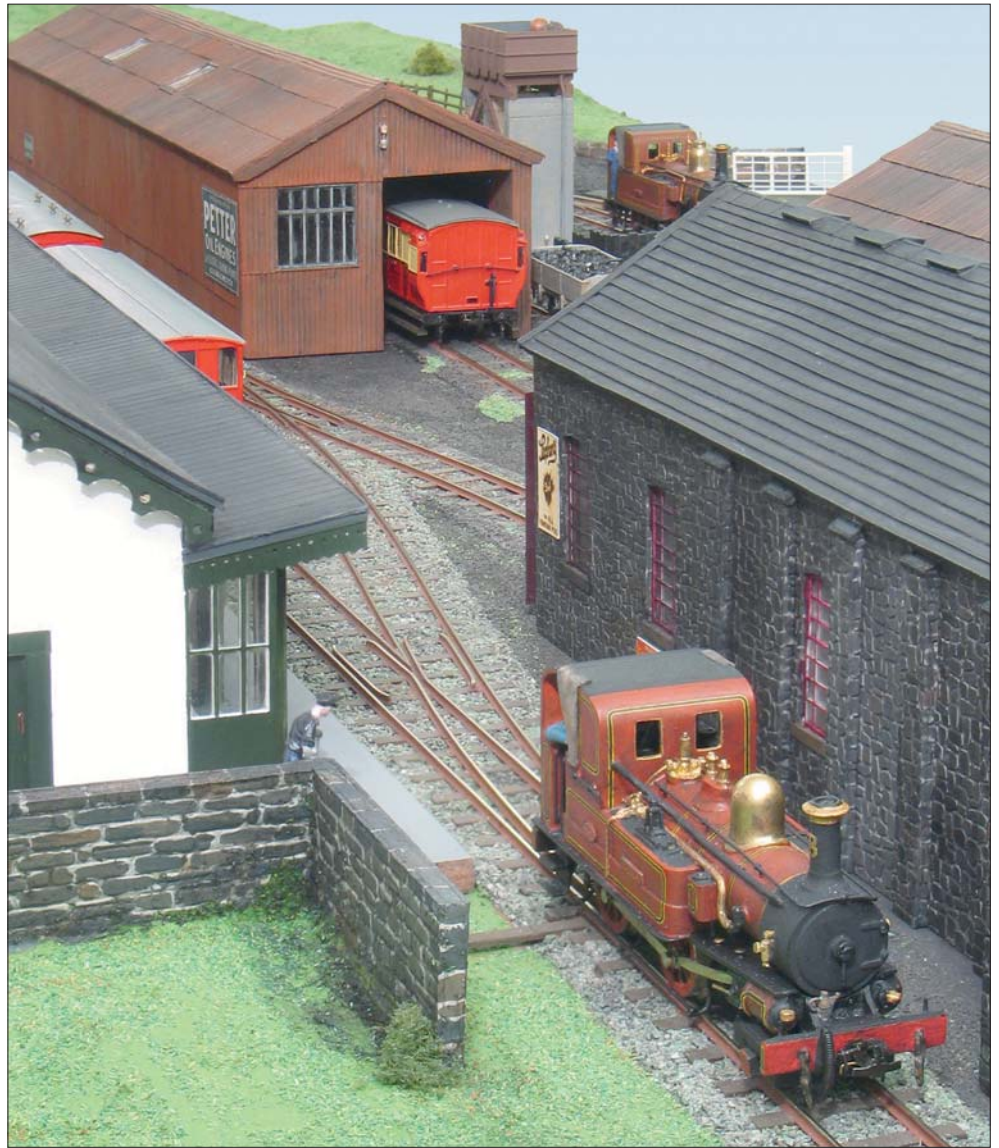
built from castings specially made for Association members. The size of these vehicles fits in perfectly with the other goods stock and as a result nobody would know that they were in reality to a larger scale. To complete these, once they had been painted and covered in plenty of rust and grime, they were numbered T1 to T8.

All the goods stock with the exception of the tippers, has been fitted with the 3mm Society brass 'W' irons to carry the 9mm pinpoint wheels. The 'W' irons make a big difference to the free and accurate running of the vehicles. I discovered the 'W' irons many years ago during my time modelling finescale 3mm.

And finally, the couplings. Like many modellers I experimented with various modern couplings to find the ones that suited me best. I decided from the beginning that whatever I chose had to be 'hands off' and fully automatic. Due to the fact that the stock does not get turned round I chose two different makes, Bemo at one end and B&B at the other. This may sound rather strange but the two work perfectly together the way I have set them up. For the Bemo type (that is at the rear of the stock) I soldered a metal tail to the leg of the loop to be activated by an electromagnet. That in turn lifts the loop when needed.

The front of the stock has the B&B but only the part with the latch; no loop is needed at this end. With experience I have found that two loops cause nothing but trouble. After using this combination at the layout's first exhibition, our team of operators, like myself, thought we had hit on a winner.

Without the team of unpaid hired helpers the layout would never be seen at exhibitions, so I must say a great big thank you to all of those friends who have given so freely of their time. If I mention some by name I will certainly miss one out and that is not fair so many thanks one and all, I do appreciate your help.



Conclusion

To conclude, modelling the Isle of Man Railway has proved to be a most worthwhile challenge. The research has been very interesting and rewarding, and it has also given me the opportunity of meeting many people with a similar interest. A great number of those people still live on the island and, from talking to them, would certainly choose to live nowhere else in the world, it really is a magical place.

Due to the health and safety act in force today, there are many signs displayed around

the station areas informing you of the fact you are 'on camera' and a heavy fine awaits you if you step out of line. Certain publications have heavily criticised the large number of signs displayed. We found that the people in charge of the railway could not have made us more welcome, providing that you go through the proper channels first. The thing always to remember is that the Isle of Man Railway is a real working railway and as such is run like any other business. Safety is paramount for all, be it railway staff or passengers.

The future of the steam railway under Isle of Man Government ownership looks safe and secure for years to come, and a journey from Douglas to Port Erin during one's holiday just has to be a number one priority.

It just falls for me to say a big thank you to Paul Ogden, Head of Railways in the Isle of Man for all his co-operation during our visit, our dedicated team of helpers at exhibitions and finally Steve Flint for the truly excellent photos that accompany this article.

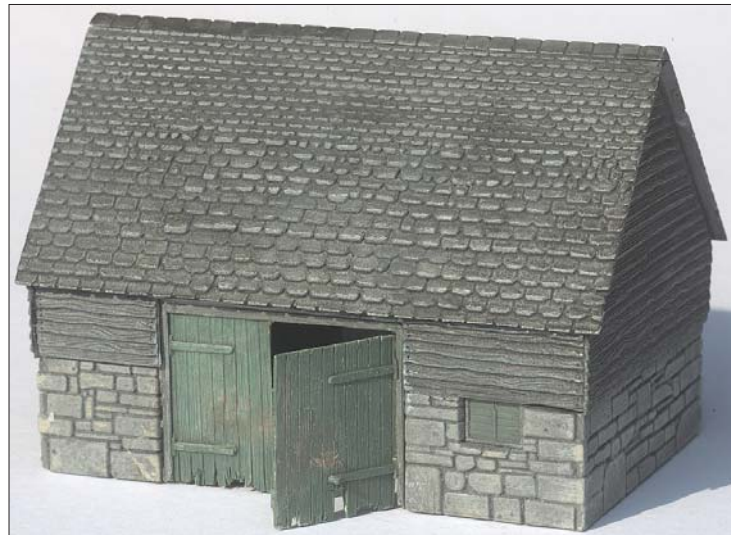
And so if you wish to keep up with current happenings on the Isle of Man Railway, you can do no better than become a member of The Isle of Man Steam Railway Supporters Association. Membership Secretary: Lynda Beard, 29 Hawarden Drive, Douglas, Isle of Man IM1 4BP.



Howard Bros. Garage

A 1950s-1980s period structure in 4mm scale

PAUL MARSHALL-POTTER combined kits and components to produce this roadside essential.



My layout *Albion Yard* is set in the UK, and in red-brick territory. I have a wide range of interests in the UK prototype, and the layout is set to represent the period from the 1950s up to the 1980s. The era-changes are made by replacing the stock, road vehicles and some of the buildings too. The layout is a back-street industrial yard in an urban area. The red brick identifies the location as potentially any area with typical red-brick Victorian and Edwardian housing, and so allows me to run a variety of regional stock and locomotives without them looking out of place.

I have several of the Howard Scenics houses built and I wanted to place them into a run-down urban area, and thought about what industry would look at home in the same context. Looking into the box of kits picked up over the years one immediately stood out, the Dapol, née Airfix, garage. Being a small building it would suit the space I had envisaged and would be ideal for a small back-street repair business that came to mind.



The mouldings are showing their age – the design must be in the order of 45 years old – and hence are a bit crude. I thought there must still be some mileage in this kit though, and set about thinking how improvements could be made. Whilst looking at the area it was to occupy, it became apparent it needed something more on the site as well as the single building.

Another rummage found the two Wills kits added here, SS30 Stone and Timber Barn and SS65 small gents toilet. Looking at the packaging pictures I immediately knew I had found what I was looking for.

The next step was to build the very basic structures, i.e. just the walls and roofs. With these made I could start moving the buildings around to get the best and most realistic positioning. The barn would have been the first built, and in a more-relaxed planning era the garage could have been added to the older barn with not much more than a passing thought, if that.





It made sense and looked best with the gable end of the barn joined to the gable end of the office/shop section of the garage kit. The toilet then fitted very neatly along the garage back wall, and the whole building looked natural and, most importantly, believable. As it was to be removable as a module I needed a base, so I turned to the Wills Scenic sheets, again in the Aladdin's cave of my 'kits to build' box! The granite setts looked good around the barn, but out of place around the garage. Realizing that the garage would probably have a concrete floor I found it would sit almost perfectly on a single sheet of the concrete sections that Wills produces.

I wanted a narrow access to the back of the premises so cut the granite to an L shape and in filled the missing section with the concrete effect, to make an almost square base. I used a final offcut of pavement section which looks out of place on the photos, but as this section is out of view, it's not a problem that it doesn't match.

I now had my basic building and outline of the base. The toilet was built as per the kit, apart from changing the roof to corrugated iron, no creature comforts here! I wanted the garage to look in use, so the barn had the doors cut so one could be placed half-open. There was a wooden batten to hold the doors shut, which was cut off and the area scribed with planking and distressed to match the rest of the door. I also added bracing to the inside of the open door as this too could be seen. Again the planking was scribed to match the front, and then distressed to appear aged and well worn.

The biggest challenge was now to lift the Dapol building to the same standard. I thought about a large single pane of glass for the shop frontage, but felt it would look better with multiple panes of glass instead. I found an old Scale Link etch, which by chance could be cut to an almost exact fit. Once cut all I needed to do was a little dressing with a file to make an exact interference fit. I also placed a plasticard strip as a lintel and the building almost sprang to life. I partitioned the garage using a breeze-block appearance between the office/shop and the workshop.

The office would need heating, and, as if by



magic, the kit box turned up one of those Ratio chimney kits! Suitably shortened and fitted to the roof the proprietor would no doubt be nice and warm in the office. Plastruct angle was used to give an artificial thickness to the walls and the original garage door was cut and placed to look like a roller-shutter type door. Two doors – the front from Wills, and the rear from Walthers, replacing the Dapol ones – indicated that the kit box was having one of those really productive days when everything seems to be at hand! I could not find anything to replace the side windows, so fitted them with the intention of flush-glazing them later in the project.

I now had a perfect-looking building, which was all right, but was still missing – and badly needed – that gritty element I was after, to show through. Whilst out driving I came across an old building, where the rendering was falling away leaving the brickwork exposed. This was what I needed to make my grotty aspirations come true! I cut away a 2cm x 1cm rectangle of the garage wall at the base where it would be in the alleyway. I replaced this with Wills English bond brickwork, and then used filler to smooth the join. I left a patch of the

brickwork exposed making sure the filler went into the mortar courses around the edge of the patch. This was then sanded to a smooth finish and left a nice realistic patch of brickwork with no rendering; result!

To finish the base structure, the yard was enclosed with Wills feather-edge fencing, and a gate from the Ratio GWR spear fencing used to shut the alleyway. Now all I had to do was paint the buildings, add final details, drainpipes on the garage, and flushglaze the side windows.

With the painting I chose subdued tones, and kept the green of the doors and windows etc the same colour, as though the owner had got a bulk deal on mid-green paint! They were carefully weathered, streaks from leaky gutters added, the bricks individually painted, and rendering cracks painted. All time-consuming but enormously satisfying and well worth the effort. Final touches are the weed growth, and the signage, from Howard Scenics.

The building as it stands probably works for the period from the late 1940s through to the 1970s, which works fine for my main eras. If I moved later it could be made with the same components, but even more rundown, with 'for sale' signs, and all boarded-up. I'm really pleased how this little project turned out, and I was particularly surprised as to how the garage came to life with relatively little work: clearly there's life in the old dog yet!



A weathered 'Brit'

Slightly and subtly done was the aim

JONATHAN NEWTON applied a finishing touch to the Hornby 'Super Detail' BR Standard Pacific.

I love 'Britannias' and the Hornby Super Detail Class 7MT is an outstanding model! A few years ago I purchased class leader No.70000 *Britannia*, the first of the Hornby 'Brits' to be super detailed. I have five 'Britannias' in my collection and they shall soon be graced with 70013 *Oliver Cromwell*, when it's released here in Australia.

I am currently building an MPD to showcase my large, ever growing, number of locomotives. My aim has been to make everything look as real as possible and so I quickly did away with my belief in clean locos. I started to add weathering to some Hornby and Bachmann models that come pre-weathered, and I was very pleased with my achievements. Then I thought that I would start on a 'fresh' engine, and so *Britannia* became the guinea pig.

Over many years I have built up a large collection of *Steam Railway* and *Steam World* magazines, and so I turned to these for as many colour pictures I could find of the 7MTs in traffic. After searching through dozens of magazines with generally only black and white pictures in them, I finally came across a copy of the 2005 *Steam World* calendar. On the cover was classmate No.70021 *Morning Star* at 1A Willesden. The loco was clean, but a working clean, with slightly dirty wheels, rusty slidebars, dirty cladding on the pipework and a light cover of soot over the engine. This was a perfect shot and so became the basis of how No.70000 was going to look after I had 'dirtied' her up.

Now, before I start with the process, I shall



point out what I used to achieve the weathering effects. A few toothpicks, a very thin brush and a small thick brush (in Australia a Delta 912 series 8 and a Delta 915 series 4) along with flat brown and flat white paint. I also made up my own rust colour by combining many different shades, and the result was amazing; however I have lost the recipe for it, so it's not going to be fun guessing how to produce it again once it has gone.



Photographs by the author

To start with, all the pipework around the cab/firebox and around the ashpan was painted flat white. This is a very tedious task and takes a skilled hand and a lot of patience; however the result is well worthwhile. The large boxes and steam joints on the pipework were painted with flat brown, just to break up all the white piping. When dry, flat brown was dry-brushed over the white to make it more subtle.

Once that was done, I turned my attention to the smokebox door and the cylinders. This is where I took a toothpick and with a small drop of flat white I applied the lime marks to each, as per photographs I found. Using photographs as you go is very important as you will always use them as reference, and by copying the photograph your model starts to spring to life because you are replicating what you see.

Next, I took the flat brown and applied it over the wheels, the frames, the smokebox and smoke deflectors, the cylinders, the tender chassis, the buffer beams, the motion and the buffers. The best technique I found to do all this was dry-brushing, because the effects appear subtle at first and you can build them up as required after that. Remember that I was aiming for a slightly weathered look, so subtlety was a key element.

By now the 'Brit' is looking like a working locomotive and the final touch that I gave was the rusty slidebars and brake blocks. This really stands out and brings the model to life. A little rust was also applied to the tender chassis around the springs.

Finally the boiler was given a light going-over with flat brown, once again dry-brushing, and allowed to dry. The flat brown tones down the color and makes the brass safety valves look used too.

I have taken my detailing a step further and painted the backhead of the boiler in the cab, bringing out all the fittings in brass, white and red where needed. Once that was done, a light covering with flat brown makes the cab look used and the addition of a crew completes the scene.

I had never done any major weathering before and I must say that I was a little scared of overdoing it. However by sticking to the photographs and replicating what I saw, I amazed myself at what I have achieved. If I can do it, I know that anyone can and I am now weathering more of my stock. I wonder what I'm going to do to 70013 when I get it? Perhaps I will recreate her appearance when she pulled the '15 Guinea' Special in 1968.

Editor's note – the latest Hornby 'Britannia' is reviewed elsewhere in this issue.

...an exchange of railway modelling ideas for beginners of all ages

Betterton

A 00 layout in a purpose-built garden shed

IAN PICKERING describes the sequel to 'Littleton to Biggerton'.

Some readers may recall my first attempt at building a model railway, *Littleton to Biggerton*, which featured in the *Right Away* section of RM for February, March and June 2005.

From this I learned a great deal and many

mistakes came to light soon after completion. This description may be better understood if you were to read it in conjunction with the aforementioned article.

The layout started life as an 8'0" x 2'0" end-

to-end type to which more and more sections were added until it ended up being 13'0" x

Below: the industrious heart of the layout showing the approach to the engine sheds.





Left: main shopping area – the ground floor of the shops was constructed in clear plastic as described in the main text.

Below left: two workers leave the gas works at the end of a shift while postie makes a few late deliveries.

Right: a 14xx is busy shunting an auto coach, as the Bachmann 55xx leaves the station with clerestory coaches. The boats in the harbour will sail on the evening tide.

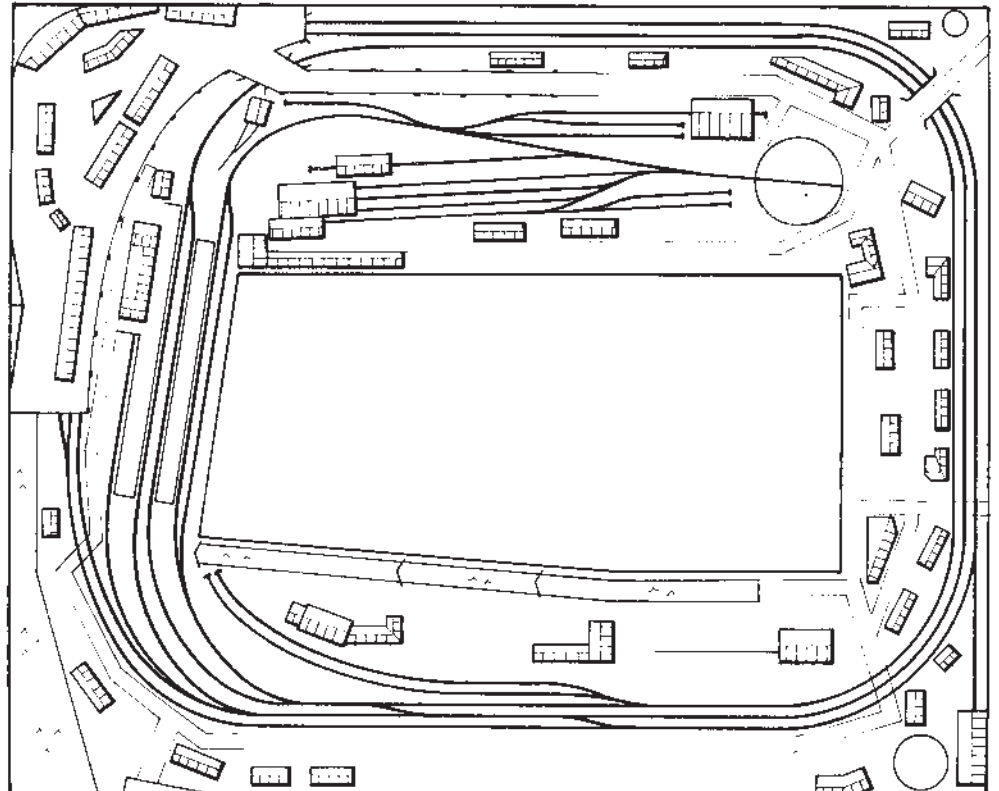
Below right: at the village end of the layout trains disappear from sight as they pass behind the houses and through a cutting. Trade appears to be booming at the only garage locally.

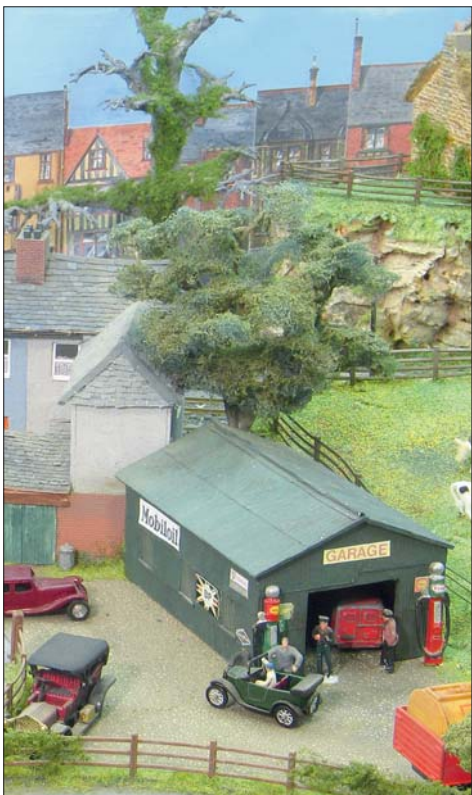
Below far right: the Lima railcar No.22 passes through the village area while customers at the pub enjoy a beer.

10'6" with a central operating space. No track plan or forward planning was ever in place. The next big mistake was to use small radius points with insulated frogs which resulted in some very nasty tight curves which made trains look more like snakes than models of the real thing and also resulted in many derailments.

Therefore with these and other things in mind, out came the sketch pad (graph paper saves loads of measuring) and page after page of track plans were produced until one that suited my criteria appeared. The new layout was called *Betterton* for obvious reasons.

The next stage was to obtain sufficient 50mm x 25mm pse timber to construct the supporting frames to carry the 6mm MDF baseboards and 4mm MDF backscene boards. The framing was screwed together on edge with 60mm dry wall screws, back boards being 2.4m long and 400mm wide and screwed flush with the bottom edge of the framing holding







Left: the smallholding in the foreground occupies a prime site between the tracks and canal. A larger farm is just out of shot to the right.

Below left: engines are maintained, coaled and watered at the sheds while the 0-4-0 delivers more coal to the coaling stage.

Photographs by Steve Flint, Peco Studio.

the back edge straight and reducing the number of supports required.

The track plan was then transferred to the newly formed surface with the aid of 1'0" x 1'0" squares marked on the boards. All track was then laid using Peco code 100 flexible track with medium and large radius electrofrog points, the whole layout being split into five sections using nylon joiners.

Wiring was the next job which again used up several sheets of paper working out how to avoid shorts and dead sections. I did eventually get it right and was then able to run various engines and trains to make sure everything was running smoothly.

Station platforms were the next thing to get right. I found that the best way was to cut 2mm thick MDF (available from DIY shops) to fit roughly between the tracks. Then move your longest coach along with a pencil held in the appropriate position against the coach side to mark the clearance on the MDF which is cut to size and then raised on 12mm x 12mm timber sawn, curved and tapered down to ground level at each end.

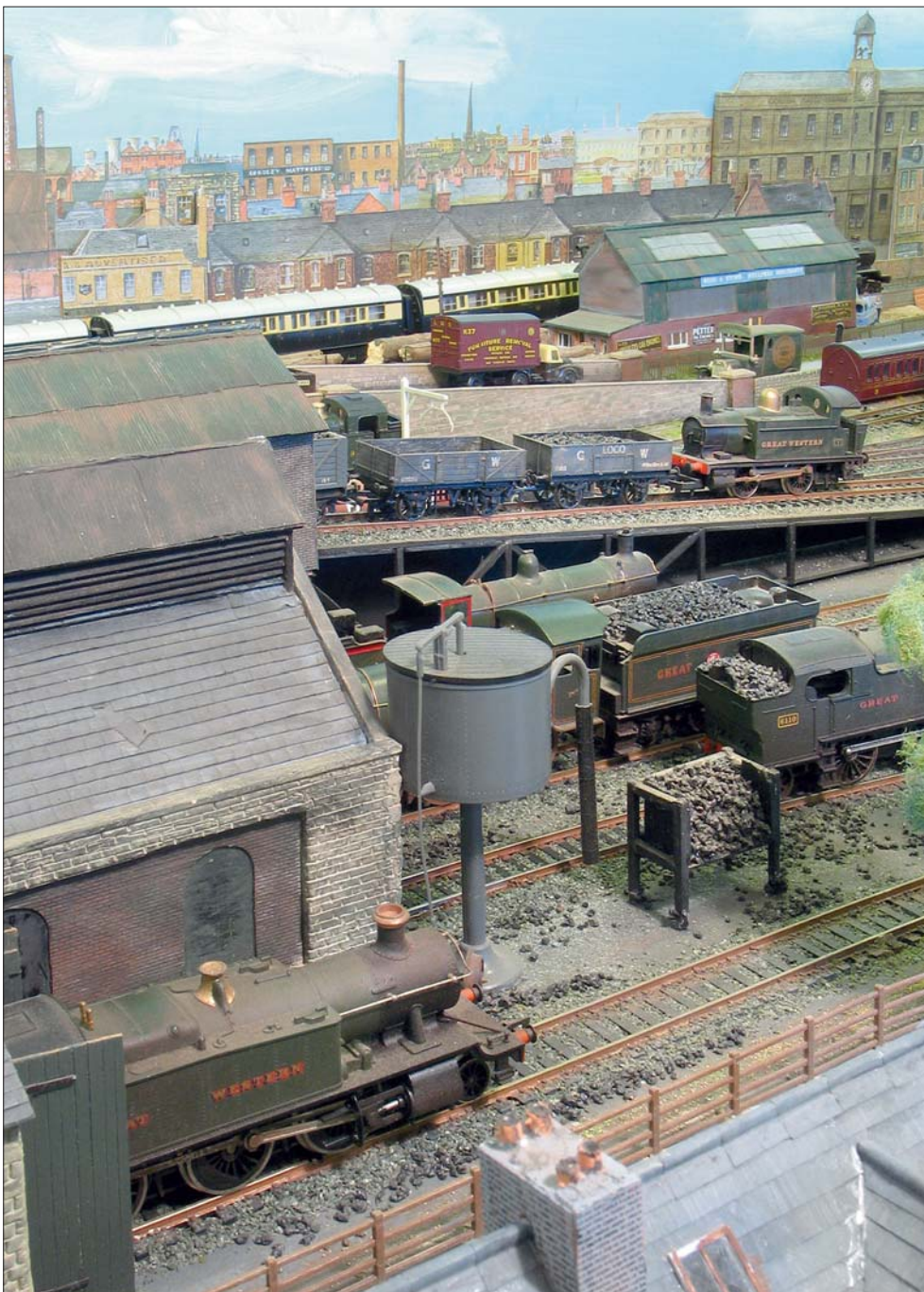
Raised areas, roads, crossings and bridges were next to be planned, all formed again using 2mm MDF cut from sheets large enough to give continuity avoiding joints. Roads were painted with grey emulsion.

Many of the buildings salvaged from the old layout and intended to be re-used were tried and retried in various positions until optimum results were achieved.

All vacant lots had footprints for new buildings drawn in, each one in turn to be built in the evenings over the next few months. Meanwhile scenic areas were planned, contours formed and covered in appropriate paint, glue and scenic scatter materials. Hedges, fences and hand-crafted trees, once placed and fixed, brought life to an otherwise dull flat area.

Ballast mixed with Extramite powder glue was next spread and brushed into place, then lightly sprayed with water containing a few drops of liquid soap to break the surface tension of the water. I find this method so much easier, cleaner and more positive than the messy process of using diluted PVA. After a few hours the rail sides can be painted with rust colour and the top surface of the rails cleaned ready for a session of running a few trains, a welcome change from building.

The layout is situated in a specially constructed very well insulated garden shed approximately 13'6" x 11'6". The material used is two sheets of plastic coated ribbed steel and 40mm of insulation bonded together in 9.6m wide interlocking panels normally used in the construction of wide span industrial and retail units (available locally very cheaply) keeping



Right: the 55xx returns to Biggerton. The signal box is one of a pair serving each end of the station.

Below right: the narrow boat has just completed loading up with timber at the small dock which is also served by a narrow gauge engine, while the 61xx moves goods on the main line.

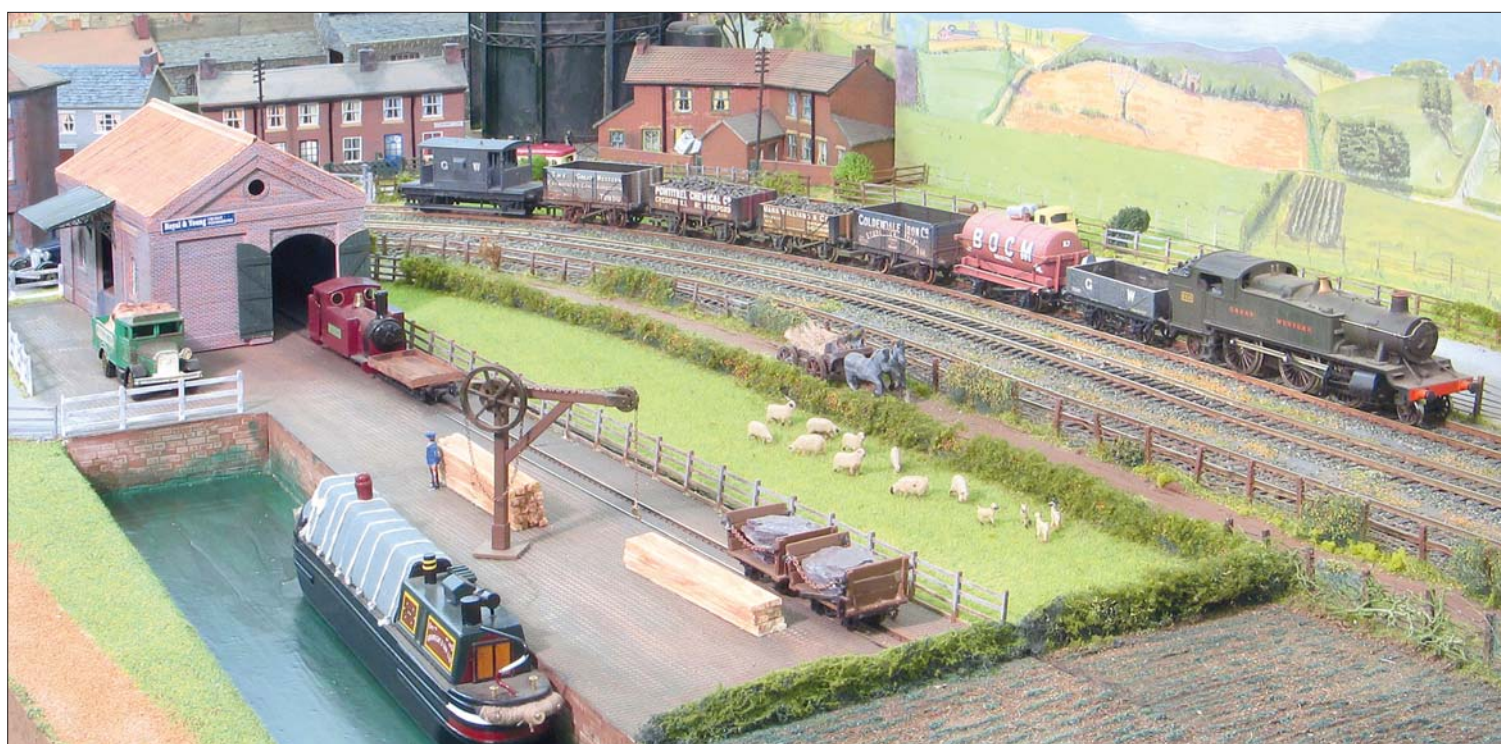
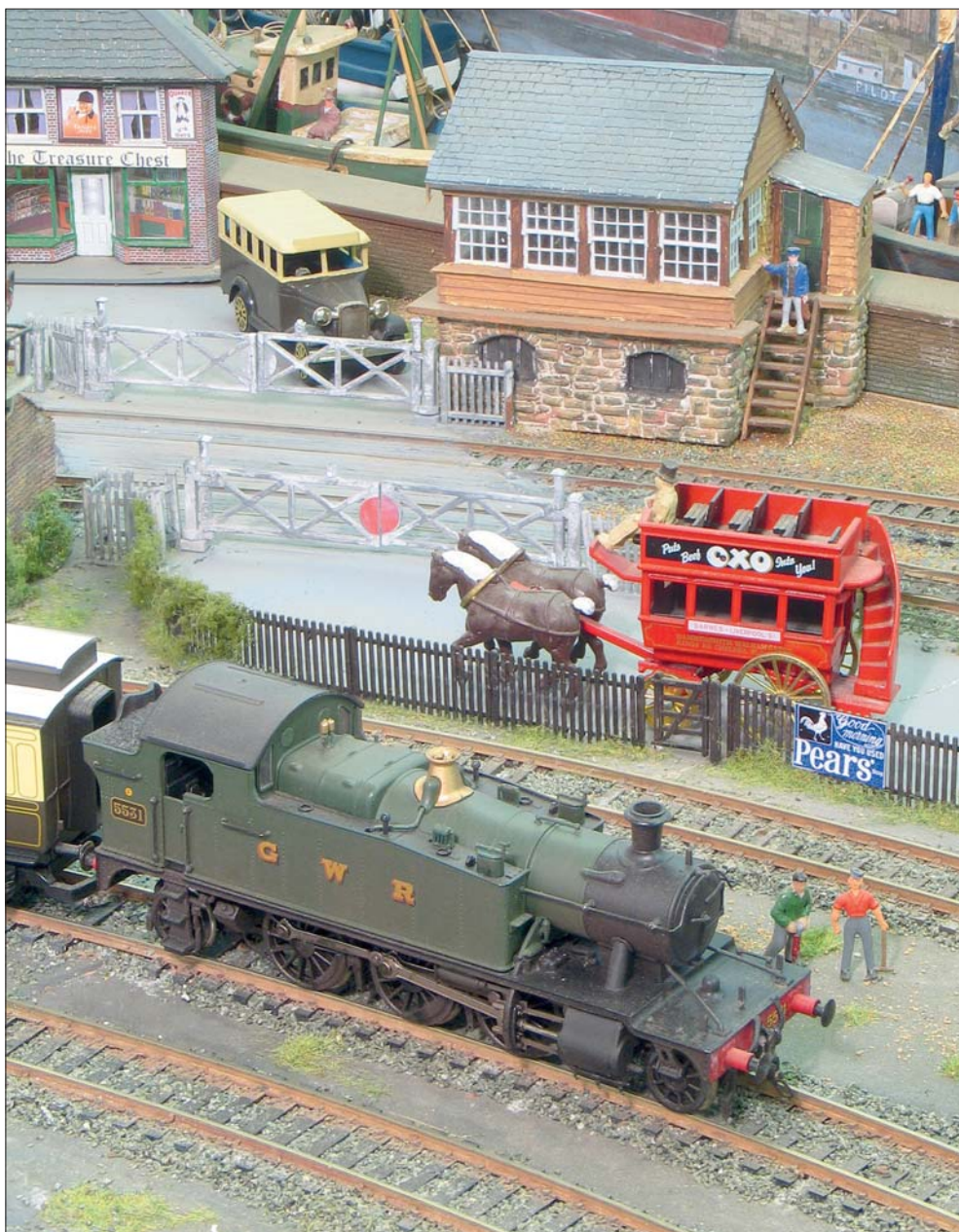
everything at an even temperature with not a hint of condensation. Lighting is supplied by eight 6'0" florescent tubes fixed under a wide continuous shelf and pelmet with four lamps on arms over the marshalling yard.

The canal situated out in the countryside complete with locks and narrowboats was never part of the original plan but is a 150mm wide extension tagged on one day when looking for something to do, as was the 200mm in front of the marshalling yard which enabled a road to continue along the front to serve a small factory, three shops and a terrace of dwellings which presumably would be occupied by railway workers.

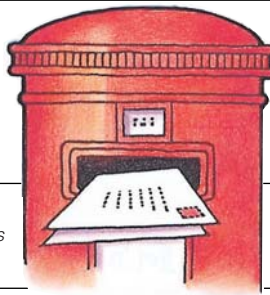
The whole layout is set in an imaginary Great Western setting because I like the variety of engines from the 'Kings' to the 0-4-0s employed in the yards and mines.

One improvement I have made when constructing buildings such as shops, where a large amount of 'glass' or a lot of windows are called for, is instead of using card for the wall and gluing clear plastic behind I now construct the whole building in 1mm thick clear plastic applying brick sheet, pilasters, fascias and window framing to the face of the plastic which can be obtained from DIY shops.

Since completing *Betterton* I have scratch-built three tank engines in 0 gauge and am now in the process of building a 1" to the foot coal-fired steam traction engine, but watch out for *Much Betterton*. No doubt it will be conceived in the near future. Hope to see you all at the Warley show.



READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

A 'SCHOOLS' IN N

As a regular buyer of RAILWAY MODELLER, which I find stimulating and useful, I also scan the pages for new products. I am interested in N gauge and disappointed that no one has produced an RTR 'Schools' locomotive.

I need hardly remind manufacturers looking for new projects and markets in N gauge that it was a numerous class seen frequently in the South of England. There are other 4-4-0s on the market and I would guess with tender drives the model would pose no problems. Furthermore, I believe that the market for the model will exceed easily 1,000 items and we are looking for something a little different. What are the chances of an RTR model?

G. SCHNEIDER

NORTH BRITISH 0-6-0Ts

Please may I make an appeal for information through the pages of RAILWAY MODELLER? I have a lovely paperback book, 38 pages, titled *Solway Steam* which I bought from the Silloth Tourist Information Centre. One of the pictures shows NB 0-6-0T No.22 at Port Carlisle working the very first locomotive hauled trains which replaced the Dandy Cart in 1914. I would like information on the class of engine, its LNER number, and its BR number, presuming it made its way into BR service? Also, the address where I can obtain track plans of St. Andrews station in Fifehire. Is Lens of Sutton still in business?

B. WARD

WMR DEVELOPMENTS

Thank you for publishing my letter and the two associated photographs in the July issue of the RAILWAY MODELLER. In that letter I mentioned that the West Midland Terminus at Tedby Stephen needed a scenic backdrop. This has now been filled, using Peco scenic backgrounds. I cut the buildings from these background sheets – removing tall trees and distant hills etc. Then, the buildings were repositioned against new sky papers so as to give the impression (hopefully) of the flat lands and big sky that I remember from childhood holidays on the East Coast. There's a photograph (*above right*) of things at this stage. It is of poor quality, but it does show Edward Beal's photographic portrait keeping watch!

The next stage involved 'growing' shrubs and trees in the area between the rear platform fence and the backscene. These were made from sponge, PVA and flock. The result can be seen in the photograph (*right*) looking towards St. Stephen's Church. This clearer view also features the two morning Dining Car trains – one destined for Laurenceton, the other for New Elms. These return each evening and are stabled overnight. The reason

for the GWR Restaurant Car is that one appears at Laurenceton in Ted's *Railway Modelling in Miniature* circa 1937!

At the time when I began work as a Locomotive Fireman (1945...) in Nottingham, this depot and many similar depots had a 'dead engine road'. This was where out of use engines were stored. (The scrapping road at Derby Works was known as 'dead man's lane'.) The dead engine road at Nottingham was home to locos from LNW, LTS, LYR and the MR. Quite a variety! I mention this because I imagine that many modellers have a sort of 'dead engine road'. These contain those out of use locos that, in a fit of misplaced enthusiasm, we buy at swapmeets in the hope that, by some miracle, we may get them moving again. My 'dead engine road' is a shelf on which sit the remains of two KMR 4-4-0s, a Dublo 3rail diesel, bits of a Farish Bulleid Pacific and, until recently, a Reidpath 0-6-0T (*bottom right*). This latter was a firm favourite of Ted Beal's, receiving honourable mention in a number of his books. After making and fitting new brushes to mine, it works well in revenue service – rattling the baseboard like a mobile earthquake!

KENNETH NEWBON

ALDEBURGH

Having modelled in N gauge since the early 1970s, I thought I was happy to be able to run near 'full length' trains

through more landscaped countryside – the scope for this would be even greater if British outline was released in Z gauge, so I was amazed and full of admiration for the Z gauge layout of Aldeburgh by Brian Yallop in the October edition of RM; surely this is a serious contender for the 'layout of the year' and possibly of the decade.

Congratulations to Brian for his efforts and can we possibly see more of his layout in future publications of the RM? How about Bachmann or Peco producing some British outline in Z gauge?

GEORGE KIRKHAM

TYNDRUM – UPPER AND LOWER

Many thanks for printing my letter re. *Crianlarich* in RM September, even the silly bits (sorry about those).

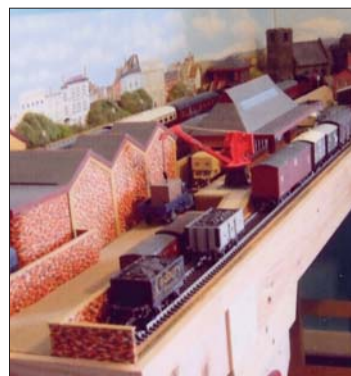
More seriously, if you are not familiar with the area, you can achieve the same NBR/CR or LNER/LMS result very compactly and simply by modelling the tiny, yet very busy (and now 'touristy') Tyndrum, still boasting two stations (Upper and Lower).

I'm sure modeller's licence would forgive you for moving them closer together.

NEIL POLLARD

FOUR-COUPLED TANKS PLEASE

As a keen 69-year-old lady 00 modeller, may I make a couple of points as to locos and layouts? I live on a narrowboat and my layout is 16' x 15" and I am modelling rural LMS in the 1950s.



But what choice of locos do I have? McIntosh, Worsdell, Johnson, Stanier, Wainwright and Adams all designed that 'maid of all work' the 0-4-4T. Excluding the GWR, most branch lines in the country had an 0-4-4 trundling along somewhere. But in the shops, nothing!

The M7 has just hit the market, which is good news for Southern modellers but how about the rest of us? Can someone please tell Hornby and Bachmann that the constant flow of new 2-10-0s, *Mallards*, other 4-6-2s and large main line locos is enough for the present and can we have just one Midland 0-4-4T for us country bumpkins?

Secondly, gentlemen, do any of you out there actually remember the steam age? As a smart dresser, I regularly travelled behind *Silver Fox* and *Silver Link* to London and I always got out feeling grubby and smutty. Yes, gentlemen, steam engines were exciting and some were beautiful, but they were all dirty. I constantly see in your great magazine, layouts that must have taken ages to build but in truth look ridiculous because they are so clean.

Lastly, what to do with the leftovers? I have just married a Maunsell boiler to a Worsdell cab and side tanks, both mounted on Collett 14xx chassis. The result is a neat, well balanced 2-4-2 loco. It looks good, runs well and was fun to make. What more can one ask from railway modelling?

JOANNA WALKER

M7 PORTHOLES ARE GLAZED!

I am writing to correct a misunderstanding by your reviewer about Hornby not modelling the front spectacle plates (cab windows) on the new M7 tank loco (November issue).

Hornby has modelled these porthole windows but in the open position, therefore they can be seen 'pinned up' inside the cab roof.

In service these cab windows were often left secured in the open position, as when running in the closed position they quickly became dirty and when left open on a warm day, they provided some cab ventilation.

Modelling the windows in this way is yet another example of Hornby now going the extra mile to produce a very fine and accurate product. I am sorry that your reviewer was fooled by Hornby having been a bit too clever.

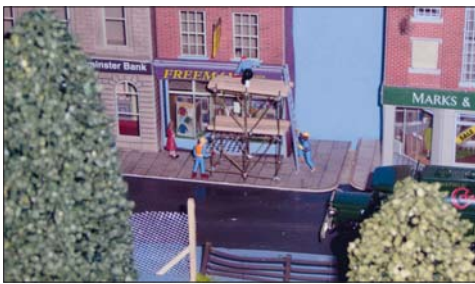
My main criticism of the loco is that the packaging is much too tight, making it very difficult to remove from the box without damaging any of the delicate parts. Also the instruction notes are frankly well below par and only give vague general guidance and do not clearly give the vital explanation as to how to fit the couplings. The reviewer apparently did not notice that you can't return the loco to its box once the couplings have been fitted! The M7 is not the first loco to have fooled the manufacturer in this regard.

I have hacked my packaging about to make it easier to get the loco in and out and to accommodate space for the couplings.

Hornby has produced a fine loco in the M7 and dare I say please can we now have the hinted-at Maunsell coaches produced to the same high standard, to go with it?

STEPHEN DIMMOCK

Apologies for the oversight – Ed.



EXHIBITION SIGNAGE

I was sorry to read of Paul Towers' problems with roadside signs for advertising a model railway exhibition.

What Paul's local district council should have done is to give him the A5 booklet, *A Guide To Advertising*, and he would have had no problems at all.

The booklet states that, for charity events (and one must take it that the exhibition was raising funds), roadside signs measuring no more than 0.6 of a square metre can be erected on private property for not more than 28 days in any 12-month period. Signs erected on the verge of the highway will be taken away and a charge made.

I would recommend anyone wishing to advertise a charity event in this way to have something like an estate agent's sign, double sided for maximum impact, with as few words as possible so that car occupants travelling by can read it easily. Some common sense will need to be exercised when siting the signs, not to obstruct drivers' views. Take signs down promptly afterwards and you can ask the same people again next year. I have been doing this for over 20 years with no trouble.

I would point out, just in case, that putting flyers under car windscreen wipers attracts a fine of £1,000 and is not recommended.

CHRIS CHALLIS

Editor's note. We would like to thank all who corresponded on this topic.

'GOLDEN ARROW' LUGGAGE TRUCK

As a young boy living in Kent I well remember seeing both 'The Golden Arrow' and 'Night Ferry' trains pass through Orpington (coincidentally as Nicholas Rothon – *November issue, Ed.* – did) and therefore the seed was sown so to speak, for in 1996 I decided to build an N gauge railway based on the line from Victoria to Dover Marine circa.1950-1955. The first train that was run on the completed layout had to be 'The Golden Arrow' but as Mr. Rothon found out, it was extremely difficult to find any meaningful pictures/photos of the 'luggage truck'!

To cut a long story short, I basically built the truck from boyhood memories (not necessarily reliable) and from a few rather indistinct pictures which were always taken at the most acute angles. I utilised a Peco flat wagon (GUV?), its base measuring exactly 57mm over the buffers, which amazingly converts to 28', and as such, is virtually identical to the 00 gauge model produced by Mr. Rothon!

STUART NEALE

I fear that your contributor Nicholas Rothon (November) is in error in stating that the formation of the 'Golden Arrow' 'did not include a Pullman brake' – although it is true that the brake vehi-

cles diagrammed for this service did not incorporate van space for passengers' luggage.

From 1951 onwards, the usual brake cars were *Minerva* or *Isle of Thanet* (1st class) and Car No.36 or No.208 (2nd class). All four had been remodelled from parlour cars, with a guard's brake compartment replacing the toilet at one end. Although vehicles of this pattern are frequently identified as 'guard/parlour' cars in enthusiast literature, that is a latter-day neologism: the official designation in both Pullman and railway operating notices was always, quite simply, 'brake'.

The dedicated baggage-container trucks used on the 'Golden Arrow' until 1961 were ex-Southern Railway goods-stock Conflat D wagons, two of which had been transferred to the passenger list and renumbered S4207/8S in 1950. A brief description and a photograph appear on p.205 of Mike King's *An Illustrated History of Southern Coaches* (OPC, 2003).

CHARLES LONG

Pullman Car Co Traffic Office, 1959-63

ANBRICO – THE HISTORY

We believe that the story of Anbrico should be told, by the Colbeck family, hence: www.anbrico.com will build up a story of all things Anbrico from the 1930s onwards. Your readers will be most aware of the period when hand-built 00 scale DMUs, locos and coaches were sold from the late 1950s onwards. This is the period I am most interested in, being just a little before my time

Would it be possible to ask your readers if they have either any stories or pictures of their Anbrico hand-built models I can include in the My Anbrico Collection on the website. Early next year I hope to start up a Yahoo group to get people talking and sharing stories on this very subject.

PAUL COLBECK

MORE ABOUT SCAFFOLDING

As I promised in the January issue, which described how I covered up my mistake when building two houses, I have now added three more scenes where scaffolding can bring your layout to life.

The first (*above left*) shows the shop front of 'Freemans' being repaired but no signs of cones or tape to protect the public, it being the period of the 1940s and 1950s; pity about the crash hats, they were not required by law in those days.

The second photo (*above centre*) displays a mansion house being built. This original house had no windows or garage, and had been floating about with other bits and pieces for many years, and I could never think of any way to use it, but inspiration can help at times, and the final result was passable with 'tongue in cheek'. The photo

does show up mistakes such as the window above the garage was inserted on its side, and the scaffolding did not have any cross-pieces in support, nevertheless the overall effect is only seen from a distance.

The third photo (*above right*) gave me scope to include the railway crane laying new line, and the wall being built at the same time. From the photo, it can be seen that there is a wire inside the crane which allowed me to put two lights in, so that in night scenes the working area brings more reality into the layout.

Taking photos helps me to find my mistakes as I progress with the various scenes, until I can achieve a scene that can be appreciated. It is very rewarding to me as the layout has helped to raise £53.00 for charity to date.

DEREK WARREN

A.W.H. PEALLING, DRAUGHTSMAN

I have over the last few years collected a number of what could be original scale drawings produced by a Mr A.W.H. Pealling. My collection numbers some 300 drawings covering mostly locomotives but also wagons and carriages. The drawings are to three scales; 3.5mm to 1ft, 7mm to 1ft and 10mm to 1ft, although there are also a few at 1/2" to 1ft. Nearly all the subjects relate to prototypes built before the mid 1930s.

Through the pages of RAILWAY MODELLER, I would be very interested to know something about the draughtsman and when the drawings were done if any of your readers could help.

PHIL LUNDBERG

THANKS TO MELKSHAM

I would like to offer a vote of thanks to the organisers of the Melksham Mega Model Ex, Saturday 30 September.

I have a disability, and find getting around very difficult, and therefore do not attend many exhibitions. So it was wonderful to spend the day at such a brilliant event, where all the layouts were of such high quality.

The venue was excellent, and the staff of the Christie Millar Sports Centre were extremely helpful, even down to car parking.

All those involved with this exhibition worked very hard, and their efforts were very much appreciated.

I will hopefully be in attendance next year.

KIM PALMER

SODOR – AND MAN

What an imaginative idea to cover both sides of a bishopric in one issue! [*October – Ed.*]

I have never previously been enamoured of a Sodor-based layout, because in cramming in as much play value as possible, the usual result is a cluttered tail-chaser. By using a diag-

nal scenic break, Graham Nicholas's *Thomas's Railway* has avoided this to excellent effect. The trackplan is one of the cleverest uses of a 10' x 5' space I have ever seen. I particularly admired the working roadway, and the clever positioning of a turntable, hidden but accessible in emergencies, for main line engines terminating at the junction. As a layout for bringing out the latent child in all of us, this was a delightful concept executed with just the right touch of, as Mr Nicholas himself put it, 'too good to be true!'

I'm less sure what Alan Catlow is aiming at with *Ramsey*. Perhaps the second episode will make everything clear. Just as 1664, according to the lager ad., was not a good year for music, 1964 was far from a good year for the Isle of Man Railway. I spent most of my visit that year based at Laxey and Port Erin youth hostels, so did not travel on the north line, but I'm sure if there had been a sudden temporary revival from the dreadful 1963 service, I should have noticed: Peel and Ramsey sheds were closed, and assuming things were not much different from 1963, there would have been only two steam trains a day from Douglas to Ramsey – from memory 10.30, not stopping at Crosby, and 12.00, two through coaches detached from a Peel train. The engines would have been Nos.5 and 8. Railcars 19 and 20 also ran out as far as Kirk Michael, leaving at 2.15 or thereabouts. Returns from Ramsey were around 1.45 and 4.00 – except on schooldays when the time of the latter was 4.05.

As for Mr Catlow's engines, they look wonderful, and had me wallowing in nostalgia, though in the case of No.16, was there a late temporary attempt at providing a spare boiler? If so, apologies – otherwise the boiler looks too small and the chimney definitely wrong; it was surely a cut-down version of the tapered type. No.1 may still have been fit to run in '64, but unless it was reboilered, 16 was confined to light duties on the Peel line and 4, I'm pretty sure, was out of use. No.13, which looks similar to 4, was spare engine I think – I'm almost certain I remember seeing it on standby at Douglas on Tynwald Day '64.

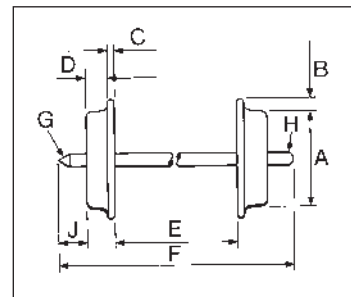
The harbour branch was long gone by 1964, and yet...staying at Ramsey youth hostel in 1967, all the inhabitants of my dormitory were awakened by the unmistakable sound of a ghost train, first shunting the yard and then quite definitely coming *closer*, which could only have been along the harbour branch. A real train could only have faced away towards the west. Weird but true. I just wish I could remember the exact date.

JOHN GLASSCOCK

As it happens, the 'coming alongside' of the articles was co-incidental – Ed.

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Brand new Fairburn 2-6-4T in 00 from Bachmann



Of the 645 ex-LMS Class 4 2-6-4 tank locomotives operated by BR in the mid-1950s, 250 had been designed by Charles E. Fairburn and introduced in 1945. These engines were a development of the earlier (1935) Stanier two-cylinder machines with a shorter wheelbase and other more minor modifications. The shortening of the Fairburn design, and perhaps the use of the 'utility' front footplate treatment, saved a couple of tons but, according to several of our library references, the tractive effort remained the same as the Stanier locos at 24,670 lbs.

Numerous Fairburn Class 4s were based on the Southern Region, their construction actually being shared between the works at Derby and Brighton. The writer saw a good many on SR metals, including a regular sighting hurrying up New Cross bank in the late afternoon bound, one imagined, for Oxted or some such commuter heaven while its young observer was homeward bound from school. It's an interesting thought that at this time (1955-56) the Fairburns' successors, the closely related BR Standard Class 4s, also presently modelled by Bachmann, were still under construction at Brighton and the then recently introduced Dublo 80054 was so far up your reviewer's birthday list that it was, and forever remained, out of sight.

The model has a diecast main frame and is powered by a horizontally dis-

posed three-pole motor driving the centre coupled axle by worm and well-hidden gear train. Current collection is conventionally by wiping contacts on the insides of the rims of the unsprung driving wheels on both sides of the engine. The idle wheels do not serve as current collectors, although both pony truck and trailing bogie are sprung, with the latter being allowed some lateral as well as pivotal and vertical movement. The slender bar-framed pony truck is a well modelled item. The manufacturer's neat tension-lock couplers are fitted front and rear in NEM pockets.

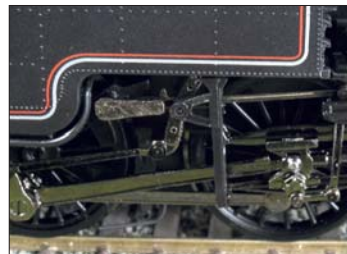
The finely produced motion features darkened fluted rods and correctly shaped slidebars and crosshead. Only the lifting link disappoints. It is a diecasting with, on our sample, a very poor ragged outline. A touch of black paint might make its shortcomings less obvious.

Other running gear details such as brake and sanding gear, road springs etc, are realistically unobtrusive. The model's designers have not forgotten to simulate the twin brake blocks which came into use with these locos.

The superstructure of the model is of highly ingenious composite metal/plastic construction with the footplate and side tank 'inners' (see photograph) in diecast metal to provide valuable strength and weight. The 'utility' front footplate is part of the diecasting

and therefore its slender appearance belies its actual strength.

The plastic outer shells are moulded to the crisply defined standard of detail which we now expect from this and other manufacturers. The very noticeable rivet patterns on tank and bunker sides which were a characteristic of these engines have been modelled with exactly the right 'weight' in our opinion. In some lights you don't see them at all, in others you certainly do, just like the prototypes.



In order to appreciate the finely modelled cab interior, you really have to dismantle the loco to the extent that we have, but please don't try this at home, folks!

The sprung buffers have blackened metal heads of the correct oval shape.

All printing is sharp and clear. No.42096 carries a 75F Tunbridge Wells West shedplate where it was shedded in 1950 with five others of the



class according to *BR Steam Motive Power Depots* by Paul Bolger. No.42073, on the other hand, belongs to 56E, Sowerby Bridge.

On the Pecorama Loft Layout, with its testing 1:36 gradients and 3' radius curves, the Fairburn handled five coaches with ease. DCC users will find the eight-pole dual inline (NEM652) socket and blanking plug forward of the motor.

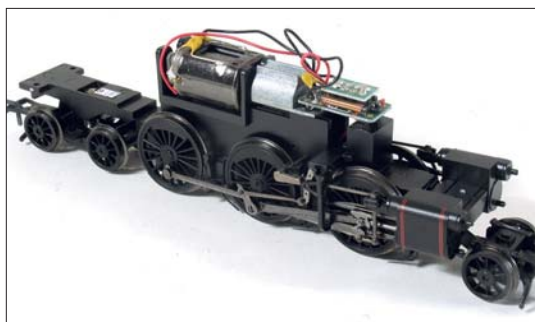
In addition to the two BR black examples seen here – the late-crest version represents one of the preserved duo – Bachmann is listing No.2691 in LMS black (ref.32-875).

For 00

SAMPLES SUPPLIED BY
Bachmann Europe PLC, Moat Way,
Barwell, Leicestershire LE9 8EY

PRICES
No.42096 (ref.32-876) – £70.35
No.42073 (ref.32-877) – £70.35

WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 2mm,
E. 14.5mm.



New BR Standard Class 7 'Britannia' 4-6-2 in 00 from Hornby

Apart from ascending to the cab of the 'Brit' on display at the Festival of Britain as a young lad in 1951, the only BR Standard Pacifics the writer really saw were either 70004 *William Shakespeare* or 70014 *Iron Duke* passing Beckenham Junction with the 'Golden Arrow'.



The chosen example for the Hornby model is No.70030 *William Wordsworth*, with post-1956 crest and 32A (Norwich) shedplate. A stalwart of this depot through much of the 1950s, she would have been no stranger to the crack expresses on the ex-GE main line, the competent handling of which so endeared the 'Britannias' to the route's loco crews. Like her stablemates she moved north in the 1960s, and was withdrawn from Carlisle Upperby in July 1965. Ward's yard at Beighton, near Sheffield scrapped her, along with four other 'Brits' at this Yorkshire location.

As we remarked recently regarding the new Hornby M7, some older readers may mistakenly assume that this 'Brit' is merely the latest in a line of models of the class stretching back to 1960 and developed over the ensuing four decades with a period of tender drive from 1973 to 1981. But of course, the model illustrated here is from entirely new tooling and representative of the new generation of Hornby products from its far-Eastern factories.

First impressions of the locomotive for us included bright brass pipework and front cab lookout surrounds, finely modelled motion with plain coupling rods, fluted connecting and valve gear rods. The mechanical lubricators sit realistically under their cut-outs in the footplate valance and the drive linkage to them is exquisitely fine. Should we



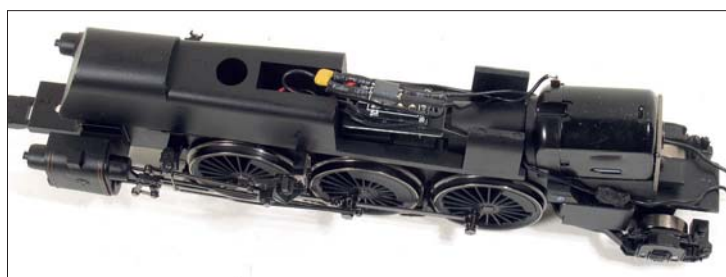
expect it, too, to move with that well-remembered rocking motion? One day perhaps. Not so many years ago, we would not have expected the expansion link to move.

In fact, on our sample, the lubricators were glued to the footplate, impeding removal of the body. Securing them to the chassis proved to be a worthwhile modification. The speedo drive – fitted to the actual loco in mid-1960 – nearside rear, is well modelled but inevitably easily damaged. Care is the watchword when handling models like this.



The detailed cab interior replicates the rather spartan but efficient BR Standard design – one of the few steam locomotive cabs designed with regard to ergonomics. The push-pull regulator and 'end-on' reversing wheel are present and, most remarkably, the white-faced gauges have hands and calibrations and the boiler and carriage warming pressure gauges, on the fireman's side, are authentically mounted at an angle for easy observation by the driver. Crew seats are present and the firehole doors have the operating lever and linkage faithfully modelled. The sliding cab roof ventilator can be opened and closed. The inside of the cab roof and sides is finished in red/brown and the foremost side windows are glazed; wind deflectors are also fitted.

The model of No.70030 is paired



with a BR1 tender – No.765 – correct for this prototype. This is an excellent replica in its own right with the correct low water pickup dome, flush tank and legible type and number plates on the rear. The front of the tender features detailed shovelling plate, brake and water scoop handles, locker lids and legible inscriptions. A low coal load can easily be removed to reveal a completely empty space, which in turn can be filled to taste from a bag of loose coal supplied with the model. Also provided for customer fitting are brake pullrods, cylinder drain pipes, and a screw coupling, AWS plate and brake hoses for the front bufferbeam plus a tension-lock coupler for the rear one. Buffers are sprung. The loco/tender drawbar has two holes, enabling close or wide coupling to suit the ruling radius of curves on the model's home layout. A simple plug-in cable allows the tender also to pick up traction current for the locomotive: the cabling is generous in length, but can be adjusted once the body is removed from the chassis.

The loco easily handled seven bogies on our steep and tortuous loft layout, although some binding was noticed before the test started, which was cured by slightly 'tweaking' the motion outwards.

The trailing truck is rigid and its

wheels flangeless. Although this certainly does avoid the 'too much daylight under the cab' syndrome, its appearance on sharp curves is awkward and unrealistic. The 'rigid back end' was undoubtedly a good idea with the Hornby Gresley Pacifics where, on the prototype, the locomotive main frames spread out under the cab and encompass the sliding Cartazzi truck, but with the 'Brit', which in reality has a swivelling trailing truck, perhaps some may feel that this well-intended step towards extra realism has not entirely achieved its aim.



The smoke deflectors are commendably thin with well modelled hand holds – of the LM type with rear cups – and a suggestion of the removable lower sections whereby access could be gained to cylinder fronts for removal of piston valves etc. Boiler details such as safety valves, clack valves, handrails and regulator rodding all look very realistic, although the chimney lip seems to be thicker and coarser than from memory and in photographs. The BR lined green livery is well carried out, with authentic black wheels and running gear and (lined) cylinder covers.

Digital Command Control users will find the eight-pole dual inline NEM652 socket and blanking plug at the centre of the mechanism.

For 00

SAMPLE SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICE
ref.R2563, £105.00

WHEEL DATA
B. 0.7mm, C. 0.5mm, D. 2mm,
E. 14.5mm.

More private owner wagon commissions from Dapol in 00 and N

1E Promotionals has added two more 00 private owner wagons to its series, namely 'Gardner' of Norwich and 'E.W. Nappin' of Thame.

250 certified examples are available, price £7.50 each plus £1.00 postage from the joint distributors, KRS Model Railways of Leighton Buzzard, and GE Models of Sheringham.

KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds LU7 0BA.

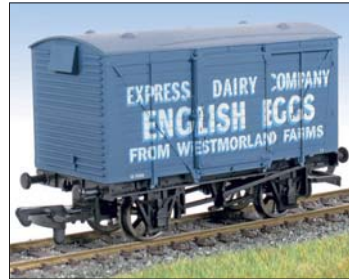
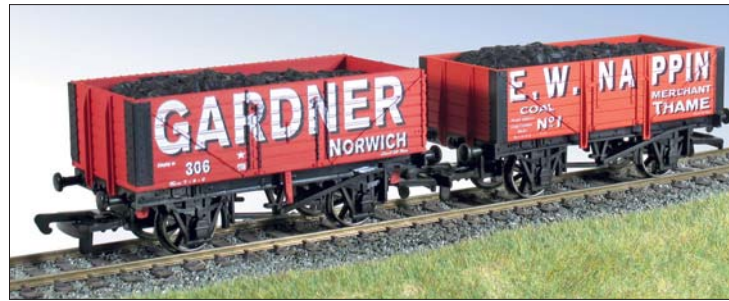
G.E.Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.



East Kent Model Railway Society (Whitstable) has commissioned 170 private owners in 00 in the livery of 'Pilch Collard' of Canterbury.

Price £10.00 including postage (Please make cheques payable to 'EKMRs Whitstable') and allow up to 14 days for delivery.

Wagon Offer, EKMRs, P.O.Box 201, Whitstable, Kent CT5 1WT.



The Train Shop, Morecambe has had a short run of an old Airfix favourite, namely a private owner egg van in 00.

Price is £6.50ea plus £1.00 P&P. *The Train Shop, 23 Pedder Street, Morecambe LA4 5DY.*

Ballard's has commissioned two



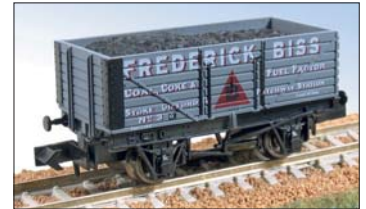
new special run wagons from Dapol. In 00 is an LBSC-liveried cattle van, based on photographic evidence but on a readily-available wagon type to produce a reasonable facsimile. Price is £8.50ea, P&P £1.50 per order (any quantity).

In N, a new commission represents 'G.H. Smith & Son' of Tunbridge Wells.



The firm worked from the town's goods yard, supplying coal from the Midlands and Wales. Price £8.00ea, P&P £1.50 per order (any quantity).

Ballard's, 54 Grosvenor Road, Tunbridge Wells, Kent TN1 2AS.



Bristol East MRC has commissioned a certified run of 200 N gauge wagons in the livery of coal factor 'Frederick Biss' of Stoke Gifford and Patchway.

Price is £8.50ea, P&P £1.50. Please make cheques payable to 'BEMRC'. *BEMRC, c/o 693 Muller Road, Bristol BS5 6XT.*

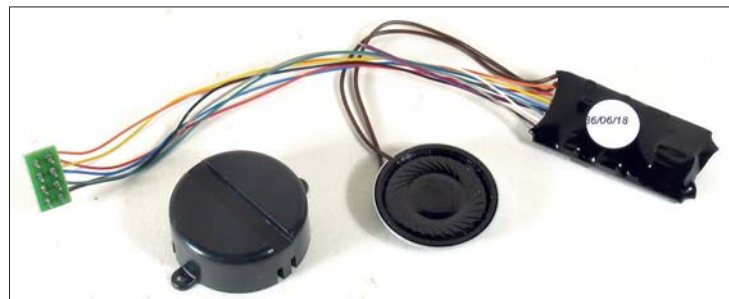
ESU sound-fitted digital command control decoder for Class 31

Locomotive sound is increasing in popularity amongst users of digital command control, and South West Digital has a range of UK-specific classes available, recorded onto ESU LokSound decoders. The newest type is for a Class 31.

There is a selection of LokSound decoders available: the Micro is intended for N, the 3.5 for 00 and 0, and the 3.5XL for 0 and gauge 1. We were able to evaluate the 3.5, and installed the components in a Hornby Brush Type 2. This required the drive to the rotating fan blades to be disconnected, as there is no other way to install the speaker. We attached the fan to the underside of the radiator grille – an acceptable compromise, and one that allows the speaker to be near the exhaust outlet. The decoder itself was slung underneath the PCB at the No.2 End.

The decoder has a wide compatibility. It can be used with Märklin/Motorola and NMRA protocols, and will work with Digitrax, Lenz, Roco, Atlas, Bachmann, Uhlenbrock, Zimo Fleischmann and LGB™ controllers amongst others. It senses whichever of the four operating modes (AC, DC, DCC and Märklin digital) automatically. Additionally it can be used with ordinary DC motors such as Bühler and Mabuchi, coreless motors such as Faulhabers, and AC motors. A full instruction manual is included, as is a set of notes from South West Digital on the specific locomotive decoder being supplied.

As is normal with digital decoders, the default address is 03: it supports



two- and four-digit addressing, features 128 speed steps for smooth operation, and many Configuration Variables – CVs – to adjust performance characteristics. South West Digital advises the CVs 3 and 4 are supplied with high values, allowing the

locomotive to take up to 20 seconds to reach its maximum speed – and therefore the model takes as long to slow to a stand!

The function keys are assigned as follows. F0 turns the lights on and off; F1 turns the sound on and off; a press

of F2 gives the horn (high tone), F3 the low tone; F4 gives a brake hiss, F5 the sound of buffering up; F6 the sound of coupling up; F9 the air dryer; and F10 the compressor. F7 and F8 are auxiliary function buttons (a high-intensity light could be controlled separately from the others, for example), F11 controls the volume, and F12 turns CVs 3 and 4 on/off – for shunting, etc.

The sound mix is most effective. With the loco stationary, a press of F1 starts the engine priming pump, and after a while the familiar EE 12SVT 'rattle' is heard as the engine starts then idles. South West Digital includes advice on how to drive the model realistically, i.e. mimicking the real engine taking load and so on. Similarly at the end of the running session a press of F1 when stationary allows the loco to 'shut down' its engine, as per prototype. For the record, the full-size 'guinea pig' for the recording session was No.31 130 *Calder Hall Power Station*, located on the Battlefield Line.

In addition to the 31, South West Digital covers classes 08, 20, 25/27, 37, 47, 50 and 66, plus GWR 2-cylinder steam. Under development are decoders with sounds applicable to classes 04 and 57, plus High Speed Train power cars.

For gauges N to 1

SAMPLE SUPPLIED BY South West Digital Ltd., 1 Savernake Road, Worle, Weston super Mare, North Somerset BS22 9HQ

PRICE Loksound 3.5 – £89.50



Programmable turntable new in 00/H0 from Heljan

Heljan has released a ready-to-use model of a turntable which scales out at 78'9" (23.975m) in 4mm. What makes it really special is that not only is it powered by a high quality drive which is smooth and quiet in operation but also incorporates digital control, which allows up to sixty track locations to be programmed, at any angle (with a minimum separation of 1°), with very accurate automatic alignment.

The pit is an impressive one-piece moulding, with a 'concrete' surface, paved rim, and grille detail, and comes lightly weathered.

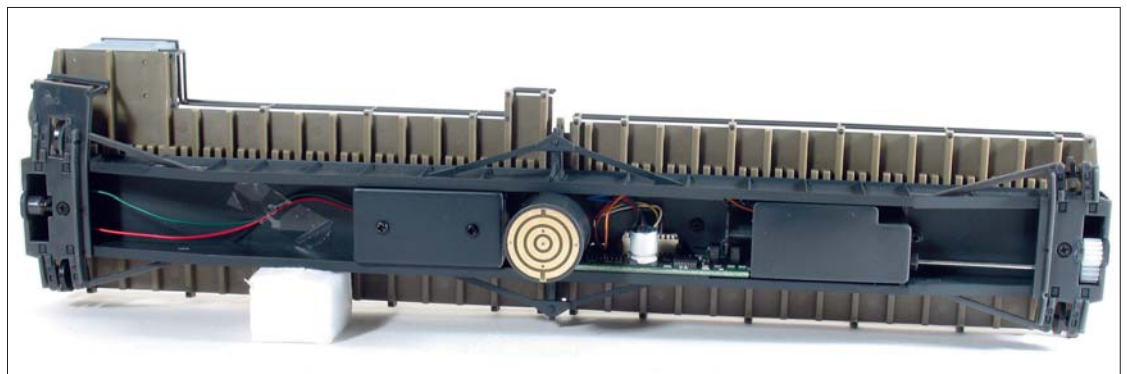
The bridge is well detailed, with girder sides, wooden deck, an operating cabin one end, and walkway railings. (There is even a spare set of railings already provided in case of accidental damage.)



Also provided is an optional central arch (for the electrical power supply, following American prototype practice).

The mechanism is built into the bridge, below the deck and between the girders, and drives through reduction gearing to a gear wheel which engages with teeth moulded into the edge of the pit outside the support rail.

The electrical contacts are built into the base of the central pillar/pivot, which is of large diameter for strength, rigidity, and accuracy. They consist of wipers onto contact strips – there are no permanently attached cables, so the bridge could be lifted off if necessary (although this will disrupt the indexing).



The pit has an overall diameter of 13³/₄" and requires a 12³/₄" diameter hole in the baseboard. In addition, a notch ³/₈" wide and about 1/2" deep has to be cut at one point to accommodate the integral housing of the optical sensor. A full size paper template is included to guide installation and fixing.

The pit moulding is intended for use in a baseboard at least 1/2" thick, and can be secured with eight ⁵/₁₆" (8mm) screws (supplied, complete with grommets). Clearance of 2¹/₄" (57mm) should be allowed below the centre boss.

The control box measures 3¹/₁₆" x 3¹/₁₆" x 1" (80mm x 80mm x 24mm). The controls are simple – the two main buttons, within the direction arrows, activate rotation to left or right. At the bottom left are two small buttons which enable the user to SET (i.e. programme the stopping points) and ZERO the turntable. At the bottom right are two LED indicators, POWER and POS, which lights to show when the turntable is in a programmed position.

Setting a programmed position is simply a matter of driving the bridge to the required place manually using the direction keys, then pressing SET.

Then to operate the turntable, all

you have to do is press and hold one of the rotate buttons to move the bridge in the desired direction. When the button is released, the bridge will stop at the next programmed track. It tends to over-run very slightly and then set back, aligning perfectly every time.

Two positions are pre-set at the factory to simplify testing, but these can be overwritten. There is also the facility to restore the factory defaults.

Software is apparently being developed to control the turntable from a PC (probably as an adjunct to an existing proprietary control program) – the desired track would simply be selected and the bridge would align itself automatically.

The unit works best on 15 volts (DC or AC), rated at 500mA, though will operate on supplies between 12 and 19 volts; a separate power pack is recommended.

The connections are on the back of the control box: simply two wires for power in and two for the track on the bridge via screw terminals, and a multi-way socket for the control cable, 6' long, which is permanently attached to the base of the pit.

The bridge comes fitted with code 83 rail, which is a close enough match

to Peco code 75 fine scale track.

The bridge does not transmit power to the track with which it is aligned – the surrounding roads must be provided with their own supply, switched as required. This simplifies use with DCC control systems, as no built-in switched link has to be bypassed, but is equally applicable for conventional DC.

The instructions for installation and operation are both comprehensive and clear, with a number of diagrams. They occupy one folded A3 sheet (= four sides of A4) plus one extra A4 sheet, printed one side only, plus the installation template.

This product has been thoughtfully designed and carefully made, looks good, and works well.

For 00/H0

MANUFACTURED BY
Heljan, Rebslagervej 6,
DK-5471, Sandersø, Denmark.

AVAILABLE FROM
Your local Heljan stockist. For nearest
dealer visit www.heljan.dk

PRICE in the region of £155.00.

Class 168/1 DMU new in N from Graham Farish



Bachmann has produced its popular Class 168/1 DMU in its Graham Farish range of N gauge models, representing No.168 111 in the Chiltern Railways fleet. The unit is the first of the promised modern types to be produced in this scale this year: a Class 150/2 is also to appear.

In common with other three-car units in the GF stable, the 168 is powered by the tried and tested centrally-mounted motor with twin flywheel transmission to all four axles of the centre car via gear towers. The cast split-frame chassis means the car has ample weight (120g) for adhesion. The model does not feature working couplers at the outer ends of the unit, so the transmission has ample power for the other two cars in the unit.

In motion the model is smooth-running and quiet. Pickup is limited to the centre car's axles, but the long wheel-base ensures dead spots such as insulfrog crossings are no problem to progress. The cars are coupled by standard N gauge couplers, which

give a degree of close-coupling but the effect is not in the same league as some Japanese prototype units we have seen.

The tinted glazing on the well-moulded body hides the inevitable lack of an interior in the centre car admirably. Interiors are provided in the other two cars, and these can be accessed by simply unclipping the superstructure from the chassis. Detail in the model is good, but the under-floor detail is a bit 'thin'. Painting and printing are, as we would expect from GF, very good – for example the graduated tints on the doors.

*SAMPLE SUPPLIED BY
Graham Farish, Bachmann Europe
PLC, Moat Way, Barwell,
Leicestershire LE9 8EY*

PRICE ref.371-435, £89.95

*WHEEL DATA
B. 0.5mm, C. 0.5mm, D. 1.8mm,
E. 7.4mm.*

A3 body kit for Z scale



A whitmetal body kit for a Gresley A3 is due to be launched at the Warley show by the Z Club (GB), the organisation devoted to those modelling UK outline in 1:220 scale.

The kit (£19.95) represents those fitted with corridor tenders, includes a representation of the Cartazzi trailing axle area and is designed to fit the standard Märklin mechanism.

Also new is an N gauge garden tractor (50p), produced 'for a laugh'!

For Z

*AVAILABLE FROM
Z Club (GB), 36 Floribunda Drive,
Briar Hill, Northampton NN4 8RZ.*

PRICES in text.

Fantasonics 'Scale Magic™' background sounds

We have been able to evaluate some of the series of audio CDs of background sounds which Fantasonics is marketing under the label of 'Scale Magic™'. These are intended to add a new dimension to layouts – whether using sound-equipped locos or not.

The firm currently offers no fewer than 24 different CDs (and more are in development), each of which contains between 60 and 80 minutes of continuous background sounds. They are divided into tracks, of from one to nine minutes, but will play continuously with no audible gap between tracks. The tracks are useful if you want to set a playback machine (with the appropriate facility) to play and repeat randomly (though spotting a repeat after an hour or so would be hard anyway!) or for copying and assembling a compilation to play on a particular scene – repeating a relevant sound and/or avoiding an inappropriate one. The tracks are not separately described, and are simply convenient 'building blocks'.

We auditioned a representative selection of five of the discs – roundhouse/yards (modern), big city (modern), big port/harbour (modern), waterfalls & rivers (day and night), and creeks & streams (day and night).

Other scenes available provide similar settings but (as the subtitles suggest) in different eras so steam or diesel trains in the roundhouse and yards (and indeed cropping up in other backgrounds), and no helicopters or police sirens in the older cityscapes, for example! Many of the CDs are not specific as to place or period.

The recordings are described as 'hand-made' and 'scratchbuilt', to use railway modelling terms, from hundreds of individual sounds, and certainly a lot of careful work must have gone into their production. They are not simply field recordings of real places.

The CDs are stereo recordings but do not produce a stereo image in the conventional sense. The big appeal for layout use is that, unlike stereo, the impression does not depend on the critical position of the listener. Similarly, it does not help to hear them on headphones: they are deliberately designed so that the sounds mingle in the air to create their effect.

They are also designed to be played quietly, and on basic equipment, ideally through relatively small speakers concealed in or under the layout. There is no advantage in using a powerful hi-fi system.

The recordings have been balanced to provide equal loudness, compensating for the loss of bass and treble extremes at low volumes. The use of tone controls or more elaborate equalisation is not encouraged.

There is a lot of serious sound science involved, and the result is an audio image with remarkable depth. Some sounds seem to be in the foreground, others very distant; within the general ambience, some actions and activities are clearly recognisable. (We did find one particular bird call noticeably recurrent!) The effect should be almost subliminal, with the odd sound catching the attention.

The accompanying manual (free if downloaded from the website as a pdf) is worth reading as it is both informal and informative. It begins with general background about the philosophy behind the recordings and then moves on to practical tips on how to make the most of them.

The audio recordings are subject to the usual copyright protection, quite properly, although permission is given for the purchaser to make working copies. The standard copyright terms also technically prevent public performance – this is not meant to apply to visitors to a home layout, and we

understand that it is permissible for use with layouts at exhibitions as long as the origin of the sound CDs is acknowledged and displayed.

As more modellers use sound-fitted locos, these recordings might be regarded as the aural equivalent of the backscene, designed to complement the stock, structures, and scenery but not to compete with them.

Although some of these scenes are specifically American, most could be used in any context.

The whole idea of model sound may drive you to distraction, but if the idea appeals the subtlety of these backgrounds will not distract you while you are driving.

For all scales

*AVAILABLE FROM
DCC Supplies, The Annex,
Thistle-down, Suffolk Lane, Abberley,
Worcestershire, WR6 6BE.
Telephone 01299 896198.
Fax 01299 896470.
website: WWW.DCCSUPPLIES.COM*

*PRICES
each CD – £18.99.
Manual – £2.50 if purchased with a
CD, £3.50 alone.*

Hornby 'Lyddle End' platform segments in N

Hornby has increased its 'Lyddle End' range of N gauge scenic accessories with a selection of curved platform sections, to suit first and second radius sectional track.

In similar vein to other platform units from this stable, the segments have 'mortise and tenon' joints, which although they are not an interference fit allow the segments to be aligned accurately once glued. The black squares – to mark the positions of canopy supports – are painted on the surface of the segments.

The platforms are supplied two to a



pack, and are finished well. The brick edging is crisply represented, and there is a subtle element of weathering. The segments are approx. 65mm (1st radius) and 100mm (2nd) long.

For 00

SAMPLES SUPPLIED BY
Hornby Hobbies Ltd., Westwood,
Margate, Kent CT9 4JX

PRICES

1st radius (ref.N8092) – £5.50
2nd radius (ref.N8093) – £7.25.

Modern signs from Roger Smith



Roger Smith has added a sheet of modern-type speed restriction signs to his range of scenic accessories. The details need to be cut carefully out with a craft knife and positioned as required on suitable posts.

Trade enquiries are welcome: contact Roger at the address below.

For 4mm scale

AVAILABLE FROM
Roger Smith, 121 Wellsford Avenue,
Wells Green, Solihull, West Midlands
B92 8HB

PRICE
ref.LINE29, £1.95.

Markits loco and coach parts



Markits has added some useful locomotive and coach components to its range, as seen above.

The N gauge handrail knobs are a tiny 3mm long and 0.82mm across the ball, accept 0.35mm handrail wire, and are supplied 12 in a pack (£2.00).

For 009, there is a pack of four turned brass coach buffers (£1.48).

For 4mm scale standard gauge are new 'Super Deluxe' crankpins. They differ from previous versions in that they have a slotted (to accept a Romford screwdriver) and threaded (14BA) fixing bush. Two plain crankpin bushes are also included, for the axle carrying the connecting rod.

The crankpin sets are available in packs of four (£3.05), six (£4.38), eight (£5.71) and 10 (£7.01). The slotted, threaded crankpins are also available separately in packs of 10 (£3.61) as are the slotted fixing bushes (10-pack, £3.50).

For 7mm scale, WD-type handrail knobs are available in packs of 12, in both short (2.78mm long, 1.52mm dia.) and long (4.18mm, same diameter) versions. Price £2.62 each type. Tapered handrail knobs (1.73mm ball, 2.4mm long) are also offered, again in packs of 12 for £2.62 per pack. Finally, coach T handles are available, 16 to a pack price £5.49.

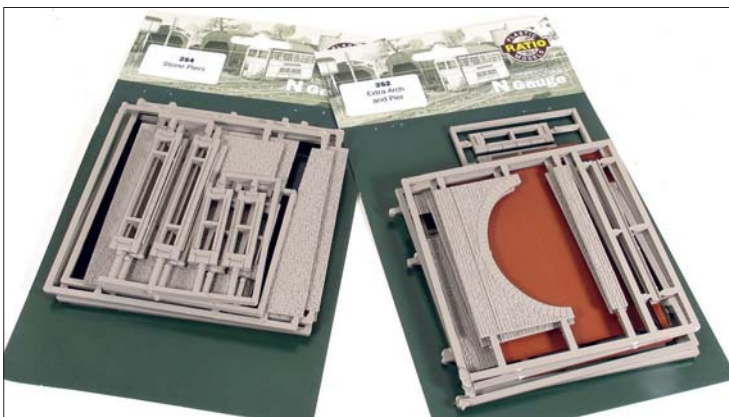
Markits intends to release 7mm versions of its popular 4mm scale Romford rolling stock wheels, commencing with 8-spoke, split-spoke and 3-hole disc wagon wheels, and 3'7" 4-hole and Mansell coach wheels.

For N, 4mm and 7mm scales

AVAILABLE FROM
Markits, P.O. Box 40, Watford,
Hertfordshire WD24 6TN

PRICES in text.

Ratio viaduct add-ons in N



In the September issue we mentioned the new Ratio N gauge three-arch viaduct, the smaller relation to the 4mm scale Wills structure kit. As with the latter, the Ratio range includes add-on packs for the 'basic' three-arch kit, and these were mentioned briefly in the main review. We have now had a chance to examine the extras more closely. (Note, incidentally, the attractive new header card.)

The extra arch and pier pack contains exactly that: the pier is 85mm to the base of the point at which the arch springs, and the arch is 72mm wide.

The stone piers pack contains sufficient parts to produce two piers: we imagine that post-steam era modellers might use this pack to represent a remnant of a closed line, perhaps either

side of a road where the span has been demolished for safety reasons.

As with the main viaduct itself, single- and double-track structures can be modelled.

Trade enquiries for the Ratio range are handled by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.

For N

SAMPLES SUPPLIED BY
Ratio Plastic Models, Ratio House,
Mardle Way, Buckfastleigh, Devon
TQ11 0NR

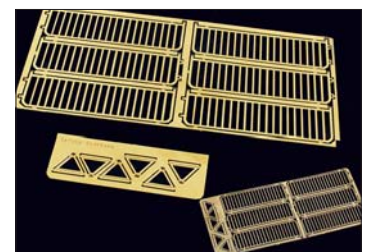
PRICES
Extra arch and pier (ref.252) – £6.50
Stone piers (ref.254) – £7.50.

Safety barriers for G1 and 4mm

Two useful frets of modern safety barriers in gauge 1 (£8.20) and 4mm (£3.50) have been released by Peter Clark Models. The crisply-etched frets will build six panels of 12' fencing.

AVAILABLE FROM
Peter Clark Models, 92 Durham Road,
Bromley, Kent BR2 0SR

PRICES in text.





Book Reviews

The Railwayman's Diesel Manual

William F. Bolton

Ian Allan Publishing, 4 Watling Drive, Hinckley, Leicestershire LE10 3EY

184mm x 122mm 210pp
Hardback £14.99
ISBN 0711031975

A number of reprints of classic technical guides are on the market now, prime customers being preserved and heritage railways. This example was first published in 1956; this revised reproduction edition dates from 1963.

The book is entirely technical and a good source of information about how diesel engines, transmission couplings, transmissions, brakes and controls actually work. The text is necessarily in the form of a manual with sets of very clear diagrams to help the reader digest the principles discussed. Monochrome photographs provide more support and they help to convey the physical scale of some of the machinery. The hand-drawn line drawings seem to have more character than today's computer-generated items and the inclusion of cutaway illustrations adds great clarity. There are also some welcome coloured illustrations in the transmission and brakes sections.

The railway applications are presented so that it is clear which type of engine, transmission or whatever relates to which locomotive. One particularly fascinating example is that of the 'Deltic' which contained two huge engines each with three crankshafts linked together. The controls chapter is interesting, showing the cab layouts of diesel-electric units, diesel-mechanical and diesel-hydraulic railcars. It is also good to understand the workings of Westinghouse electro-pneumatic brake systems and others; much can be learned from these pages.

The most value from the book would be obtained if the reader has a specific purpose to know its contents. It is not a casual read, more a reference document to consult prior to examining the machinery itself.

Above: want to know what made a 'Deltic' tick (over)? The diesel manual is your guide to this and many other modern traction types. 55 014 *The Duke of Wellington's Regiment* was photographed at Finsbury Park.

Below right: V2 *Green Arrow* returned to the GC in 1999 to commemorate the centenary of Marylebone station.

Photographs by Phil Caley.

Practical Garden Railways

Peter Jones

The Crowood Press Ltd.,
Ramsbury, Marlborough,
Wiltshire SN8 2HR
195mm x 252mm 224pp
Hardback £19.95
ISBN 1861268335

It is difficult to think of anything obvious that Peter Jones has omitted from this very entertaining, extensive and informative book. The term *entertaining* in no way belittles its substance and content.

After the *Foreword* and courteous *Acknowledgments*, Chapter 1 is an extended introduction to the subject. The informal writing style takes away any pretension and brings a feeling of accessibility to a subject often associated with considerable expenditure. Pictorial contributions from owners of garden railways, in the popular large scales, show the potential diversity of the final result and the methods used to achieve them.

A further 15 chapters go through, for instance, planning, rolling stock, tools and the aesthetic balance of having a railway incorporated within a garden, plus all the other pertinent subjects along the way. Unusually, the slightly personal writing style, that includes the author's own views and feelings, adds to the appeal and readability; it is not at all sentimental.

The experience of a long-time garden railway modeller is brought out by the inclusion of subjects such as pets, security and running the railway in snow. The book is up-to-date as demonstrated by the section on using a computer as a tool for creating miniature signage. The latest low-price laser technology is brought to our notice for creating level track.

The chapter about locomotives is a magnet for all modellers with much information on obtaining bargains, ready-to-run, plastic models, loco kits, live steam, radio control, coal firing and battery power.

The garden railway often features buildings that have to stand outside in all weathers and much help is given on the subjects of design, building and materials.

The book is not just for beginners. Mr. Jones takes the subject all the way, profusely illustrating everything with good close-up colour photographs. Great consideration is given to the approach to garden railway modelling. The would-be modeller is guided along the initial stages and the advanced modeller has their knowledge reinforced and taken into, perhaps, uncharted territory. Read it and read it again; there will always be more to discover.

Wagons of the early British Railways era

David Larkin

Kestrel Railway Books, PO Box 269, Southampton SO30 4XR.
270mm x 210mm 88pp
Softback £13.00
ISBN 9780954485986

The book's sub-title is *A Pictorial Study of the 1948-1954 Period*, and this nicely describes the contents. The author's cut-off point is set immediately before the 1955 Modernization Plan was published, a plan that had profound effects for freight stock. Before that date, nationalization brought relatively little visible change, and this period is the theme of the book.

The b/w photographs are generously sized and captioned, and subjects include a wide variety of open wagons with both steel and wooden bodies, hoppers and tipplers and iron ore wagons, ventilated vans, tanks fixed and demountable, gunpowder vans, pallet and fruit vans, conflat, shock-absorbing designs and mineral wagons of different sorts.

BR number series are given for all types. The book will be of great use to conscientious modellers of this interesting period.

Video Reviews

Whistle Stop 11

On Track Productions

DVD, 70mins £15.95

If you like steam and spectacular scenery in some of Britain's finest locations, you will enjoy the 70 minutes of train action on this DVD.

For example you can see Swindon-built 2-8-0 No.3802 on the Llangollen Railway. The Severn Valley-based 8F No.48773 is also on view on the Dee Valley. The shots are mostly of trains running by with a background of their recorded sounds and a basic commentary. The Lakeside & Haverthwaite Railway is captured under heavy snowfall with the two remaining Fairburn 2-6-4Ts.

Gresley V2 fans will be pleased to see No.4771 *Green Arrow* running-in on the Great Central Railway after returning to steam. BR Standard Class 5MT is represented by No.73050. At the Nene Valley is 4M No.80078, whilst sister No.80105 features at the Great Central.

On the Dean Forest Railway 'Manor' Class 7802 *Bradley Manor* is there for Great Western fans.

There is something for Somerset and Dorset followers: action on the West Somerset Railway centres on classic combinations of Bulleid 'West Country' and Fowler 4F 0-6-0, and of course a 7F 2-8-0 appears too. We also visit West Yorkshire lines plus other locations.

A recurrent theme in the programme is shots of preserved goods trains: the varying and syncopated beats of the wheels on rail joints will be an instant memory to those who remember the 'traditional' freight train, and be an education to those that cannot.

The DVD's presentation conforms to others in the series to provide over an hour of diverse railway movement in a range of weather conditions. Camera-work is steady, and locations have been thought out well, allowing for the right combination of light and wind direction in most cases.

A second DVD in the box is a DVD catalogue updated September 2006.

On Track Productions, 41 Lumley Crescent, Skegness, Lincolnshire PE25 2TL. Telephone 07795 955112. www.ontrackshop.co.uk



INFORMATION

FROM THE RAILWAY MODELLER

Hornby launches its new DCC system at the National Railway Museum



On Thursday 12 October, the well-known and respected Marketing Manager of Hornby, Simon Kohler, entertained members of the press to a very special launch of the new Hornby DCC system at the National Railway Museum in York.

In his presentation, Simon said that the firm's system was easy to install and means not having to fit lots of messy wires and all the complication that that entails.

Initially, two integrated control units will be available; an 'entry level' unit under the name 'Select' – to be priced around £70.00 – and an advanced operating unit called the 'Elite' (£140.00). Corresponding 1 Amp and 4 Amp transformers are supplied with these units. A 'standard' locomotive decoder and a 4-output point and accessory decoder have also been introduced into the range.

The Select controller (*below left*) has

a single rotary control knob and has capacity to store up to 59 locomotive addresses and 40 accessory addresses. The 1 Amp transformer supplied allows up to three locomotives to be run simultaneously, depending on their power consumption characteristics. The Select can also be used with the 4 Amp transformer allowing up to 10 locomotives to be run simultaneously. The LCD screen displays the number of the locomotive (or accessory) under control and switching between them is just a matter of keying in the corresponding code number and pressing the select button.

The Elite unit (*left*) is supplied with a 4 Amp transformer and has twin rotary control knobs allowing greater flexibility for twin-track control or two-person operation. It also has greater memory capacity and can store up to 254 locomotive addresses and 255 accessory addresses. Additionally, there is a facility for assigning locomotives with abbreviated names, as well as just the address number. It too can run up to 10 trains at a time.

A larger LCD screen is fitted which in addition to displaying the number of the locomotive under control also shows train direction; train speed setting; on-off indication of functions (e.g. lights) and a section for displaying locomotive addresses in the Hornby system's alpha-numeric format.

The Elite has a USB port for connecting to a computer and the internet. Both the Elite and the Select can have up to 7 Select units attached in tandem, creating additional walkabout or 'slave' control positions around the layout. Both units are also fitted with an XpressNet port.

Just one size of locomotive decoder (£TBA) is being offered at present (*left*) which is rated at 500 mA continu-

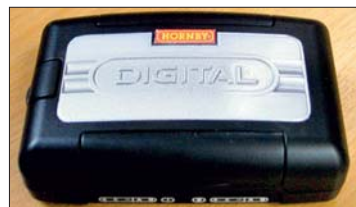
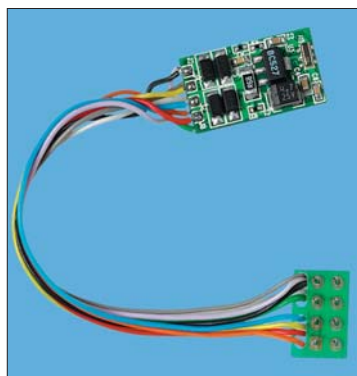
ous and 1 Amp maximum, with an integral safety cut out to protect both the decoder and the locomotive motor. It is fitted with a standard NEM 652 8-pin plug providing four on-off function outputs (two dedicated to lighting). It incorporates back emf load compensation (constant speed) and 14, 28 or 128 programmable speed steps.

The accessory decoder (*below*) can control up to four separate solenoid operated items, such as point motors. It takes all power requirements, and digital control signals, directly from the track, so a separate accessory power bus does not have to be installed on the layout.

Several complete train sets are also being introduced with the Hornby Select controller and factory-fitted locomotive decoder as standard. These are the Virgin Pendolino set (*bottom*) due out in 2007, the Mixed Goods set and the GWR 'Western Pullman' set.

The system is NMRA compatible and locomotives can be programmed for both independent control and for working in multiple (double heading).

To get the most out of DCC it is usual to have all running tracks and sidings permanently powered. However all Hornby points electrically isolate the routes they are set against. To overcome this and allow all tracks to be permanently 'live', a pair of small sprung conductor wires will also be available, which simply clip in place.



HORNBY

VIRGIN TRAINS PENDOLINO

00 GAUGE DIGITAL TRAIN SETS

DIGITAL

DIGITAL | COMMAND | CONTROL | SYSTEM

PROGRAMMES AND OPERATES UP TO 60 LOCOMOTIVES

Virgin Train Set 2004 • Car Pendolino (Power Car • motorised) • Power Car (motorised) • Standard Buffer Coach • motorised • opening paragraph • Standard Open Coach • motorised • end of coach • Track Pack A & B • NEM17 TrainPlug™ (180mm x 120mm) • Hornby Select Digital Control • Wall mounted transformer

Warley – late extra!

The exhibition is now only a few days away, December 2 and 3 so it is time to make your travel arrangements!

The prototype inspiration this year is the Class 4MT locomotive No.80079 supported by the Severn Valley Railway, promoting the new 'Engine House' project at Highley. The movement of the locomotive is sponsored by Squires Model and Craft Tools of Bognor Regis.

Competitions will be held for the Bachmann Trophy for the best layout in 4mm/3.5mm scale, the Calvert Trophy for the best N gauge or 2mm scale layout, the Modern Image Trophy for the best modern image layout in any scale and the 7mm Trophy for the best layout in that scale. It is also anticipated that there will be some new trophies this year.

There have been some changes to the layout listing which is too large to include here; the catalogue will provide all the information you need. *Nancladre* (0-16.5mm) has been replaced by *Medford POLR*, a narrow gauge layout in G16.5mm by George Himms, a teenage member of Warley MRC.

John Sowden has withdrawn *The India Hill Railway* because some redevelopment of the layout will not be completed by the show. It is hoped to include the layout at a future show.

Due to damage in storage *Scarborough Central Station* (00) has been withdrawn. It will be replaced by *Merthyr Riverside* (EM) by Rob Kinsey of Wolverhampton MRC.

Following the success of last year, in association with Bachmann Branchline, there will be a limited edition tank wagon in 4mm scale. The production run of 500 items will only be available at the exhibition. The wagon is in the livery of the *West Midlands Sugar Co. Limited of Kidderminster* and will retail at £7.50.

Those who have visited the Show before will know that the Saturday is a very busy day. If you wish to visit without such large crowds, the Sunday should be more comfortable, provided we don't all go on the Sunday!

There is ample car parking for those planning to drive to the Exhibition. The standard NEC parking charge is currently £7.00 per car. The NEC has full facilities for disabled visitors.

Birmingham International Station is adjacent to the exhibition site at Hall 1, and is well served by Virgin West Coast, Cross Country Trains and Central Trains making railway access easy.

See the *Societies & Clubs* pages for full details: updated details of the show are available through the website www.warley-mrc.org.uk

Dapol 'Eddie Stobart' Class 66

Dapol has secured sole and exclusive manufacturing rights to produce the Eddie Stobart-livery Class 66 locomotive in N gauge. The model will be of the new 'low emission' design and will be first in their new range of Class 66s

to be DCC-ready.

Full details can be found in the free Dapol 2007 catalogue available from stockists during the first week in December and at the Warley exhibition stand.

Classic Commercials excavator

A 1:43 scale (7mm/0 gauge) kit of the small Ruston Bucyrus 10RB digger has been issued by Classic Commercials.

Known as a 'crowd shovel' digger, it has a forward-working cantilever arm carrying a scraper bucket with a rear dump door. Large quantities of these machines were used extensively in contracting, quarrying, open-cast mining, civil engineering and scores of other applications in the UK and around the world.

The kit has a one-piece resin cab,

pewter undercarriage, chassis and jib. Lost wax cast brass provides smaller detail and the kit is complete with engine and detail inside the cabin. The comprehensive instructions show how to fabricate a lattice drag-line type jib from wire.

Price £58.50 plus £2.00 postage; cheques payable to Classic Commercials. A colour catalogue is also available for £2.50 post free.

Contact **Classic Commercials, PO Box 800, West Wrating, Cambridge CB21 5NB.**



Medway Queen wagon in N

Here is a Dapol N gauge special edition with an interesting story. It carries the fictitious green and white livery of a real company, and joins several commissions in 00 along the same lines.

The New Medway Steam Packet Co Ltd operated a fleet of excursion steamers, among which the little Ailsa-built *PS Medway Queen* made seven round trips to Dunkirk in 1940, rescuing 7000 men while under heavy fire.

These wartime exploits plus her well-remembered excursions between the wars and in the 1950s and 60s between Strood and Southend have given this paddler a special place in the affections of those who love small steamers, and the *Medway Queen* Preservation Society is now actively preparing the ship for restoration.

Although £1.8m has been granted by the Heritage Lottery Fund for the restoration of the ship's hull, an enormous amount of work still remains to be funded and all proceeds from these wagons will be donated towards the



partnership funding that the Society now has to find.

The wagons are available at shows from Medway Queen (Reading Group) stands or by post from: **Richard Halton, 21 Lakeside, Earley, Reading RG6 7PG.** Cost is £8.00 per wagon plus £1.50 per order for postage and packing. Cheques should be made payable to R. Halton.

For details of how to join the MQPS contact the **Membership Secretary, Medway Queen Preservation Society, 25 Hawkhurst Road, Gillingham, Kent ME8 6NU,** or visit: www.medwayqueen.co.uk

Midlands MES show a success

During six days, 11,000 visitors enjoyed the second successful year of the Midlands Model Engineering Exhibition.

Exhibits included three live steam model railways and hundreds of individual exhibits including three stationary engines from Germany. Forty clubs presented displays of their members' work with the Guild of Model Wheelwrights winning the society

shield for the best society display.

The visitors were enthralled by the daily parade of Fosse Way Steamers with over forty model steam road vehicles in action at one time.

Next year will be the thirtieth anniversary of the show, but if you would like to see a show in the new year, the London Model Engineering Exhibition takes place at Alexandra Palace on January 19-21.

Bachmann Club meets *Black Prince*

Members of The Bachmann Collectors' Club met up with 9F No.92203 *Black Prince* at the Gloucestershire Warwickshire Railway on Sunday October 8. The visit coincided with the recent issue of the limited edition model of *Black Prince* in 00 gauge for members of the Club.

Black Prince owner, artist and wildlife campaigner David Shepherd was on the footplate and during the day was presented with a model of *Black Prince* in a presentation case

and a boxed example containing certificate No.1 of the 504 produced. Garry Owen, Chairman of the Gloucestershire Warwickshire Steam Railway also received a presentation model on behalf of the railway.

Dennis Lovett, PR Manager for Bachmann, handed over a cheque for £5040.00 to David Shepherd, Founder and President of the David Shepherd Wildlife Foundation. This represented £10.00 donated from each of the 504 models sold.

Modelling training courses for 2007

DCC was the focus of a new training module in 2006 and this will be extended to a more advanced module in 2007, *Decoder Programming*. Another new module has been devised, *Layout Design and Planning*; this will also be available during 2007.

Decoder Programming is a course for those with some familiarity of DCC, but who want to learn and practice more of the available features in modern decoders. The course will deal with basic programming to provide a considerable degree of control. In addition to this, there may be time to include the use of decoders for lighting, sound and turnout control.

Jon Jewitt will join Michael Watts for the two training opportunities. The 2007 programme of courses is offered over weekends, Friday to Saturday at Ewert House, Oxford and Friday until Sunday at Pecorama in Devon.

Pecorama, Devon:

Track & Control April 27-29
DCC: Decoder programming August 17-19
Layout Design and planning September 28-30

Ewert House, Oxford:

DCC: Decoder programming June 22-23

For the Ewert House courses, contact **Michael Watts, StarDancer Ltd., 4 Chaundy Road, Tackley, Kidlington, Oxfordshire OX5 3BJ. Telephone 01869 331181.** michael@stardancer.org.uk

For the Pecorama courses, contact **Julie Newbery, Pritchard Patent Product Co. Ltd., Underleys, Beer, Devon EX12 3NA. Telephone 01297 21542.**

SHOP NEWS

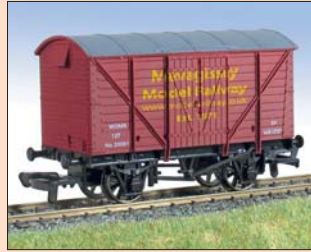
OPEN

World of Model Railways, Mevagissey

Following the success of last year's event, the World of Model Railways, Mevagissey is again running the 'Ferrero Rocher' diorama competition in order to encourage model making.

Treat yourself to a box of Ferrero Rocher chocolates, any size will do, then build a railway-theme diorama inside it. The best entries will go on display at the World of Model Railways for the 2007 season. The only limits are the size of the box and your imagination. Categories for entrants are Junior (under 11), Secondary (under 16), 16-20, Adult and Professional. Winner and runner-up prizes will be awarded in each category and the overall winner and runner-up will be chosen from the non-professional categories.

The prizes will be vouchers for



models stocked at Mevagissey. For an application form and rules, send an SAE. Closing date is March 31 2007.

Additionally, the shop has commissioned a souvenir van for 2006 from Dapol. The 00 model is priced £7.99; please add £2.00 if ordering by mail.

Contact: **The World of Model Railways, Meadow Street, Mevagissey, Cornwall PL26 6UL. Telephone 01726 842457.**

Orange Model World, Potter Heigham

There will be a move to a new shop for Orange Models. The new location will be in the Herbert Woods boat yard adjacent to Potter Heigham Bridge opposite the Latham's of Potter Heigham Stores.

There is parking nearby, places to eat, a nearby pub and it is adjacent to the river where you can

hire a day boat.

It is hoped to include a permanent model railway and doll's house exhibition with an extensive sales area.

Contact: **Orange Model World, Herbert Woods Yard, Broads Haven, Potter Heigham, Norfolk NR29 5JD. Telephone 01692 672121.**

Bachmann Class 37/4, new tooling

The Bachmann Branchline Class 37/4 diesel locomotive is now effectively a new model. New tooling has allowed a number of variations of cab noses and grilles which provide plenty of options for future models.

The models will be powered by a new chassis unit with six-axle, twin-fly-wheel drive. New bogies have been tooled as have new wheels of

improved profile.

The body will feature an etched brass radiator roof fan grille and new fan beneath it. Opening cab doors and directional LED lighting will also be provided.

A special feature is the working cab lights to show the detailed cab interior. These lights can be switched on or off using a digital controller

NRM tourism accolade

The National Railway Museum in York has won Yorkshire tourism's accolade for the fourth time.

The coveted Visitor Attraction of the Year award, sponsored by GNER, was announced at a ceremony at the Magna Science Adventure Centre in

Rotherham. Judges praised the Museum for its 'ongoing policy of investment in the future'.

The Museum beat five other finalists in the category to scoop the award. It will now go forward to the national Enjoy England Awards next spring.

Solent/Itchen joint exhibition

A model railway exhibition will be presented jointly by the Itchen Valley Model Railway Club and Solent Model Railway Group. It will take place at Oaklands Community School, Lordshill, Southampton on Saturday and Sunday November 18 and 19.

Opening times are 10.00 until 17.00 and 10.00 until 16.30 respectively. Admission is: adults £3.00, children £1.50 and family £8.00.

Layouts will range from N to G scales; see the *Societies & Clubs* pages for full details.

DCC Supplies – command station offer

The revolutionary new DCC command station from ESU is on special offer until the end of November.

ESU produces sound decoders and now a full command station. All the usual DCC features abound, all topped off with a white background-illuminated liquid crystal display to show all the

information in plain words. There is a touch-sensitive screen that you can work with your finger or the stylus provided.

For full details, contact **DCC Supplies Ltd., Suffolk Lane, Abberley, Worcestershire WR6 6BE. www.dccsupplies.com**

Cards and calendars – late arrivals

Last month we reviewed a selection of calendars and cards, but since press date we have received information of some cards from the Corris Railway and a calendar from Strathwood.

The Corris A5 size cards depict Corris 'Tattoo' Class No.7 from an delightful original painting by Jonathan Clay. They are £1.00 per card plus P&P. Send your order to **Mrs. R.G.Guest, 38 Underwood Close, Callow Hill, Redditch, Worcs B97 5YS.**

The Strathwood 'Spotting Days' calendar is 230mm x 240mm folded, opening out vertically to twice that size. It is staple-bound with a punched hanging hole. Page one offers com-

pact calendar charts for 2006 and 2008. The pages beyond show seasonal scenes of steam and diesel content in the 1960s.

The captions are informative and the uncluttered date area below gives good room for notes.

Only 1000 copies have been produced available post free for £6.99. Two or more copies cost £5.99 each. If, however, customers order a minimum of £29.95 worth of books, DVDs etc. before December 25, a calendar will be included free with the order.

Contact: **Strathwood Ltd., Glenavon House, Kinchurdy Road, Boat of Garten, Inverness-shire PH24 3BP.**

Invertrain, Wayoh coach bogies

Invertrain is to take over the production and marketing of the complete Wayoh Coach Bogie range from Wilf Gammack with immediate effect.

The present range of six- and four-wheel coach bogies will continue in their current successful format. Most of the range is in stock and listed in the latest Invertrain Model Railways catalogue, September 2006. Information is also available on:

www.invertrain.com

Any bogie kits not currently in stock will be the first to be brought back on stream using the same suppliers and materials. There are no plans to increase prices following the changes. The cost of a pair of bogies remains at £20.00 and £27.00 for four- and six-wheel bogie kits.

Invertrain Model Railways, 33 Rose Gardens, Cairneyhill, Dunfermline, Fife KY12 8QS. Telephone 01383 880844.

Lochgorm Highland kits

Two new coach kits for the Highland Railway have been released by Lochgorm Kits. The kits for the 50' luggage composite, to Diagram 56, are available in 7mm and 4mm scale. The prototypes were built in 1910 and lasted in service until 1951. The 7mm is £65.00 and the 4mm is £35.00 including bogies and associated castings.

Also available soon will be etchings for axlebox covers for 7mm scale. In 4mm scale, etchings for typical Highland Railway awning brackets and

station awning valancing, Manson tablet catchers, Highland Railway point levers, signal balance weights and etched boiler backhead for a typical David Jones-designed locomotive will be on the market.

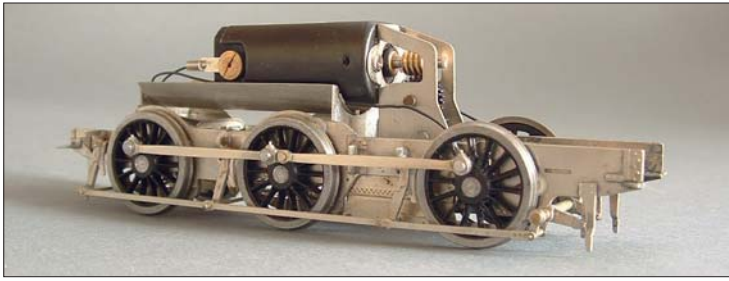
For further details, send an SAE for a copy of the 4mm and 7mm catalogues or visit:

www.lochgormkits.co.uk.

Andrew Copp, Lochgorm Kits, 3 Broomhill Court, Keith, Banffshire AB55 5EL.



More chassis kits from High Level

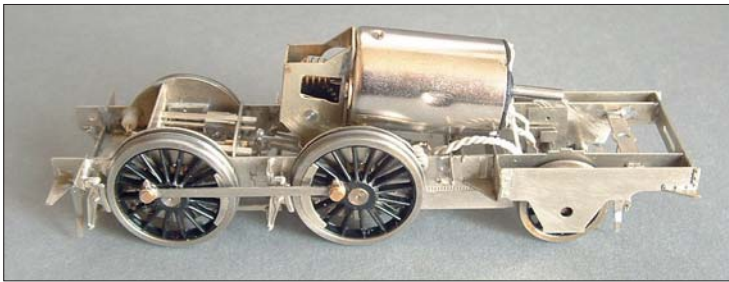


After the success of replacement chassis kits for the LMS 'Pug' and 'Jinty' – see RM December 2005 –, High Level kits have introduced two kits to fit the Airfix/Dapol/Hornby 14xx 0-4-2T and the Mainline/Bachmann/Replica 57xx and 8750 Class pannier tanks.

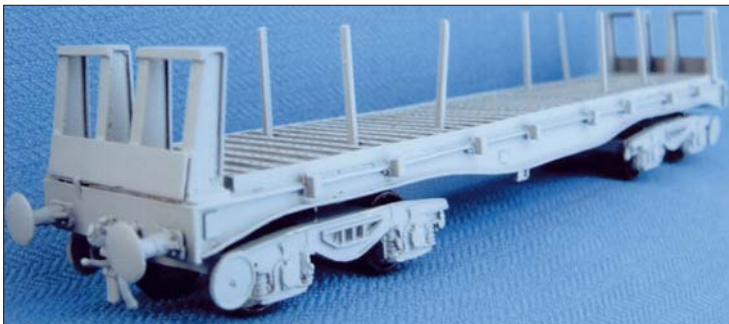
No modifications to the r-t-r body are required, but the finescale chassis and the high-quality motor/gearbox will improve the running especially at shunting speeds.

The kits are etched in nickel silver and include sidframes of prototypical outline, 00/EM/P4 chassis spacers, full spring and brake gear detail, balance weights, coupling rods and dummy inside motion. Included also are cast sandboxes and the 14xx features highly detailed axlebox/spring castings.

Both kits are £38.00 or £48.00 with motor. Postage is £1.50 per kit. Contact: **High Level Kits, 14 Tudor Road, Chester-le-street, Co. Durham DH3 3RY. Telephone 0191 3882112.**



Steel traffic wagon kits from Genesis



Two new 4mm scale wagons are announced by Genesis: a BAA steel-carrying bogie wagon kit and a BCA steel coil-carrier. They complement a growing range of kits cast in lead-free pewter.

Prices are £16.00 and £19.40 respectively. P&P £1.50 per kit. The

steel coils seen on the BCA are available separately, in packs of three and of two widths (13mm and 15mm), price £3.00 per pack.

Contact: **Genesis Kits, Waverney Cottage, Willingham Road, Market Rasen, Lincolnshire LN8 3DN. Telephone 01673 843236.**



Jack Ray's 90th birthday!

By happy coincidence, in this golden anniversary year of the Gauge 0 Guild, its founding Chairman Jack Ray celebrates his 90th birthday. Jack has spent much of his eighty-ninth year writing *Fifty years down the line*, a wonderfully illustrated commemorative history of 0 gauge modelling since the Guild was formed.

Jack's famed *Crewchester Railway* ran from 1953 until 2003; although sadly no longer existing as a railway, *Crewchester Junction* still operates on Graham Sheppard's *Abbotsdene Railway* to which Jack is a frequent visitor.

Happy birthday Jack and many more of them!

South West Digital and ESU

South West Digital Ltd. has been appointed as the UK distributor for ESU products.

The links with ESU go back to 1999 and Steve Weeks of South West Digital has been trained at ESU. A very good relationship with ESU has been estab-

lished. The aim is to promote the products through a more informed dealer network throughout the UK.

South West Digital Ltd., 1 Savernake Road, Worle, Weston-super-Mare, Somerset BS22 9HQ. Telephone 01934 517303.

ACE Trains Pullmans for 0 gauge

A new range of gauge 0 tin-printed Pullman cars will be issued by ACE Trains in 2007.

They will be fitted with two-rail wheels suitable for most two- and three-rail systems including Peco SM-32. These cars have names to make up trains such as *The Golden Arrow*,

The Yorkshire Pullman and later, a *Brighton Belle* set.

The cars will have the option of fitted interiors and the basic coach will sell for under £100.00.

Full details from **ACE Trains, PO Box 2985, London W11 2WP. Telephone 020 7727 1592.**



Skaledale gasworks and more



From December a complete gasworks will be available from Hornby in the Skaledale range. The items include a gasholder, retort house with chimney, exhaust house, tower condenser and washer, purifier, offices and gates, store building and walling. The suggested retail prices range from £20.99 for the gasholder to £6.75 for sections of walling.

Hornby has also announced the introduction of a range of Sealion hopper wagons. This follows on from the

highly acclaimed Seacow hopper wagons. There were subtle differences between the two including brake differences and the fact that the Sealion bodies were riveted and not welded.

These should also be in the shops before the end of the year. There will be initially three liveries, all in pristine finish, BR olive green, Departmental and Transrail. The suggested retail price is £16.50.

Contact: **Hornby Hobbies Ltd., Westwood, Margate, Kent CT9 4JX.**

Brassmasters Ivatt 4MT upgrade

Brassmasters' new upgrade kit for the Bachmann 00 gauge LMS/BR Ivatt 4MT 2-6-0 provides a new chassis designed for 00, EM and P4, improved motion and a replacement pony truck. There is also a new tender chassis to fit inside the moulded plastic sideframes and, like the loco chassis, this can be sprung if required.

Smaller details such as steps, brakes, ladders and cab doors are supplied with the kit. The pony truck,

which is suitable for many LMS and BR standard locomotives, is also available separately for £5.00 plus £1.00 P&P.

The conversion kit sells for £45.00 without hornblocks or £50.00 including a set of Brassmasters hornblocks, plus £2.00 P&P. They are available from Brassmasters' exhibition stands or direct from **Brassmasters, PO Box 1137, Sutton Coldfield, West Midlands B76 1FU.**

sales@brassmasters.co.uk



Harburn Hobbies staff charity abseil

Dave Anderson (*left of picture*) and Grahame Duff of Harburn Hobbies abseiled from the Forth Railway Bridge onto the south foreshore in aid of the Deafblind Scotland charity. Dave's father is a sufferer and director of the charity. The event, which was held on Sunday 15 October, attracted over 300 participants all raising money for various charities.

Readers who wish to make a contribution can do so via:

www.deafblindscotland.org.uk or c/o **Harburn Hobbies, 67 Elm Row, Leith Walk, Edinburgh, Scotland EH7 4AQ.** Telephone 0131 556 3233.



Frogmore 'Toad' and bullion van kits

The Frogmore Confederacy has recently issued two new 4mm GWR rolling stock kits.

The first is a 'Toad' 20 ton brake van to Diagram AA13. The kit is etched brass and includes all the necessary details to produce a faithful model. The version modelled is the steel veranda model with all the sanding gear. All that is required to complete are buffers, wheels and vacuum pipes where appropriate. Price £23.95 plus £2.00P&P.

The second kit is a bullion van to Diagram M17. The roof profile is accurately reproduced. It comes with bogies but not buffers nor vacuum pipes. The kit even has the loops for



the emergency brake cord. Price £32.50 plus £2.50 P&P. Both kits can be assembled using modern adhesives, but soldering is recommended. Contact: **The Frogmore Confederacy, The White House, Frogmore, Kingsbridge, Devon TQ7 2NZ.** Telephone 01548 531451.



Got your Christmas tree yet?

If you need a Christmas tree, a trip to Woodseaves Garden Plants will also give you the chance to ride on the firm's miniature railway that runs around the site.

For just £1.00, with concessions for groups and families, you can enjoy this experience from 11.00 on Sundays and Bank Holidays.

Trains will also run on Saturdays from 13.00.

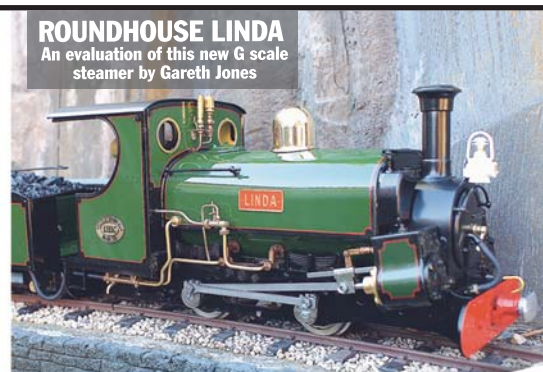
There is a grass car park. The service runs in good weather so check the forecast before you go.

Woodseaves Garden Plants, Sydnall Lane Nursery, Woodseaves, Shropshire TF9 2AS. Telephone 01630 653161.



ALBION QUARRY

Bob Alderman describes his new Portland-set layout



ROUNDHOUSE LINDA

An evaluation of this new G scale steamer by Gareth Jones



BISHOPS QUAY

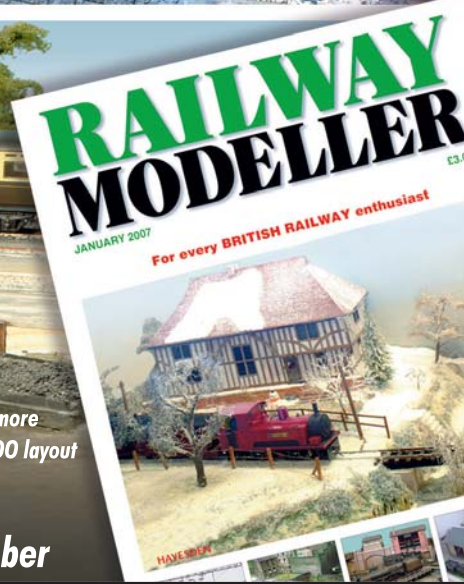
An 00 gauge waterside terminus by the Bridgend MRC

Coming next month

- HAYESDEN *Kentish O-16.5 in the snow, by Tony Mortlock*
- WINDRUSH-2 *00 Cotswold Terminus concluded by Harvey Whitmore*
- MCKINLEY RAILWAY *David Townend introduces a remarkable 00 layout*

plus all the regular features

January Issue - Out Tuesday 19 December




- | | |
|-------------------|------------------------|
| DCC | RAILWAY OF THE MONTH |
| GARDEN RAILWAYS | REVIEWS |
| HELP | RIGHT AWAY |
| LAYOUTS | SCALE DRAWINGS |
| LOCOMOTIVES | SCENERY & CONSTRUCTION |
| MONTHS | SEARCH |
| PLAN OF THE MONTH | WAGONS & COACHES |

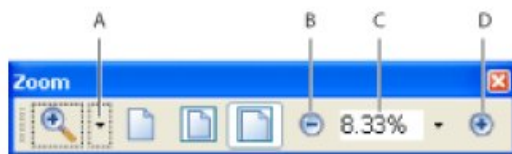
The complete Adobe Acrobat help file can be accessed through the menu bar. These are just a few extracts to help get you started.

Subject Menu

Use this menu to move around the publication. It contains subject links which will lead you to pages where you can access specific articles.

When you are over a link the Hand tool will change to a pointing finger . Click the left mouse button and you will be taken to the relevant article.

Magnifying and Reducing the View



Magnification options on toolbar A. Zoom menu B. Zoom Out button C. Magnification menu D. Zoom In button

To increase or decrease magnification:


Click the Zoom In or Zoom Out button on the toolbar, or select a magnification percentage from the toolbar menu. *(Try the page width setting)*

Paging through Documents



Navigation controls A. First Page button B. Previous Page button C. Current page D. Next Page button E. Last Page button

Moving around the Page

Use the Hand tool  to move around the page so that you can view all areas. It is like moving a piece of paper on a desk with your hand.

To adjust the page position: with the Hand tool selected hold the left mouse button down and drag the page up/down or left/right. Release the mouse button to stop scrolling.

Navigating with Bookmarks

Bookmarks are provided on the left hand side so that you can quickly go to any month's magazine. Use the bookmark to return to the Main Menu. You may also launch a word search from here. Click the (+) sign next to a parent bookmark to expand it. Click the minus (-) sign next to a bookmark to hide its contents.

If you wish to close the Bookmark area in order to give you a wider screen size, just click the Bookmarks tab. To reopen, just click the tab again.

Retracing your viewing path

To retrace your path within the Annual use the green arrow buttons at the bottom of the screen to move forwards or backwards between the articles/menus you have recently viewed.

Viewing Movies

Movies may take a short while to load as they are quite large files. The speed at which they will load will depend upon your computer.

When the Movie is playing you may pause it or move to another part of that programme by using the controls at the bottom of the picture. To exit the Movie screen, click the 'X' in the top right of the Movie window.

Search

Click the Search bookmark. Type your query in the box and press Search. If you wish to use the Index Search, click Advanced Search, select the index (CM 2004 Index or RM 2004 Index).

Printing

Go to the page you wish to print and select the Printer icon on the toolbar. Alternatively select File > Print. Remember to choose which pages you wish to print or everything will be printed.

January	July
February	August
March	September
April	October
May	November
June	December

Bradford City Road

Ffriddoedd Branch

Halifax Midland

Knott's Wharf

Linfit West CCE Sidings

Maiden Lane

Middleton-in-Teesdale

Penfold Priory

Ramsey

Seaton Junction

Watlington

Wellbridge

Book reviews

Product reviews

DVD reviews

Alderney Railway

Aviegorm

Coal Mining in North Somerset

Gainsborough Jubilee

Gauge 1 in the Garden

Lochinver

North Staffs in N

Return to Ashburton

Santon

That 'Dam' Railway

Tin Town Train

Windrush

An O Gauge B1	LNWR 18" Express Goods 0-6-0
BR Bogie steel wagons	LNWR prize cattle van
Freelance G scale signal cabin	LSWR 700 Class 0-6-0
Gresley A3 Pacific	Model a PPM50
IoMR diesel No 17 Viking	Rowlands Castle
L&Y 0-6-0ST	Rowlands Castle - 2

Ashminster	Structure Modelling 9
Aston Yard	Thomas's Railway
Betterton	Westbridge-on-Sea 1
Pitt Lane	Westbridge-on-Sea 2
Structure Modeling 7	Westbridge-on-Sea 3
Structure Modelling 8	Westbridge-on-Sea 4

RAILWAY MODELLER

Locomotives

8750 Pannier
8750 Pannier 2
8750 Pannier 3
A weathered Brit
An O Gauge B1
Building Exe
City of Truro in 4 mm scale
Exbury engine duties
Great Eastern Decapod
Gresley A3 Pacific
Instant Industrials
IoMR diesel No 17 Viking
L&Y 0-6-0ST

LNWR 18" Express Goods 0-6-0
LSWR 700 Class 0-6-0
Modelling (Northern) Irish
Modelling (Northern) Irish 2
MR 0-4-4-T for S
NBR Glen 4-4-0
Nellie in O gauge
NSR locos and stock
Scratchbuilt narrow gauge locos
Stanier's ghost
Tower Models brass Jinty
Victory

RAILWAY MODELLER

Scenery & Construction

7 mm narrow gauge couplings

A baseboard variation

A low-relief warehouse

A weathered Brit

Building goods stock in N

Freelance G scale signal cabin

Headlamps for locos

Howard Bros Garage

LNWR station footbridge

Modelling stone buildings

Newton Abbot East

Powered turntable in N

Rowlands Castle

Rowlands Castle - 2

Sanding stone

Small turntable in OO

Street lamps in 4 mm

Structure Modelling - 7

Structure Modelling - 8

Structure Modelling - 9

Telegraph Poles

Bob's Folly & Pike Cottage Railway

Compton Basin

Ferndale Light Railway

Gauge 1 in the Garden

Never a dull moment

Peco SM-32 update

Return to the Vale

Rivelin Glen Railway

The Gauge O Guild

BR Bogie steel wagons
Brake Vans for the BR era
Building goods stock in N
Car flats in N
Coachbuilding in SM-32
Correctly covered
Golden Arrow luggage truck
GWR brake composite
GWR brake composite 2

GWR Duplex milk tank
GWR iron cattle wagon
GWR milk train in 4 mm
LNWR prize cattle van
Morning milk train
NSR goods stock
Ramsey 3
Wagon kits in 7 mm scale

DCC for Dapol 14xx

DCC for Dapol 45xx

DCC for Dapol M7

DCC for GF Hall

Efficient O gauge DCC

Alphabetical

By Gauge

O	7 mm
OO	4 mm
N	3 mm
HO	9 mm
EM	OO9
Z	OO _n 3
S	1:64

Abergwynant	Linfit West CCE Sidings
Abergwynant 2	Lochinver
Aldeburgh	Loch Lochy
Anderstaff Yard	Maiden Lane
Ashminster	Melcombe Magna (S&D)
Aston Yard	MGWR No 117 Moy
Audley Grange	Middleton-in-Teesdale
Aviegorm	Millfield Road
Balleyconbeg	Milstead Halt
Bedlam Heath	N gauge tramway modules
Betterton	Nethercreech Junction
Beyond Rothby	North Staffs in N
Blackmill	Penfold Priory
Blagdon extended	Pitt Lane
Bradford City Road	Ramsey
Caer Faban	Ramsey 2
Castle Rock	Return to Ashburton
Ceriog Light Railway	Return to Tapley
Chilcompton	Rothern Bridge
Clayton West	Scrubs Lane & The Maltings
Coal Mining in North Somerset	Scrubs Lane
Cobnor	Sealane
Colstead	Seathorpe Branch
Crackington Quay	Seaton Junction
Denebridge	Stour Lane MPD (SR)
Denebridge	Sunderland trams
Donegal 1	Sidney Street
Donegal 2	Tarrant Valley Railway
Ffriddoedd Branch	That 'Dam' Railway
Finnegan's Crossing	Thomas's railway
Gainsborough Jubilee	Two Southdales
Glasgow Emerald	Watlington
Halifax Midland	Wellbridge
Hellifield - a postscript	Westbridge-on-Sea 1
Hilltop Colliery	Westbridge-on-Sea 2
Isle of Man Railway - 4	Westbridge-on-Sea 3
Jubilee Sidings	Westbridge-on-Sea 4
Kew Bridge	Westerdale
Kingsway Subway	Weydon Road
Knott's Wharf	Whitfrom to Whitworth
Kyre Forest	Windrush
Lazy Cottage	Wintringham Haven

OO

Ashminster
Audley Grange
Balleyconbeg
Betterton
Blackmill
Blagdon extended
Bradford City Road
Colstead
Denebridge
Pitt Lane
Return to Tapley

Scrubs Lane
Seaton Junction
Thomas's railway
Watlington
Westbridge-on-Sea 1
Westbridge-on-Sea 2
Westbridge-on-Sea 3
Westbridge-on-Sea 4
Whitfrom to Whitworth
Windrush

4 mm

Abergwynant
Abergwynant 2
Aston Yard
Aviegorm
Bedlam Heath
Chilcompton
Clayton West
Coal Mining in North Somerset
Ffriddoedd Branch
Hellifield - a postscript
Isle of Man Railway - 4
Jubilee Sidings

Kew Bridge
Kingsway Subway
Linfit West CCE Sidings
Lochinver
Maiden Lane
Middleton-in-Teesdale
Millfield Road
Seathorpe Branch
Sidney Street
Two Southdales
Wellbridge
Wintringham Haven

N

Caer Faban

Hilltop Colliery

Kyre Forest

N gauge tramway modules

North Staffs in N

Return to Ashburton

Westerdale

9 mm

Milstead Halt

S

Halifax Midland

Z

Aldeburgh

3 mm

Finnegan's Crossing

EM

Anderstaff Yard

HO

Glasgow Emerald
MGWR No 117 Moy

1:64

Sunderland trams

O

Gainsborough Jubilee

Penfold Priory

Rothern Bridge

OOn3

Donegal 1

Donegal 2

Ramsey

Ramsey 2

OO9

Beyond Rothby

Castle Rock

Cobnor

Denebridge

Lazy Cottage

Scrubbs Lane & The Maltings

Tarrant Valley Railway

That 'Dam' Railway

7 mm

Ceriog Light Railway

Crackington Quay

Knott's Wharf

Loch Lochy

Melcombe Magna (S&D)

Nethercreech Junction

Sealane

Stour Lane MPD (SR)

Weydon Road

British Rail Remembered 4
Mechanical signalling & level crossings
Right Track 3
Right Track 4
Rise and Fall of Hornby Dublo
Sheffield & North Derbyshire
Sidmouth & Budleigh Salterton branches
Southern Region Steam 2
Whistle Stop 11

Train Crazy Publishing
Fastline Films
Activity Media
Activity Media
Axiom Video Productions
Cine Rail
Branch Line Video
Cine Rail
On Track Productions

73219 The Forgotten Caprotti Abertillery and Ebbw Vale Lines Alcester Branch Atlas of Train Operating Companies Beginner's Guide to 2 mm Finescale Modelling Bembridge Branch Line Bridgend (West) to Swansea Brilliantly Old Fashioned British Railway Air Braked Stock British Railway Journal NER Edition Bromsgrove to Gloucester Brunel Brunel an Engineering Biography Brunel's Royal Albert Bridge Bure Valley Railway Souvenir Guide Carl Arendt's small layout scrapbook Castle Cary to Durston Channel Tunnel Class 40 Diesels in Depth Class 8F 2-8-Os Crewe Works Deltics - the last year Diesels in the Highlands Diesels on the Southern Dorset & Somerset Narrow Gauge East Lancashire Railway Engine Sheds in Camera Engine Workings CD First Generation Southern EMUs Freight Train Operation Garden Railways from the ground up Getting Rolling Glyn Valley Tramway Coaches & Goods Great Western Pictorial Greater Genius - Isambard Kingdom Brunel Guildford via Cobham GWR Wagons before 1948 Hexham to Carlisle Hornby Book of Model Railways Iron Roads to Burns Country Jack in a Box Jack the Station Cat & the Tail's End Tickets Jinty Leek & Manifold Valley Light Railway Lincolnshire Potato Railways Liveries of the BR Standard Diesel Electric Shunters Liverpool & Manchester LMS Journal No 12 LMS Journal No 13 LMS Journal No 14 LMS Locomotive Profiles - 9 LNER Wagons Locomotives in detail 4 London's Railways from the Air LSWR Carriages Memories of Steam the final years Modelling Scotland's Railways Modern Railways Dictionary Monmouthshire Eastern Valleys Mountain Ash to Neath Neath and Brecon Railway Newcastle to Hexham Orion, Darroch and the Alfreds Pacifics on the South Western Potters Bar to Cambridge Power of the 8Fs Power of the BR Standard 2-6-Os Power of the LMS 2-6-Os Practical Garden Railways Private Owner Wagons Private Owner Wagons Rails round Cork and Kerry Rails to the People's Palace Railwayman's Diesel Manual Railways around Clapham Junction Railways Restored 2006 Reservoir Builders of South Wales Riddles Class 6/7 Standard Pacifics Right Track, The Robert Stephenson: Railway Engineer Scottish diesels Scottish Region 1948-1967 Severn Valley Railway Snape Branch Somerset & Dorset Line Southern electric slam-door stock Speyside Line, The Steam on Canvas Steaming in Three Centuries Steaming in your Garden Stratford upon Avon to Birmingham (Moor Street) Sutton Scotney Tavistock North & South The Power of the Hymeks Torrington & Marland Light Railway Tramway Memories Belfast Transport Memories London Wagons of the early British Railways era Wartime on the Railways Waterford, Limerick & Western Railway Welsh Highland Railway Yeovil to Taunton	Paul Deane Vic Mitchell & Keith Smith Stanley C Jenkins & Roger Carpenter Ian Allan Publishing ed. Mark Fielder Peter A Harding John Hodge Allen Levy comp. Tom Smith divers authors Vic Mitchell & Keith Smith Vic Mitchell Adrian Vaughan A R Kingdom Ted Cubitt ed. Carl Arendt ed. Nancy Langmaid Nicholas Comfort David Clarke David Hunt, John Jennison, Fred James & Bob Essery Edward Talbot & Clive Taylor Alistair McLean Andrew Vines Michael Welch Vic Mitchell & Keith Smith Mike Heath David Hucknall Midland Railway Society Kevin Robertson Bob Essery David Pratt 7 mm Narrow Gauge Assoc Bernard Rockett Sue Sterndale Harold Bagust Howard Mallinson comp. R Turret Roger R Darsley Chris Ellis Michael Pearson Alan Cliff Alan Cliff Ivo Peters Robert Green Stewart E Squires Steve Jordan Bob Pixton ed. Bob Essery ed. Bob Essery ed. Bob Essery David Hunt Peter Tatlow Peter Swift Aerofilms G R Weddell Roger Siviter Ian Futurs John Glover Vic Mitchell & Keith Smith Vic Mitchell & Keith Smith Gwyn Briwnant Jones, Denis Dunstone & Tudor Watkins Roger R Darsley R A S Hennessey Tony Monyneaux & Kevin Robertson Vic Mitchell & Allan Mott Jeff Ryan, David McIntosh, George Moon Gavin Morrison Gavin Morrison Peter Jones Keith Turton Keith Turton Michael H C Baker Reg Davies & David Bevan William F Bolton Kevin McCormack ed. Alan C Butcher Harold D Bowtell David Clarke ed. Nick Wright John Addyman & Victoria Hawarth David Cross Brian J Dickson Michael A Vanns Peter Paye David Cross Roger Palmer Dick Jackson Philip D Hawkins Irwin Price & Leslie McAllister cont. Dick Moger & David Pinniger Vic Mitchell & Keith Smith Keith Robertson A R Kingdom John Vaughan Rod Garner Desmond Coakham Paul Collins David Larkin David Wragg Ernie Shepherd comp. John Keylock Derek Phillips
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1E Promotionals KRS Model Railways, Leighton Buzzard and GE Models, Sheringham

Dapol Private Owner Wagons

Dapol Private Owner Wagons

Dapol Private Owner Wagons

More PO wagons

Private Owner Wagons

Anderson Miniature Signs PO Box 467, Rotherham, S Yorks, S63 7ZN

Precut signs in N, OO and O

Assoc of Model Railway Clubs 18 Meadowsweet Avenue, Filton, Bristol, BS34 7AL

Dapol Western Private Owner Wagon

Avalon Line Models Hanton Farm, Boulston, Haverfordwest, SA62 4AG

New chassis for 9 mm gauge

Bachmann Europe PLC Moat Way, Barnwell, Leicestershire, LE9 8EY

45' containers

56xx 0-6-2T with DCC on Board in OO

BR Class 9F No 92220 Evening Star in OO

BR Mk I Pullman cars in OO

BR Mk II TSO brand new in OO

BR Mk IIa open second in OO

BR Standard 9F 2-10-0 in 4 mm scale

Class 04 shunter in OO

DCC on Board - decoder fitted Jinty in OO

Dellner coupler-fitted Class 57 Thunderbird in OO

First Scotrail-liveried 158 DMU in OO

Great Western stalwarts in OO and N

Gresley V3 2-6-2T with Westinghouse pump in OO

Junior' locos for 16.5 mm gauge

Latest BR Mk II coach in OO

Latest Pos in OO

Mk 1 Pullman First in 4 mm scale

Mk1 catering vehicles in OO and N

New PO wagons in OO

Rebranded Class 158 and new TTA tanks in OO

SR Lord Nelson 4-6-0 in OO

Shock open and van in OO

Tank wagons old and new in 4 mm scale

Thames Trains livery class 166 DMU in OO

Two new three-packs of tank wagons in OO

Virgin Trains 'Thunderbird' Class 57 in 4 mm

Weathered container flats and new Limpet opens in OO

Ballards 54 Grosvenor Road, Tunbridge Wells, TN1 2AS

Dapol Private Owner Wagons

Dapol Private Owner Wagons

Private Owner Wagons

Private Owner Wagons

Branchlines PO Box 31, Exeter, Devon, EX4 6NY

The Model Company: Malcolm Moore 2' gauge diesel kit in 7 mm

Bristol East MRC 693 Muller Road, Bristol, BS5 6XT

Dapol Private Owner Wagons

Bristol Model Railway Exhibition David Baverstock, 18 Meadowsweet Avenue,
Filton, Bristol, BS12 7AL

More PO wagons

Buffers Model Railways Colston Cross, Axminster, Devon, EX13 7NF

Bachmann Private Owner Wagons

Cambridge Custom Transfers 206 Nuns Way, Cambridge, CB4 2NS

New transfers from CCT

Classic Lines of Southport 43 Arundel Road, Hillside, Southport, PR8 3DA

Display cases for 4 mm scale

Connoisseur Models 33 Grampian Road, Penfields, Stourbridge, DY8 4UE

Reintroduced Starter loco kit in 7 mm scale

C-Rail Intermodal Morven, Roome BAY Avenue, Crail, Fife, KY10 3TR

40' container kit in 4 mm scale

New container transfers

Dapol Ltd Gledrid Industrial Park, Chirk, Wrexham, LL14 5DG

Dogfish ballast hoppers in N

Drummond M7 0-4-4Ts in N

New GWR Class 4575 prairie tank in N

Six Wheel milk tanks in N

DCC Supplies The Annex, Thistledown, Suffolk Lane, Abberley, Worcs, WR6 6BE

Fantasonics Scale Magic™ background sounds

Digitrax Sunningwell Command Control Ltd, PO Box 381, Abingdon, Oxfordshire,
OX13 6YB

New DS64 stationary (accessory) decoder

DJH Engineering LTD Project House, Villa Real, Consett, Co Durham, DH8 6BP

Ready-to-run LNER J72-0-6-0 in O

East Kent MRS (Whitstable) Wagon Offer, PO Box 201, Whitstable, Kent, CT5 1WT

Dapol Private Owner Wagons

Emerald Models 4662 Kingston Road, Unit 58, Scarborough, Ontario M1E 4Y7, Canada
Bus details

Fox Transfers 138 Main Street, Markfield, Leics, LE67 9UX

Loco headboards

Transfers for GBRf locos

Transfers for Hornby HST car and Fastline 56s

Gaugemaster Controls Gaugemaster House, Ford Road, Arundel, W Sussex, BN18 0BN

Noch arcade walling sheets

Noch new scenic accessories

Noch New Scenic Items

Graham Farish [Bachmann Europe PLC, Moat Way, Barnwell, Leics, LE9 8EY](#)

16T mineral wagons in N
27T iron ore and chalk tipplers in N
BR/Sulzer Type 4 Peak 1Co-Co1 in N
Class 168/1 DMU in N
GNER and Virgin electrics in N
GWR Railcar in N
Latest Class 50 in N
Latest Class 66 liveries in N
Modern freight stock in N
More BR/Sulzer Type 4 Peaks in N
New freight stock in N
Private Owner Wagons in N

Harburn Hobbies [67 Elm Row, Edinburgh, EH7 4AQ](#)

Harburn firs
Latest in 4 mm
Petrol pumps in 4 mm

Heljan UK www.heljan.dk

BR Type 3 Hymek in O gauge
BRCW Class 33 in OO
Programmable turntable in OO/HO

Hornby Hobbies Ltd [Westwood, Margate, Kent, CT9 4JX](#)

A1 Pacific No 1470 Great Northern in OO
Brand new Drummond M7 in OO
Brush Class 60 in OO
Contemporary-livery HST train packs in OO
De-named Class 56 in OO
Flying Scotsman in OO
Gresley coaching stock in OO
Gresley stock with corrected grain
GWR clerestory coaches in OO
IC225 train pack honours Tam the Gun
Latest Class 08 shunters in OO
Latest Class 60 and Class 50 in OO
Latest Mk IV stock in OO
Latest Princess Coronation in lined maroon
LMS Period III coaching stock in OO
LMS/BR(LM) stock in OO
Lyddle End platform segments in N
Master Cutler premier box set in OO
More Mk II and Mk III stock in modern liveries in OO
More Skaledale NER structures
NER footbridge in OO
NER structures in N
New BR Standard Class 7 Britannia 4-6-2 in OO
New 08 in OO
New OO steamers
New SR Q1 in OO
OO seacows with new fleet numbers
Recent 'Thomas' items
Scaledale McK & H box
Scaledale North Eastern structures in 4 mm
Seacow ballast hopper in OO
Seacows in OO include weathering
Selection of new steam locomotives in OO
Three new Class 31s and an NSE 50 in OO
Top link passenger steam power in OO
Two new train packs in OO
Weathered wagons in OO

International Models [Plas Cadfor, Llwyngwrl, Gwynedd, LL37 2LA](#)

Auhagen foliated sea moss trees

John Lythgoe [12 Oak Tree Close, Bedale, N Yorks, DL8 1UG](#)

Etched letters and numbers

Kernow Model Rail Centre [98 Trelowarren Street, Camborne, Cornwall, TR14 8AN](#)

Bachmann Weathered TTAs in 4 mm scale

Kitmaster Collectors' Club [109 Head Street, Halstead, Essex, CO9 2AZ](#)

Dapol Private Owner Wagons

Lenz Mackay Models, [Studio 56/57, Embroidery Mill, Abbey Mill Centre, Seed Hill, Paisley, PA1 1TJ](#)

Silver series DCC decoder

M G Sharp Models [712 Attercliffe Road, Sheffield, S9 3RP](#)

A1 Models Buffers and fencing
A1 models pallisade and chain link fencing in N
Brawa Lamps
More A1 buffers for 4 mm scale

Markits [PO Box 40, Watford, Herts, WD24 6TN](#)

Loco and coach parts

Metcalf Models & toys [Bell Busk, Skipton, N Yorks, BD23 4DU](#)

Four-arch viaduct kit in 4 mm scale

Middy Trading Company [21 Leggatt Drive, Bramford, Ipswich, Suffolk, IP8 4EU](#)

Dapol Private Owner Wagons

Mill Lane Sidings [7 Mill Lane, Rainford, nr St Helens, Lancs, WA11 8LW](#)

BR Shock open body kit in N
GWR Aero propeller-carrying wagon kit in N

Model Irish Railways [12 Lymedale Grange, Portadown, Craigavon, Northern Ireland, BT63 5XB](#)

Anhydrous ammonia tanker and barrier in 4 mm scale

Model Masters 50a Clifton Road, Weston-super-Mare, BS23 1BW

Massoth High power digital central unit & handset

ModelZone Unit 31, Centrale Shopping Centre, North End, Croydon, Surrey, CR0 1TY

Weathered Bachmann 9F in OO

Modern Structures PO Box 3119, Ferndown, Dorset, BH22 8XY

Motor Art plant in 1:87 and Express Models lighting kits

Modratec PO Box 2206, Graceville 4075, Queensland, Australia

Interlocked mechanical level frame

Nigel Lawton 77 Katherine Way, Seaford, East Sussex, BN25 2XF

Micro Motors

Remotoring kit for Bachmann N gauge chassis

Nsprays Chapel Place, High Road, Guyhirn, Cambs, PE13 4ED

Special-run Dapol Class 73s in N

OO Works Brendon, Langham Road, Robertsbridge, East Sussex, TN32 5DT

Billinton E4 0-6-2T in OO

Osborns Models 2-4 Marcham Road, Abingdon, Oxfordshire, OX14 1AA

Cornerstone N scale modular component packs

Ott-Lite Technology EQS Ltd, 11 Iliffe House, Iliffe Avenue, Leicester, LE2 5LS

TrueColor lamps

Parkside Dundas Millie Street, Kirkaldy, KY1 2NL

BR21T hopper kit in 4 mm scale

New wagon kits

Peter Clark Models 92 Durham Road, Bromley, Kent, BR2 0SR

Safety barriers for G1 and 4mm

Phoenix Precision Paints PO Box 8238, Chelmsford, Essex, CM1 7WY

Phoenix acrylics

Precision Labels

Carriage board frames & chocks

EE Class 40 nameplates

Gresley grain for OO coaches

New additions

Royal Train labels

Pritchard Patent Product Co Underleys, Beer, Seaton, Devon, EX12 3NA

CDA china clay hopper in N

Commemorative CDA

Grain hopper in N

New items

New Setrack

O gauge double slip

Rerailer in OO

R Parker 19 Oaklands, Malvern Wells, Worcs, WR14 4JE

More 4mm scale vehicle kits

Ratio Plastic Models Ratio House, Mardle Way, Buckfastleigh, Devon, TQ11 0NR

Three-arch viaduct & single-span canal bridge kits in N

Viaduct add-ons in N

Roger Smith 121 Wellsford Avenue, Wells Green, Solihull, B92 8HB

MOD transport workshop building & air raid shelter in 4 mm

Modern signs

Traditional speed limit signs in 4 mm scale

Upgraded three-link couplings for 4 mm scale

Rue d'Etropal 21 Ambleside Close, Huncoat, Accrington, Lancs, BB5 6HY

More signs

Scalefour Society 5 Cedar Close, Teignmouth, Devon, TQ14 8UZ

Conductor rail equipment in 4 mm for SR & LT modellers

Shedloads Models 37 Chaplin Drive, Headcorn, Ashford, Kent, TN27 9TN

New wagon loads for OO and N

Skytrex Ltd Unit 1, Charnwood Business Park, North Road, Loughborough, LE11 1LE

Ready-to-run BR Highfit & ready-to-paint skips in O

Slater's Plastikard Temple Road, Matlock Bath, Matlock, Derbyshire, DE4 3PG

1:32 scale Robert Hudson Rugga skip

Small Scale Customs Flat 7, 22 Chatham Grove, Withington, Manchester, M20 1HS

Bespoke numberplates in 4 mm

South West Digital Ltd 1 Savernake Road, Worle, Weston super Mare, North

Somerset, BS22 9HQ

ESU sound-fitted DCC decoder for Class 31

Taylor Precision Models Unit 235, Stratford Workshops, Burford Road, London, E15 2SP

Viva estate in 4 mm

Tower Models 44 Cookson Street, Blackpool, FY1 3ED

Brass 'Jinty' and Collett coach in 7 mm

Train Shop 23 Pedder Street, Morecambe, Lancs, LA4 5DY

Bachmann Private Owner Wagons

Dapol Private Owner Wagons

Transport Treasures Pocketbond Limited, PO Box 80, Welwyn, Herts, AL6 0ND

Period road vehicles in 4 mm scale

Tutbury Jinny Tutbury Mill Mews, Tutbury, nr Burton-under Trent, DE13 9LS

Dapol Private Owner Wagons

Private Owner Wagons

Wessex Wagons Narnia, Flaxpool, Crowcombe, Taunton, TA4 4AW

Dapol Private Owner Wagons

Private Owner Wagons

West Wales Wagon Works Valentine House, Brynden Close, Adpar, Newcastle Emly,

Ceredigion, SA38 9NP

Dapol Private Owner Wagons

Private Owner Wagons

White Rose Modelworks Unit 10, Bedale Station, The Bridge, Bedale, N Yorks, DL8 1BZ
Display cabinet

Wills Kits Ratio House, Mardle Way, Buckfastleigh, Devon, TQ11 0NR
Three-arch viaduct kits in 4 mm

Worsley Works NG 19 Douglas Road, Worsley, M28 2SR
4 mm nameplates

Cork, Blackrock & Passage composite 'scratchaid' body kit
County Donegal Railways Railcar No 1 scratch aid body kit in 4 mm
JHA for N and 3 mm

Z Club (GB) 36 Floribunda Drive, Briar Hill, Northampton, NN4 8RZ
A3 body kit

ZTC Controls Ltd 24 Chilwell Street, Glastonbury, Somerset, BA6 8DB
505 entry level Master Controller for DCC