NARROW GAUGE & INDUSTRIAL RAILWAY MODELLING REVIEW

Number 145
Price £6.95

ISSN 0958-0808 01
Guideline Publications
9 770958 080010

An Illustrated Journal of Modelling & Prototype Information Dedicated to all Aspects of Narrow Gauge & Industrial Railways and More...


Towyn Pendre

Figure it Out


Chattenden and Upnor

Locosnstuff

7mm Industrial and Narrow Gauge
by Mark Clark

All loco kits are suitable for 16.5 & 14mm gauge, most also for 13.3, 12.7, 12mm. Compensation is built in, complete with wheels, gearbox and motor, just couplings required to complete. Full details of everything are on the website Locosnstuff.com

Hudswell Clark D29 kit, only 3 left.

If anyone fancies one of these in RTR form for O/16.5, I have these 4 ready to go and a US style box cab, email for details.

I am still way behind with work but trying to catch up so apologies to those still waiting for things. The 1/35th Gamecock and Berliet chassis are still a work in progress which I will try to get sorted out over the Christmas break.

My new Chinese gear sets are here and although they work well in single geared power bogies giving a 22:1 reduction, the ratio is too high for the dual geared ones as at around 55:1, they are just too slow. It looks like I will be ordering more stock of the older 13:1 gears for the all dual geared uses in the new year.

For any thinking of acquiring one of Henrik Laurel's RAR locos for which I do the chassis, they will be found at shop.winterzone.se who are now printing HL's parts after the demise of Shapeways.

I have no new products at the moment so I will wish all a happy and prosperous new year.

Locosnstuff.com
borsig1958@gmail.com
12 Adelaide Road. Gillingham, Kent ME7 4NJ
01634 575081 before 8pm

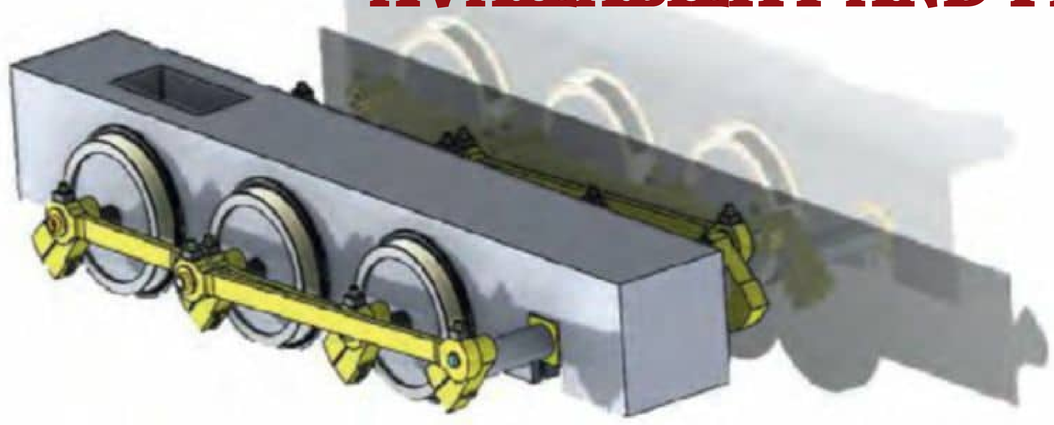
COMING SOON

HARLECH & CRICCIETH CASTLES

From EDM MODELS IN PARTNERSHIP WITH FOURDEES

- Bodies with separate details
- Etched details
- Laser cut glazing
- Separate cab details
- NG7-16.5 or NG7-14
- Stainless Steel Tyres
- Quartered Wheelsets
- Coreless Motor

AVAILABILITY AND PRICE TBA - aiming for early 2026



EDM MODELS

19 Briar Avenue, Acomb, York, YO26 5BX
info@ngtrains.com
www.ngtrains.com

Please note that prices were correct at the time of going to press but may change

NARROW GAUGE & INDUSTRIAL RAILWAY MODELLING REVIEW

ISSUE 145 – Volume 18 No.9 **January 2026**

EDITORIAL

Firstly I would like to take this opportunity to wish all readers a happy New Year from everyone here at Guideline, and especially from George Reeve, our designer, and myself, your newly-arrived Editor. George and I have worked together for some years now on our other railway titles, and prior to that he co-edited and designed the two Irwell titles from their inception, so is no stranger to what is due to a loyal readership.

I would like to thank my predecessor, John, for all the help and guidance over the past twelve months while I have been understudying him, and especially for his patience with my inability to navigate his digital files. The best way to learn, of course, is on the job, and I hope I have grasped the rudiments of how the REVIEW comes together each month. Going forward I am keen to speak to any potential contributors, to feature more layouts, and I will be making efforts to book Guideline into some of the shows and exhibitions this year, so I hope to meet some of you during 2026.

This issue offers the usual mixed bag of modelling and reference, with a welcome return to Trevor Hughes' Pendre, and some notes on the construction of buildings and scenery, a look back at the Chatterden & Upnor Railway by Sydney Leleux, and an excellent discussion on figure painting by Tim Shackleton – one of those modelling articles that will really make a difference to many.

In the meantime we will welcome your feedback at the editorial address.

All the best for 2026

Gary Hatcher

Cover illustration – Louisa. See article page 268.

All enquiries please ring the Customer Service Team on 01582 668411 or email kim@guidelinepublications.co.uk

CONTENTS

Published quarterly by: Guideline Publications, c/o Dunstable Business Centre,
Office Suite 2, Blackburn Road, Houghton Regis, Dunstable, LU5 5BQ UK
Tel: +44 (0)1582 668411 (office hours are 9.00am – 15.00pm) website: www.guidelinepublications.co.uk
Annual Subscription (4 issues): £28.00, Postage: UK – free, EUROPE – £10.00, USA/Canada – £14.00, Rest of World – £14.00.
SALES & MARKETING – for trade enquiries and advertising please email: tom@guidelinepublications.co.uk
CONTRIBUTORS – please email to discuss potential articles: gary@guidelinepublications.co.uk

Printed in the UK by ESP Colour, Millbuck Close, Swindon, SN2 8XU

Towyn Pendre

September 2024, and with tracklaying attended to, and the groundworks laid, work is underway on the buildings, with scenery to follow.

By Trevor Hughes

A welcome return to Pendre – this time focussing on the scenery and buildings.

A model based on the Talyllyn Railway station at Towyn Pendre has been a work in progress for many years. I wanted to try out a larger scale and moved from the 1:64 of my 1990s Festiniog Railway model to 1:32. This allowed me to reproduce faithfully the characteristic trackwork described in REVIEW 123, together with the single-beam steel supports, not to my knowledge used by any other modeller. REVIEW 111 introduced the locomotives, and REVIEWs 124 and 136 described the rolling stock. The coaches were produced in etched brass. Thanks to help from Martin Edmondson, PPD for the photo-etching, and David Barham for the 3D printing. Axleboxes and wheels were lost-wax cast in brass by Richard Sheard in Birmingham. Peter Kazer liked the methods so much that he subsequently built some superb Corris Railway models in the same scale. This is not surprising, as the techniques were developed from those we had both used to build Tan-y-Grisiau and Corris in 1:64 and 1:48 scales respectively.

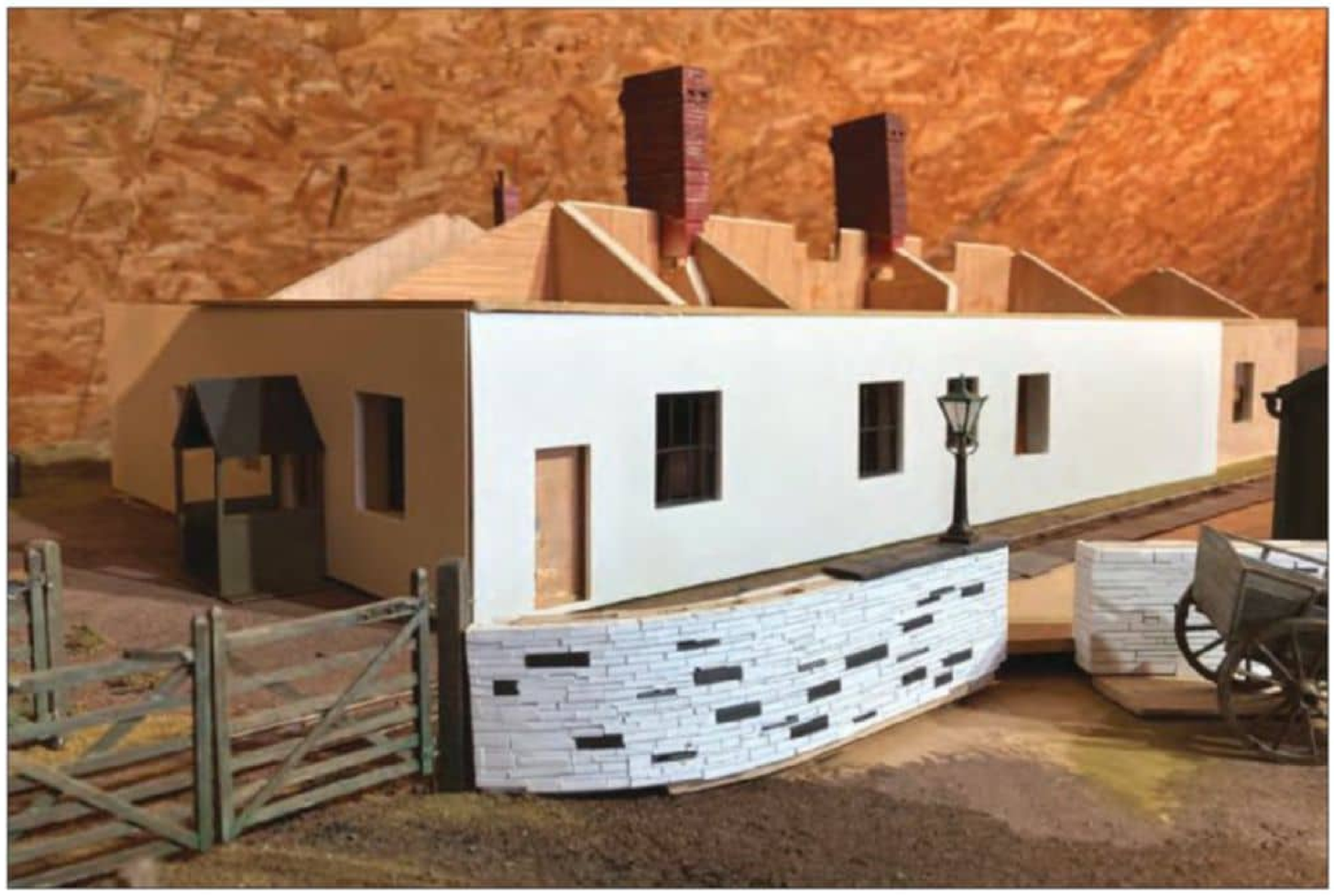
The larger scale presented new challenges, and my attempts to overcome them were discussed and dissected over many Friday lunchtimes with my good friend Malcolm Clarke. My thanks go to all involved.

A much earlier model was my S-scale cottage group at Tan-y-Grisiau. Made in 1990, it shows the mudstone shale discovered by my good friend Harry Maden, which I used extensively on the model. It was acceptable at the time but did not have the appearance of the sawn slate slab of the Pendre loco shed. I broke with the past and the reliance on cast plaster and shale stone, and decided instead to use painted Plasticard.

The basic form of the land was created with a thin layer of plaster skim over expanded polystyrene. The plaster was reinforced with self-adhesive plasterboard joint tape. Diluted PVA (equal parts PVA and water) sealed the plaster, and a further coat of PVA, only slightly diluted, fixed down the sieved sawdust undercoat. One packet of Dylon fabric dye produced more than enough green dust for the whole layout. I used laboratory soil sieves to grade the particles to the same size as Woodland Scenics fine scatter (0.5mm to 0.7mm). I have always used an undercoat before applying foam or static grass. It may be an old-fashioned idea, but I prefer the depth of colour and texture that it provides.

The static fibres were fixed down with War World Scenics basing glue, slightly better than straight PVA for allowing the

Top. The station and workshop area showing the finished groundwork, blended sympathetically with the well-weathered track.



Middle. At Pendre, the layout is dominated by the bulk of the loco shed and cottage. Most of this was lime rendered, and contemporary photographs show it to have been in very good condition. The west end had been left with the stonework exposed. The whole building was constructed from slate waste from the cutting sheds at Bryneglwys and was unlike the appearance of any of my previous models.

Bottom. A much earlier model was my S-scale cottage group at Tan-y-Grisiau. Made in 1990, it shows the mudstone shale discovered by my good friend Harry Maden, which I used extensively on the model.

Pendre shed wall: perfectly flat, with thin mortar courses, and a colour that may be best achieved using acrylic paint.

The station boundary wall under construction, using various sizes of Evergreen strip.

***Left.* The end wall of the cottage, with windows fitted temporarily.**

fibres to stand upright. Applying static grass is best done on dry and warm days. All of this was developed from the work I had done on Tan-y-Grisiau and Crowsnest. I discounted Noch and Faller static grass as too shiny and settled almost exclusively on Heki and Woodland Scenics products.

For the first time, I used grass mat on the baseboard-to-baseboard joints, setting each mat so that it slightly overlapped the edge. When the boards are brought together, the mat is compressed and the joint becomes less obvious.

Heki *Grasmat Weisengrün* (meadow green, product 1575) and *Grasmat Waldboden* (forest floor, product 1576) were used, with the sections joined using *Wildgras* 3367 (4mm loose fibres). Although the instructions recommend tearing the mat into irregular pieces, it is much safer to cut the spider-web base layer to shape with a small pair of scissors and then pull the top fibre layer apart. It still produces an irregular edge, but the piece will be closer to the shape intended.

Spray glue was used to fix the mat to the green sawdust undercoat. I had previously used Winsor and Newton artists' fixative, but this never seemed to have the long-term tack required for the layout to withstand exhibition transport without looking a little threadbare. Carpet glues such as Ultratape

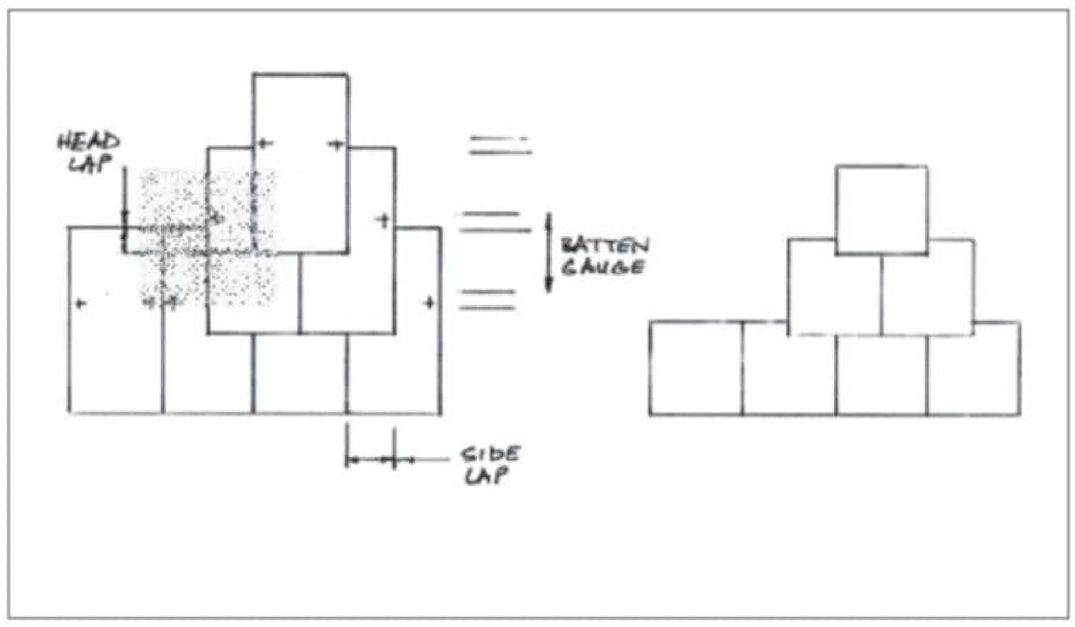
***Bottom left.* All the sash windows were jig built from brass strip, then blackened, and will be spray painted before the glazing is fitted.**

were far too aggressive. I found a good compromise with a fabric glue from iwantfabric.com. I also discovered a French product called HC10 Universal Fixative, which works well with the finer materials.

Other sections were treated with Woodland Scenics fine scatter and medium scatter, bits of clump foliage, and — a good find — Woodland Scenics Field Grass Medium Green (FG174), a much better alternative to dyed plumber's hemp for individual grass stems. Longer grass and rush stems were made using brush bristles. All of these materials were fixed with ordinary PVA.

The railway boundaries were laid out as shown on the 1900s OS map. Some were visible in early photographs

Left. **The cottage and locomotive shed were built with a fine array of chimneys. Following on from my model of School Lane Bridge, constructed in styrene blocks, I decided to continue with the same individual brick technique. I liked the way that individual bricks allowed me to reproduce the very characteristic oversailing courses at the tops of the chimneys. I used Evergreen square section strip, taking advantage of the slight dimensional differences to give a weathered effect to the brickwork. These were painted with acrylics, mainly red ochre and raw sienna.**



Right. **Given the usual viewing angle, one cannot underestimate the importance of the buildings' roofs. On the left is the proper arrangement with a fully waterproof overlap of the rectangular slates. On the right is my own rearrangement, which allows the use of square pieces of card.**

Left. **All portable layouts must be divided into sections. Pendre is 35 feet in length, on seven baseboards. The four rail breaks will betray the location of the joint. Both the Heki *Grasmat* and the wire wool hedge have been fixed proud of the joint so that the break becomes less obvious when the boards are bolted together.**

as slate on edge, but parts of the stock fence would have been thorn bush, most of which has grown into substantial hedges over the years. The slate fence was made from leftover pieces of real slate. I ground down a paint scraper to use as a chisel, splitting the slate into thinner sections, and then used a hacksaw to cut them to size. For the hedges, I returned to the wire wool and tea leaves methods used by George Iliffe Stokes in the 1950s, using the HC10 spray as a fixative. For further information, I can only refer to the informative article by Malcolm Mitchell in *MRJ 24.*

One of the inescapable features of model buildings is the prominence given to the roof. The model is usually presented to the viewer at an angle quite unlike that in real life, which is why we need to be critical about the methods and materials we use. One of the defining characteristics of a slate roof is the way it reflects light. Even on a dry day there is a quality that is difficult to reproduce in model form.

Right. **One thing that intrigued me was the way in which slates weathered. I do not suppose that I had ever made a truly successful job of reproducing this in model form, so I decided that the best approach was to do a little research. Fortunately, we can now find all sorts of information online which, many years ago, would have required a determined trip to the local reference library. This research told me that the dark staining on roofs is caused by bacteria. With the grand title of Gloeocapsa magma, it grows best in damp, shady conditions. The growth begins as a single spot, and rainwater encourages the bacteria to spread downwards in ever widening streaks. I can verify that, given the right conditions, a new roof will be significantly covered within twenty years. Algae, on the other hand, will also begin as a single spot but will grow in a ring. The outer edge remains active, developing yellow or orange tones, while the centre dies off and becomes grey or brown. Moss will remain green as long as there is moisture, surviving long periods of drought. It may turn brown but will regrow. Gardeners among you will know never to put moss on a compost heap.**

Above. **You would think that slates brought in from the same quarry at the same time ought to be very close in colour. Not so. I found that even within the same crate of slates there were slight differences in colour, resulting in some interesting patterns.**

Left. **There are many forms of ridge tile, and we need to consider these when finishing the model. The carriage shed was topped with angled grey tiles, known in the trade as roll-top crested angle. I have used a strip of 20-thou black styrene card, scribed down the centre, then scribed again at right angles to represent the joints, bent down the centre and fitted with individual pieces of round styrene rod. Although not shown in the photograph, it will be painted with grey acrylic. This not only gives a uniform colour but also covers the sanding marks left when I cut the original black finish down to a more acceptable dark grey. Re-scribing the joints afterwards will allow the original dark plastic to show through, emphasising the joint. In real life these tiles are laid butt jointed on a bed of mortar. The station shelter, previously described in REVIEW, was fitted with capped-angle ridge tiles. These overlap and provide a more weatherproof finish. If laid correctly, the open end of a capped tile should be on the leeward side of the joint.**

Top left. **This must be as bad as it gets. The left hand side has a head nailed top row; the right hand repair is centre nailed up to the ridge. One side is heavily stained with bacteria, but the repair is growing moss, noticeably so on one or two slates. These appear to be made from synthetic fibre and will hold moisture for longer. At the ridge of a roof, the last row of slates can be arranged in different ways. On an old roof, the slates may be sorted - that is, graded for size - with the smaller slates at the ridge and the larger ones at the eaves. This method is most often used with stone tiles. Alternatively, the slates may be centre nailed right through to the ridge. On a modern roof, the last row will be cut down and head nailed to the ridge. This maintains the three slate lap right up to the ridge. The last row will appear as a half row beneath the ridge tile. All this needs to be planned before the roof is laid, and if necessary the batten gauge must be adjusted to give the correct appearance.**

Above. **Stone tiles, graded in size up to the ridge.**

Middle left. **As discussed in REVIEW 123 the rail and chairs were treated with Birchwood Casey Brass Black and then airbrushed with Humbrol 113 Rust. Sleepers are mostly stained with boot polish dissolved in methylated spirits and then painted with a mixture of acrylics. This is the western end of the station area. Note the slate fence at the top of the embankment. Brass black has been used again on the rails and wheels, but readers should take note that this will only be workable when the control system is either DCC or 24volts as in my 'Crowsnest' model. Chemical black is copper oxide and is an insulator. Even worse - if the rail develops a nice rust brown colour, then the oxide will be a semiconductor and your treasured locomotive will only work in one direction - try working that out at five minutes past opening time on the first day of your first exhibition!**

Bottom left. **A good mix of vegetation provides texture and a prototypical 'clutter' to the scenery without resorting to superfluous accessories. Carefully selected and applied one can build up a convincing mixture that like real life – and O'Rafferty's motor car – boasts 'forty shades of green'.**

I have tried many materials over the years and have settled on self coloured card. A tour through Internet sites will reveal a number of alternatives.

In 1:32 scale I have been using 180 gsm card in the darkest grey I could find. The paper is cut into strips matching the width of the chosen slate. In 1:32 scale this was 8mm, representing the 10 inch width of a Countess 20 x 10 slate. Measuring 8mm strips accurately is a chore. There are many ways of doing this, but I photocopied some 10mm square graph paper at 80% reduction, cut it into strips, and glued these to the edges of the cutting mat to act as guides. The same guides are used to cut the strips into individual 8mm squares.

If you wish to lay slates as prototypically as possible, then by all means cut 16mm x 8mm rectangles. However, we should note that a piece of untreated card will have a surface character determined by the way it came off the rollers during manufacture. This is not as obvious as the pile in a carpet, but it is present nevertheless. If we lay squares rather than rectangles to represent our slates, we have the option of placing them with the upper surface facing outwards, oriented north–south or east–west. Equally, we could lay them with the underside facing outwards. This gives four possible orientations, and these will occur entirely at random depending on how we pick the pieces from the box. Although apparently all the same colour, they will reflect light differently depending on the lay of the fibres and whether the upper or lower surface is exposed. For this application, a poorer quality card may actually be better, as the fibre structure will be more visible. I have been assisted in this task by my friend Kevin Hughes whose laser cutter has made this tedious task much easier (for me that is).

The roof can be enhanced by colouring some of the slates with a felt tipped pen. I used a Grey Tint Magic Marker and settled on a single pass, finding that anything more produced a slate that was too dark. Another point to consider is that slates are not always of uniform colour and frequently show bands of colour across them.

Pendre was well received when exhibited at Railex 2025, and we look forward in due course to winding up the story with some shots of the finished layout.

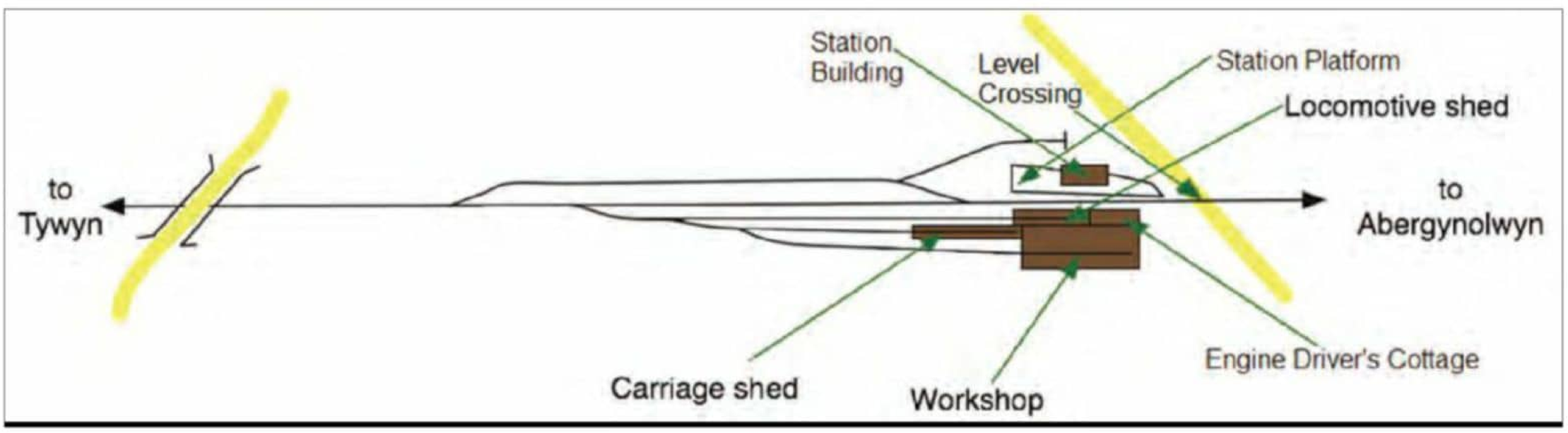
TR No.1 adjacent to the carriage shed. The mix of scenic and scatter materials employed have blended nicely with the weathered track, and the scene presents a toned-down sun-bleached pastel appearance.

The boundary fencing at the top of the embankment made from real slate. Little details in landscaping are important – the partially uncut foliage round the base of some of the fence panels where staff have made do rather than the perfectly level effect of a modern strimmer, and the slightly threadbare worn patch just within the gate, where feet have worn the grass away on the path down to the lineside.

Left. **How much easier life would be for railway modellers if the world was a tidier place – but art mirrors life here with a bewildering mixture of shades and textures visible in the vegetation bordering the track to the east of the station.**

Above. **Here is a view of the western end of the layout. The conventional mindset, brought up on school geography lessons where north is always at the top of the map, will need to adjust as Pendre is built to be viewed from what would be the north side of the line, the line here, in reality, continuing on to Towyn's main terminus just under half a mile to the south west.**

Left. **This view looks the full length of the layout, with the road bridge in the distance visible beyond the level crossing.**



Above. **Pendre station and works area circa 1900.**

Left. **An afternoon train from Towyn arrives at Pendre, interrupting the herculean labours of a maintenance worker as it runs in past the carriage shed.**

V & T Shops

Narrow Gauge & Rio Grande Western / Rio Grande Southern Water Tank

By Dale Smith

Scale:S Scale, for sn3 - Type: Resin and Muli-media - Manufacturer: V&T Shops, Reno. USA

The D&RGW and RGS 50,000-gallon Water Tanks were originally built to the same basic design standard, but throughout their lifetimes were altered slightly when rebuilt or repaired and as a result, no two water tanks were the same. The frost box location was dependent on weather conditions at the tanks' location with it being at some locations completely deleted, and the base timber framing on which the tank sat altered to suit each situation or repair requirement.

The V & T Shops kit was supplied in a sturdy cardboard box with the parts in three bags. It comes as a multi-media kit with parts provided in resin, timber, white metal, cotton thread, and some details printed on paper for cutting out by the builder and then gluing to the model during construction. The parts were well produced and needed only slight cleanup with a sanding stick and file before use.

Footings

Starting construction, the resin concrete footings were lightly sanded to remove any moulding imperfections then washed in warm soapy water to remove any mould release residue. After drying, the footings were brush painted with Gunze Sangyo H 321 Light Brown, which I have found is a good representation of the colour of concrete.

Support Timbers

Moving on to the support timbers, these are supplied pre-cut and are best stained and left to dry before major assembly. Several stain colours are kept in my modelling supplies with these obtained from the local hardware supply store in small 100ml sample tins.

Several grey and brown shades are kept on hand, they are cheap, and these tins most probably will last my lifetime. After all the timbers were stained, small nut, bolt, and washer details were added where needed to ease later detailing. Following the instructions, the interior frost box was constructed, painted, and weathered, and the main support timbers were attached to the concrete footings. Finally, the main support cross members were added and the whole assembly put aside to dry. PVA wood glue was used in most areas of the construction for several reasons. It is easy to clean up being water-based, dries clear, and is slow curing allowing some time for adjustment if needed after the pieces are joined. The only drawback with the PVA is it takes some time to set, but you can use this time to work on other parts of the construction.

Main Water Tank

Moving on to the main tank construction, this is supplied as a one-piece resin casting and can be quite fragile, so careful handling is required. The tank casting in my kit was slightly warped, but nothing too serious, so support braces were added at the top and the bottom of the tank made from some Evergreen square bar cut to the width and attached with some CA adhesive. The tank was then airbrushed with Model Master 4881 Box Car Red (unfortunately no longer available) with the water level indicator added from the paper illustration part with some PVA glue and then put aside to dry. A thin cardboard base was also added to the tank at this time cut with a circle cutter.

Top. **The main support timbers are attached to the concrete footings.**

Middle. **The main support cross members added and the whole assembly put aside to dry.**

Bottom. **The frost box assembled then added to the main support timbers.**

Tank Roof

The tank roof is a one-piece casting and requires very little in the way of cleanup. To get an acceptable-fitting surface the part was placed on a sheet of 500 grit sandpaper on a flat surface and rotated gently to remove any bumps or imperfections on the part base from where it would fit onto the tank. Two roof finials are supplied, one pointed and the other with a ball top. The pointed option was chosen for this tank. The roof was airbrushed a dark grey and then dry-brushed with a lighter grey to highlight the tile details. Final details on the roof such as the access hatch and the ladder were added from the supplied timber parts, then painted, and weathered. Rust pastel chalks were used to represent rust staining at the very top of the roof near the finial.

Spout Assembly

The final major part of construction apart from the inspection ladder is for the spout assembly. This assembly is made up from some timber 'U' channels, pieces of chain, other timber parts for the brackets, and several white metal castings. These represent the pulleys, spout, and mounting bracket. This assembly was glued together using PVA glue and in areas where I thought extra strength was required, some CA glue was used.

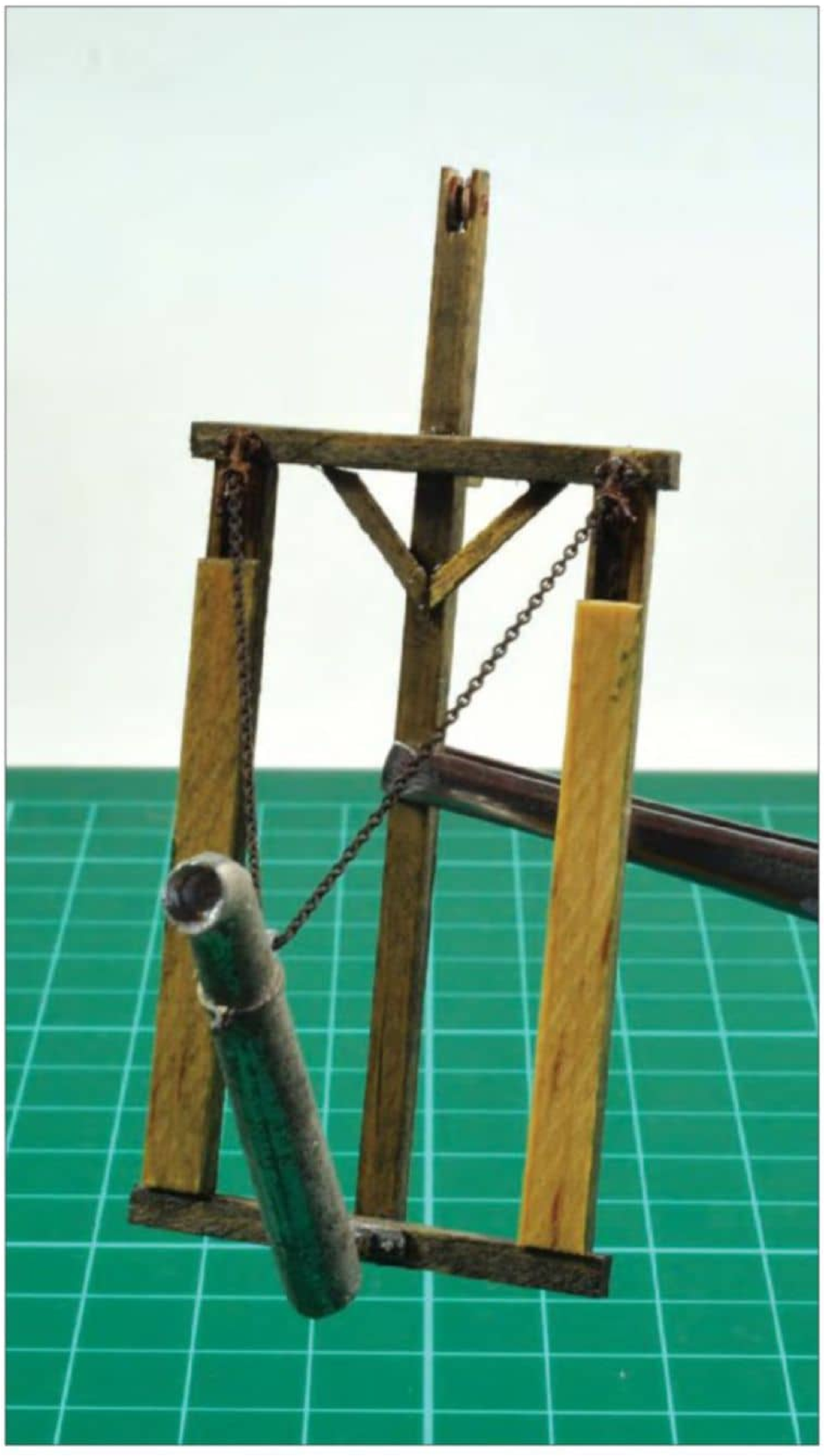
Weathering

At this stage, test fitting of all the major parts of the tank was done. This was to ensure that everything fitted properly and squarely before final assembly and moving on to the weathering phase. Looking at reference images of tanks on both the D&RGW and the RGS it was noted that water seepage stained the lower portion of these tanks from an almost black, to a light grey, then an almost white colour at the base. Using a broad paintbrush and starting with Gunze Sangyo Aqueous H77 Tire Black, alternate strokes were made over the lower portion of the tank at differing heights. This was followed by a light grey colour at a lower level, then the final white staining to finish things off (Pic 9). The final part of

Tank casting with some supports added from square styrene to maintain the tank shape.

Tank casting painted and water level gauge added.

Roof molding after painting with inspection hatch, ladder and roof finial added. Some slight weathering also dry brushed on the roof surface.



The tank side frame assembled with the water spout in place.

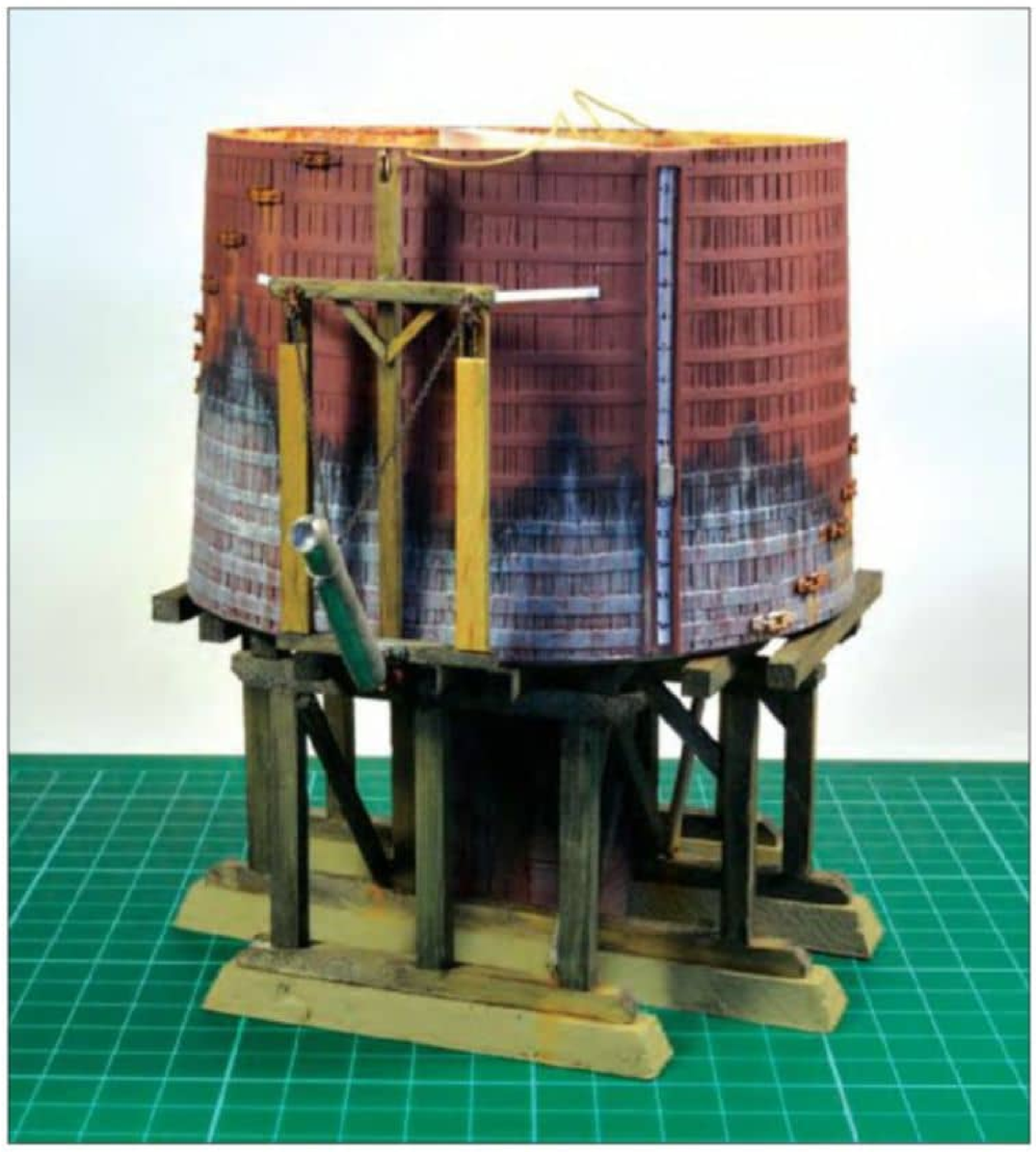
the weathering process was to add rust stains where any metal parts or nuts and bolts were present.

For this powdered chalk was used, which had been ground from pastel chalk sticks that were purchased at a local art supply store.

Final Assembly

After the weathering was completed the main base part of the tank, being the concrete footings and support timbers, were glued to a thin square piece of cardboard to ease in handling. The tank, roof, and ladder were added, and the final ladder supports will be added after placement on the layout. That's about it and the tank is complete. I'm very happy with the result and I am looking forward to doing another version of this tank that I have in my railroad infrastructure kits.

All the main parts now coming together and ready for some further weathering.



Water staining, spout, and spout framing now added.

Figure it Out

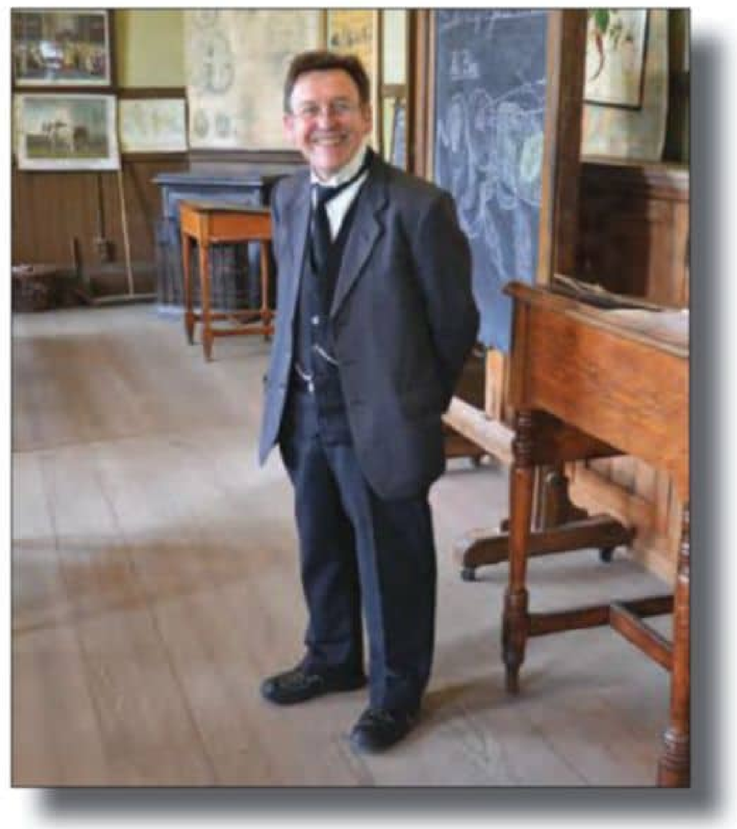
Drawing on courses he and Alan Buttler have taught at Pendon Museum, Tim Shackleton looks at ways of painting and posing model figures so they're both plausible and true to scale

Ask anybody who's not particularly interested in model railways what they think is the least convincing feature of the typical layout – whatever its scale, subject or era – and it's highly likely they'll point to the figures.

The usual criticisms are that they're lumpy, too brightly painted, the colours are far too intense, their proportions are all wrong, the clothes are out of period, they're frozen in uncomfortable 'action' poses, the ones who haven't fallen over appear to be standing on paving slabs – and so on and so on . . .

To which I might add there are usually too many of them, looking far too busy. There's an idea – popular since at least the days of the Revd Edward Beal – that figures 'bring a layout to life'. Unless treated with great care, however, my view is that they stand as good a chance of killing it stone dead. I've seen any number of model railways that, for one reason or another, were badly let down by their figure population – but I've never yet seen one that was compromised by being largely deserted. As ever, observation is the key to success. Whatever they're wearing, whatever they're doing, whatever scale you're modelling in, figures always draw the eye. That's why anything untoward, overdone or just plain wrong immediately attracts attention and shouts 'model railway!'

The past is a different country, and if you draw your inspiration from the colourful world of tourist railways and steam galas you might be surprised when you discover how what a faded, subdued, even dowdy-looking place it generally was. In nineteenth century Blaenau Festiniog or the sugar-beet fields of the Lincolnshire Fens, men did not dress like Michael Portillo – and probably still don't.

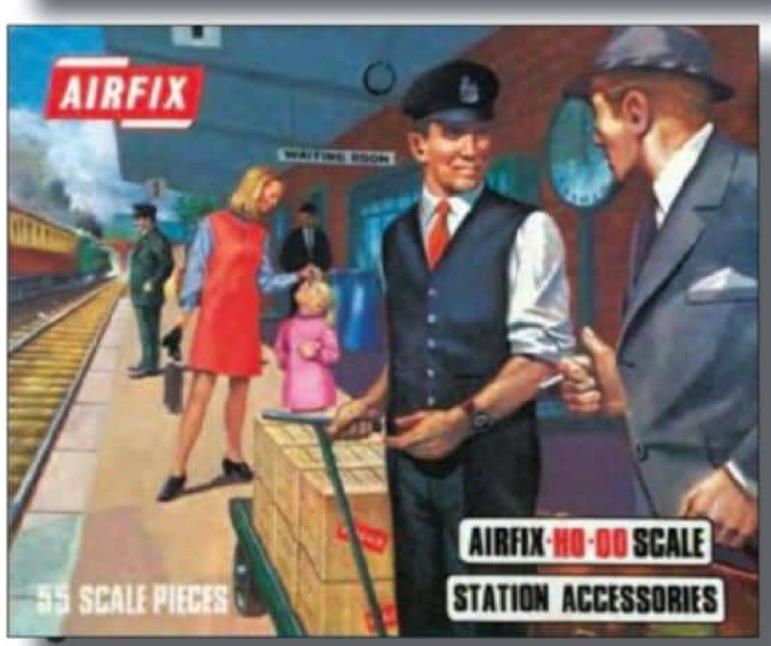


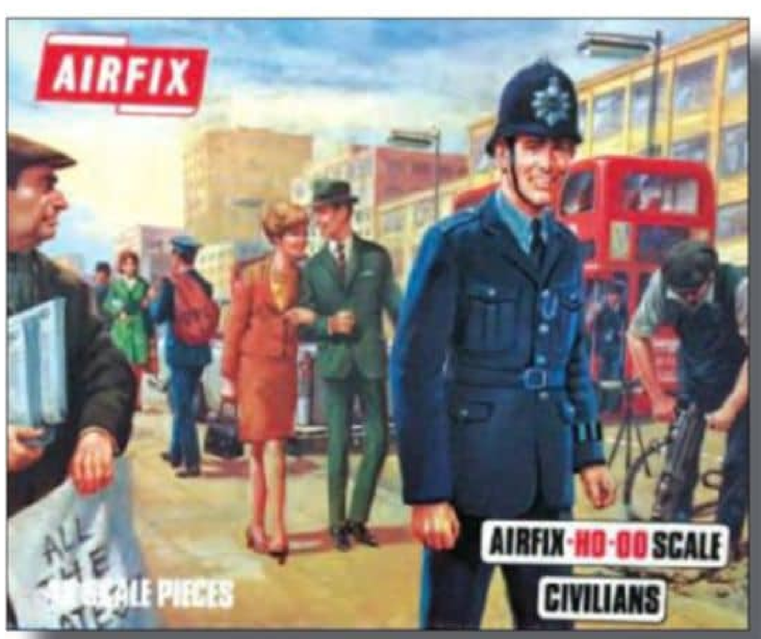
Your author, and I hope you find these notes useful…

Setting the Scene

Left. **Unless otherwise indicated, all the figures I've painted for this article come from Alan Buttler's Modelu range *(www.modelu3d.co.uk).* They're laser-scanned from real people in costume and then printed out, but careful painting is essential if you're to do them justice. This quartet comes from a series of figures created especially for Pendon Museum's Vale scene, using volunteers as subjects.**

Below left and right. **Where it all began... The perennially popular Airfix figures – still available from Dapol – have been one of the cornerstones of UK modelling for well over half a century. Heaven knows how many sets I've worked through over the years! Originally shot down from much larger model figures, the proportions are correct, the poses believable and, apart from the fact that they're a bit over-familiar by now, there's nothing at all wrong with them. I'm often surprised by the exalted company in which I see them!**





Airfix figures painted in the kind of colours that would have been in fashion in the 1950s. Nothing stands out as in any way 'different', everything has the bland respectability that was so typical of the period among all age groups. In painting them I followed exactly the same process I'm going to describe in this article – primer, base colour, highlights and details, dark wash, a handful of skin tones.

Below. I always like to work from photographs and this is the kind of scene that would inspire most people seeking to populate a layout or diorama. But one aspect stands out – as with so many of the vintage postcards in my collection, the figures are conscious of the camera. This doesn't translate into a model.

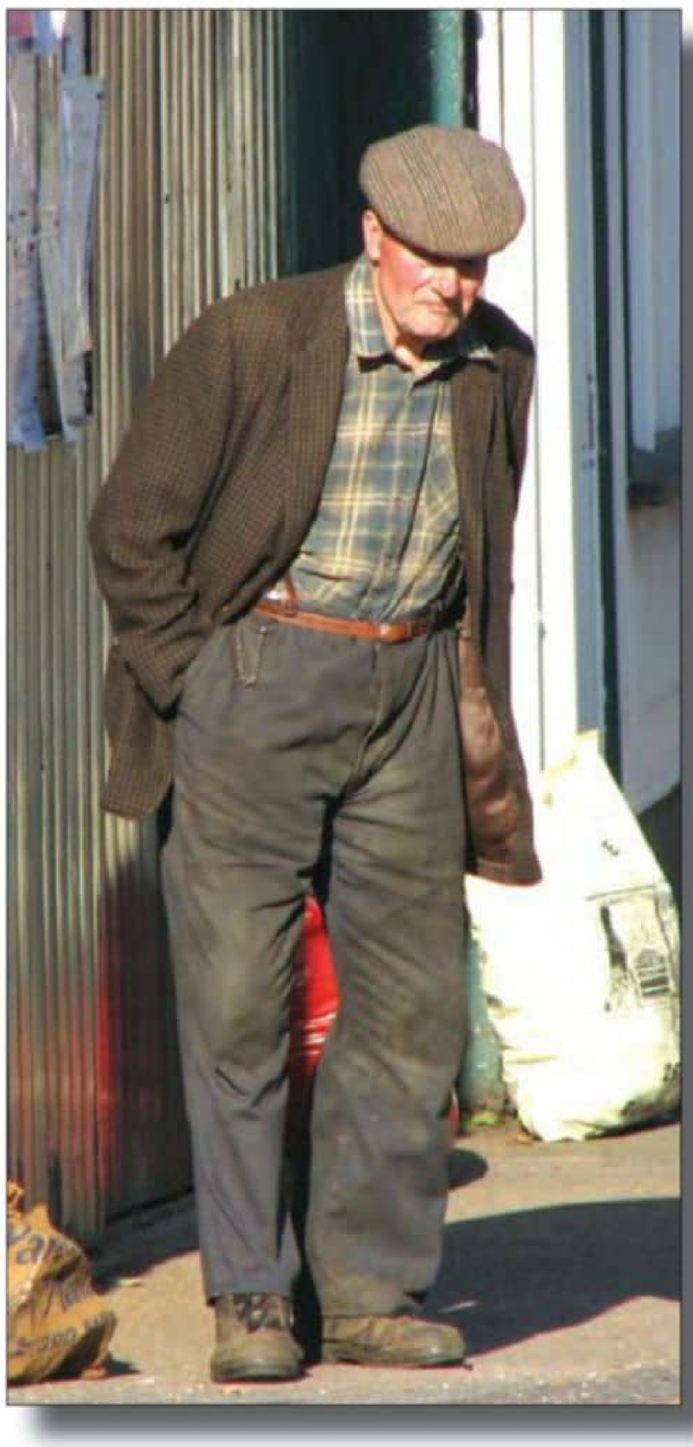
Above. At the opposite extreme, typical figures of unknown make acquired as a bulk purchase from a local model shop. With very few exceptions the colours are frankly unbelievable – pink trousers, gentlemen? – and the poses implausible. Not one of them is wearing a coat, when until comparatively recently, no one in this country left home even on a warm summer's day without one. Nevertheless many layout owners, oblivious of the alternatives, would be happy to line their platforms and roadways with figures like these.

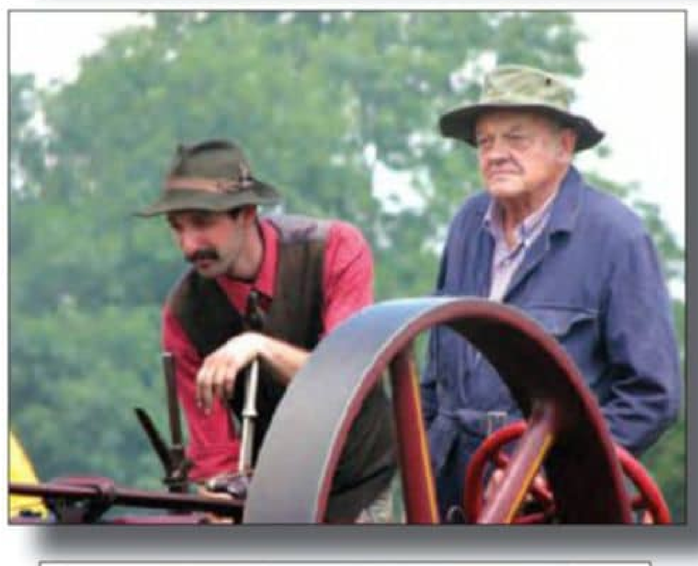
Bottom right. Miniature people don't need to be doing anything specific to look convincing – in many ways, the less noticeable they are the better. The driver of Alex Duckworth's OO9 War Department Baldwin leans casually out of his cab while an officer of the 31st Light Railway Operating Company, Royal Engineers, based in the Arras area, looks on disapprovingly: "You're in trouble unless I tell you otherwise". These figures are from W^D Models, who also make a terrific 'Old Bill' bus.

Using your eyes

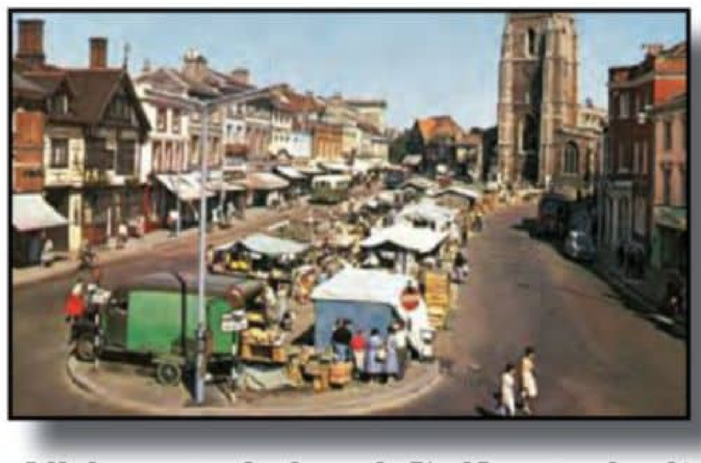
Above. **This is my daughter Holly, who's a shade under 5ft 9ins tall. I suggest you study the page from the kind of distance at which she appears a similar kind of height to figures in the scale you model in. In 7mm scale that's about 1½ inches (4cm), in 4mm about 1in (2.5cm). How much detail and colour can you actually see? There are shadows and highlights, certainly, and you'll be able to make out the basic colours of her clothing, but not much else. Even in 7mm scale it's hard to see things like patterns and textures, teeth and eyes, buttons and jewellery. In 2mm scale virtually all you pick up is the colour.**

Below. **This is my one-time neighbour Arthur, one of the last authentic country gents in our neck of the woods and, I would suggest, wearing clothes typical of what farm workers of any period between 1900 and 1980 would dress in. It's the colours and textures – very little of either – that interest me.**





Below. **This is where I live – Sudbury in Suffolk, where little ever changes and much is exactly as it was in the 1950s (and possibly earlier). Two things to focus on here – the surprisingly limited turn-out for market day, and the extraordinarily vivid red of the dress on the left. Everyone else is wearing the usual pastels and grey/brown shades. Notice how subdued the colours generally are, so much less intense than the ones we usually see on model railways.**



All images below left. **If you don't happen to be 70 years old and more, with a good memory and/or an extensive photographic collection, vintage rallies and historical recreations are a great way of finding out how people dressed and, more importantly, what kind of colours they wore – as I've said, until the 1970s these were invariably a lot drabber than you might imagine. Old films such as *The Ladykillers* and *The Titfield Thunderbolt* are another useful guide to how things were. Modern costume dramas such as *Downtown Abbey* and *Call the Midwife* are famously shaky when it comes to matching locomotives and rolling stock to their supposed period but when it comes to the clothes the characters wear, the stylists are invariably spot on!**

And even if we can get the colours right, we should learn to avoid clichéd 'action' poses that would have to be held for hours at a time – guard waving flag, fireman shovelling coal, burglar emerging from upstairs window, wedding party outside church, topless girl in garden. To look believable, figures should be in relaxed, casual attitudes – a study in meaningful inanimation, if you like – rather than dashing to and fro. Leaning is good, and so is simply sitting or standing around. Marching bands, worker perpetually swinging pick and policeman chasing bank robbers are definitely out.

It might be useful also to look at the whole business of positioning figures on our layouts in a plausible

Material Choice

Except for certain weathering techniques requiring enamel washes, I use acrylic paints for preference. Acrylics dry much faster – important if you're working in a creative blur! If you're not good at mixing your own colours, there are many products out there designed to help you with critical areas such as skin tones and fabrics. Lifecolor is a brand I know I can trust – the colours are fantastic, and very naturalistic – and anything vaguely organic-looking labelled 'linen' or 'sailcloth' will work well on clothes. Buying paint in sets give you extra options, especially if you don't have an obvious eye for colour.

What paints and brushes to use? I prefer matt acrylic paints for figure-painting, at least in the early stages. Gloss enamels are possibly harder wearing, but scale model figures shouldn't be shiny and they don't get much handling. I use oil- and water-based colours quite interchangeably, applying enamel washes over an acrylic base and adding acrylics for final details such as skin tones. Note the subdued, washed-out colours of this random selection of paints assembled for a figure-painting session.

Paintbrushes are as specialized in their shape and application as hand tools, and the choice is always subjective. For general painting I like the Polar range of candle-flame brushes from ProArte. They're robust, relatively cheap, hold their shape well and are widely available online and from art shops – expect to pay about £5 per brush. Dip your brush well into the paint so the bristles act as a reservoir while the paint flows out through the pointed tip – you shouldn't need to keep dipping your brush in the paint. The fewer brushstrokes you leave the better, hence my preference for larger 'candle-flame' brushes with sharply pointed tips that are capable of surprising delicacy.

Expensive sable brushes don't last five minutes with enamels and acrylics. I should know – I used nothing but for many years. For putting on tiny quantities of paint, Humbrol's own-brand 'Detail' range is very good, not least on account of the ergonomically designed handles. This set of four costs about £15. You can buy brushes much more cheaply than this, of course, but they're never anything other than a liability unless you use them once and throw them away. Remember, this a Yorkshireman speaking...

Unless you have eyes like a hawk you'll probably need some kind of magnification for painting small details. Optivisors are good but for really close work I use either a jeweller's loupe (left) or a linen tester. Remember that you get what you pay for with this kind of thing...

While we're clutching the shopping basket, products such as Tacky Wax are great for placing figures. It holds them in position but not permanently, making removal and re-siting a straightforward operation.

and lifelike way. It's painting, however, that seems to cause the most immediate problems, so that's what we'll look at first. The initial task is to decide exactly what we're aiming for. I'm astonished by the level of painted detail that armour modellers and wargamers incorporate in their figures, even down to 1/48 or 1/76 – their equivalent of 7mm and 4mm scales. Large-scale models, 1/24 and above, just blow me away – you don't just see the whites of their eyes but also the wrinkles around them and even the dust marks where their goggles have

been. As demonstration of a virtuoso painting technique this kind of thing is hard to beat but fortunately I don't think it's in any way necessary in railway modelling, certainly if we model in 7mm scale or smaller.

This is handy, because I don't think many of us could achieve this kind of standard – as a paid-up member of the 'good enough' school of impressionism, I certainly can't. For a start, it's very hard to carry off convincingly – to my eye, such figures often verge on the cartoonish or something out of a comic book. Professional portrait painters rarely, if ever work in such a style either – they go for something far more naturalistic and I think we railway modellers should too, aiming to put across believability rather than obsessing about the finest of fine detail. Unless you model in Gauge 1 or larger, it's hard in the typical layout situation to see any of this microscopic stuff unless you get so near to the action that you risk being poked in the eye by a signal finial (I came very close to such an incident when studying the slate courses on Peter Kazer's Corris at an exhibition). Something a little less finely wrought and slightly more generalized is what seems to work best – in my view, at least. Hence my preference for a relatively simple three-phase approach – base colour, lighter version of same, darker. Remember, too, that colour scales just as much as dimensions do – a fireman's denim overalls, however faded, will be a lot less intense in 4mm scale than in 7mm or larger.

So what I've evolved is a method of painting figures in an impressionistic way that places particular emphasis on getting colours exactly right for the scale I'm working in.

For best results, prime the figures first before applying the top coat. The seated gent has been given a light dusting of acrylic car primer, the others have been airbrushed with Lifecolor Burned Black (UA736). The choice of primer colour anticipates the final finish, and with a measure of translucency in the top coat will be allowed to show through. Now leave to dry for a good 24hr and preferably longer!

Having taken on board the truism that clothing colours are generally a lot paler and more subdued than we might imagine, begin by blocking in the main colours – just like painting by numbers! It doesn't matter whether you start with the lightest shade, or the darkest. The paint should be very wet, and flow easily off your brush – never use thick paint on figures. It's equally important to ensure your hands are well supported and the work is well lit.

This is how it works, start to finish. The effects are built up sequentially, beginning with a primer coat and a basic skintone on the faces and arms. The basic clothing colours are added next, with a darker skintone in areas such as the ears and cheek hollows. I then dry-brush pale highlights over the clothing, and add darker tones to shadow areas around the eyes and mouth. Finally, I run a dark wash into the creases and add highlights to the nose, brows and cheeks.

Back to the beginning – four Modelu 7mm scale figures ready for painting. Whether your figures are moulded plastic, resin or cast whitemetal, it's a good idea to wash them gently first so get rid of release agents and other contaminants that may inhibit paint adhesion. Use warm soapy water, rinse and allow to dry thoroughly.

This, I hope, compensates for my lack of ability at painting 2mm scale eyebrows. The other key factor is adding only such detail – of faces and clothing especially – as would be visible in proportion to the distances from which we normally view our models. Blown up to two or three times life-size in photographs, some of my efforts will undoubtedly appear crude but in a layout context at 1/1, they seem to work well enough. Whether they'll pass muster with wargamers and military modellers is another matter!

By the way, I don't think the typical layout needs more than a handful of figures. I base this statement on repeated first-hand observation over very many years. The railway station in the busy market town where I live is completely deserted for fifty minutes in every hour, except for a brief flurry when the branch train arrives and departs back to the junction. I live on a street close to the centre of town with schools at one end and a supermarket

at the other. Though I can see for a good quarter-mile in each direction, as often as not there's no one in view – plenty of parked cars, but few if any pedestrians. If you study old photographs, you'll see it was always like this, certainly in the kind of situations we're likely to model. And yet even the most brilliant models of narrow-gauge and industrial railways often seem grotesquely over-populated, with tiny single-road engine sheds swarming with cleaners and footplate crew, village streets alive with people, aproned proprietors outside every shop and business. At risk of sounding like a schoolteacher, we should try harder.

Above. **Getting the base colour right is essential. The magic ingredient as far as footplatemen's overalls are concerned is Humbrol Oxford Blue (104). It has the right purple/indigo tinge and can easily and authentically be 'faded' with matt white. Moonlight Blue (222) is useful also. From these three colours I can mix various shades of faded blue and then, having let them well down with acrylic thinners, brush on an initial coat. With such a wet mix over primer it's more a matter of flowing the paint on, using as few brushstrokes as possible. The modern world offers plenty of reference material to tell you what faded denim actually looks like!**

Left. **Once the base coat has dried, mix up slightly lighter shades and dry-brush these sparingly over the raised areas to highlight them. You don't need to thin the paint for dry-brushing – as the term suggests, use it neat. This is the second stage of my three-part application.**

Bottom. **Allow to dry thoroughly and then, with a fine pointed brush, run a much darker colour into the creases and other shadow areas. Well-thinned enamels are easier to use in this context because they don't dry off so quickly. You can either mix a dark shade of your base colour or use a product like MIG Dark Wash, which is comes ready mixed and provides a convincing dark brownish-grey that's ideal for this kind of application. Never, ever use pure black – it's far too intense and completely out of scale.**

Above left. **Touch in faces and hands with a thinnish coat of flesh colour, allowing the underpainting to show through faintly. I'm using Lifecolor LC21 acrylic here, but there are plenty of alternatives. What we don't want is a solid coat of pale pink. Do details such as collars and cuffs in the same way.**

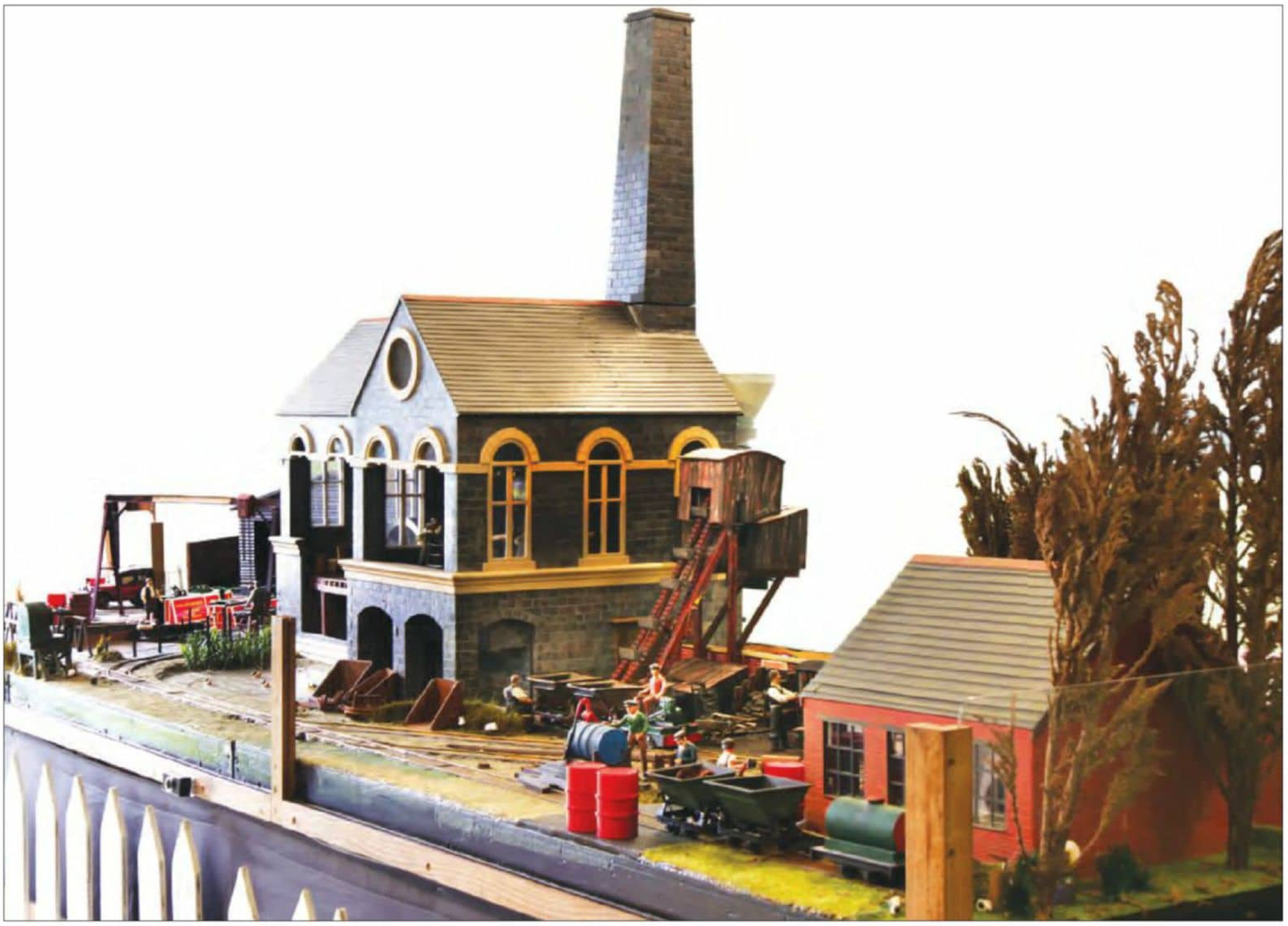
Above right. **With a lighter-coloured figure, running a dark enamel wash (I used MIG again here) into corners and around edges will be even more convincing at bringing out detail and adding false shadows. This seated figure is much more advanced at this point than the footplatemen – I've added flesh tones and much of the clothing detail.**

All three images above. **Painting faces is an area where the armour modellers really go to town. I can't match their skills – as these cruel enlargements will show – but I've adapted some of their techniques to build on the base coat of Lifecolor UA 709 that I initially applied. First of all, a darker flesh tone – Lifecolor UA 710 – goes around the eyes, under the nose and under the chin. Then I use Lifecolor UA 708 to highlight the cheekbones, nose, chin and forehead. After this, add a darker, reddish tint (Lifecolor 711) in the cheek hollows, mouth and inside the ears, with an even darker tint (UA 712) under the lips, brows, chin and other shadow areas. To paint the eye sockets and upper-lip area you can add a tiny speck of Burned Black and then a minute drop of thinners to disperse it. In the smaller scales, just use two or three midtones or it will look over-fussy.**

Exactly the same three-stage technique can be applied to 4mm scale figures. These are test shots of Modelu figures done in the early days as private commissions – that's me on the extreme right ('downtrodden man waiting for pub to open'). I was quite taken by the trendy vicar in camouflage trousers (centre). Compared with much of what's available elsewhere, the 3D-scanning process makes for astonishingly convincing detail and poses, even in the smaller scales.

Wags Wharf

By Geoff Evans



General overview of the layout with engine shed in the foreground and the narrow boat just visible in the distance. The elevator takes coal up to the boiler room. It was necessary for the boiler to be at this height on the model to enable a skip wagon to be mechanically loaded with ash below the boiler room floor. It also added the working elevator to the general scene of busy-ness.

I enjoyed the article by Sydney Leleux 'Emptying NG side-tipping Wagons' in REVIEW 134, especially the shot of the canal wharf serving Joseph Arnold's quarry. A while back such a scene was used as inspiration for a model railway at 16mm/foot scale on 32mm gauge track with two-rail electric operation, for the enjoyment of the general public. It was not intended as representing an actual narrow gauge railway but aspects had

The coal skip arrive for unloading.

been drawn from various locations near to us in Bucks & Herts.

The beam engine represents the canal pumping station at Tringford reservoirs feeding water to the Wendover arm of the Grand Union Canal. The original three-storey building had housed a steam driven beam pumping engine. Coal was delivered to the pumping station by narrow boat. The beam engine was removed in 1927 and electric pumps installed in a reduced height building, still in operation today.

There was no railway at Tringford but there was a 2ft narrow gauge railway connecting the Colne Valley Water Company beam engine pumping station at Watford, Hertfordshire with the LMS main line bringing in coal, salt, etc.

And last but not least in Leighton Buzzard, Hertfordshire the 2ft narrow gauge railway wharf by the Grand Union canal handling the sand from the quarries of Joseph Arnold & Co. Sand was carried in side tipping skips from the quarries to the canal side for onward shipment in narrow boats to London and the Midlands.

The model railway was conceived and built during the winter of 2003/2004 by a group of garden railway enthusiasts known as 'WAGS'. Not related to football but 'Wednesday Afternoon Garden Steamers'! The ideas for the exhibition layout followed my chance acquisition of a Stuart Turner model beam engine as a job lot of parts at auction. With the aid of a good friend, Roger Goodall, the engine was made to run on live steam, as it has done ever since. Then the layout was designed around it named, of course - Wags Wharf! The layout was shown at a number of railway exhibitions from summer 2004 until 2009. The onset of old age of the operators led us to house Wags Wharf from 2010 in a permanent home at Pitstone Green museum *www.pitstonemuseum.co.uk* . The museum is a 'heritage park' collecting almost anything associated with farming and rural life in the locality. The beam engine has been run on live steam from the outset, usually for about five hours each exhibition day. I estimate this totals some 650 hours to date - an amazing record for a small model engine! Of the pictures in Sydney's article only the picture of Garside's

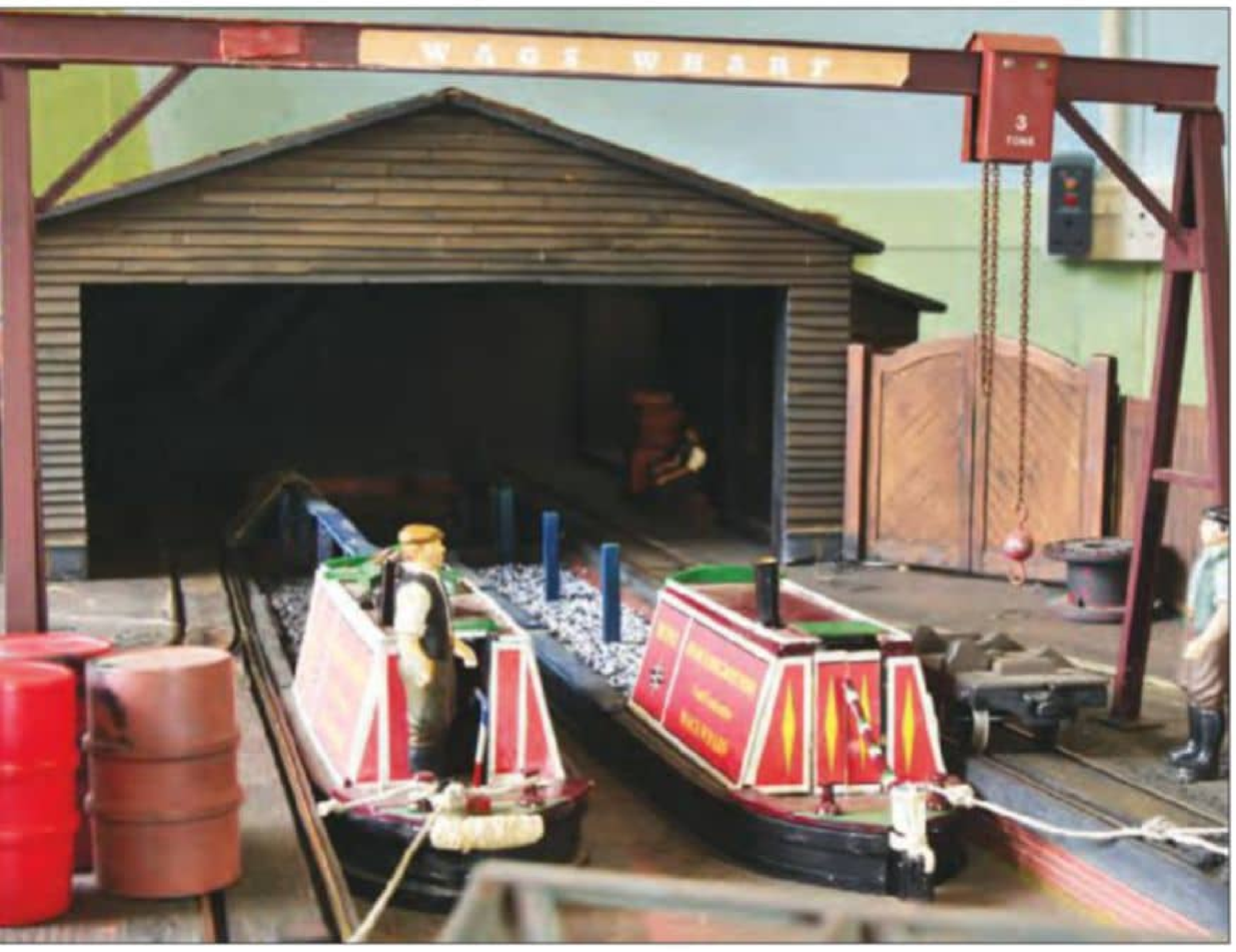
shows a man tipping a skip to empty sand into the lorry. Our 'tipping men' are an answer as to how skips can be emptied as realistically as possible in model form. The idea of bent metal bars as seen on some model railways to tip the wagons, not being very typical, did not appeal to us. So we have Fred, permanently seated at the foot of the elevator, to await the skips

Top. **Fred starts to put his back into the job, heavy things these skips!**

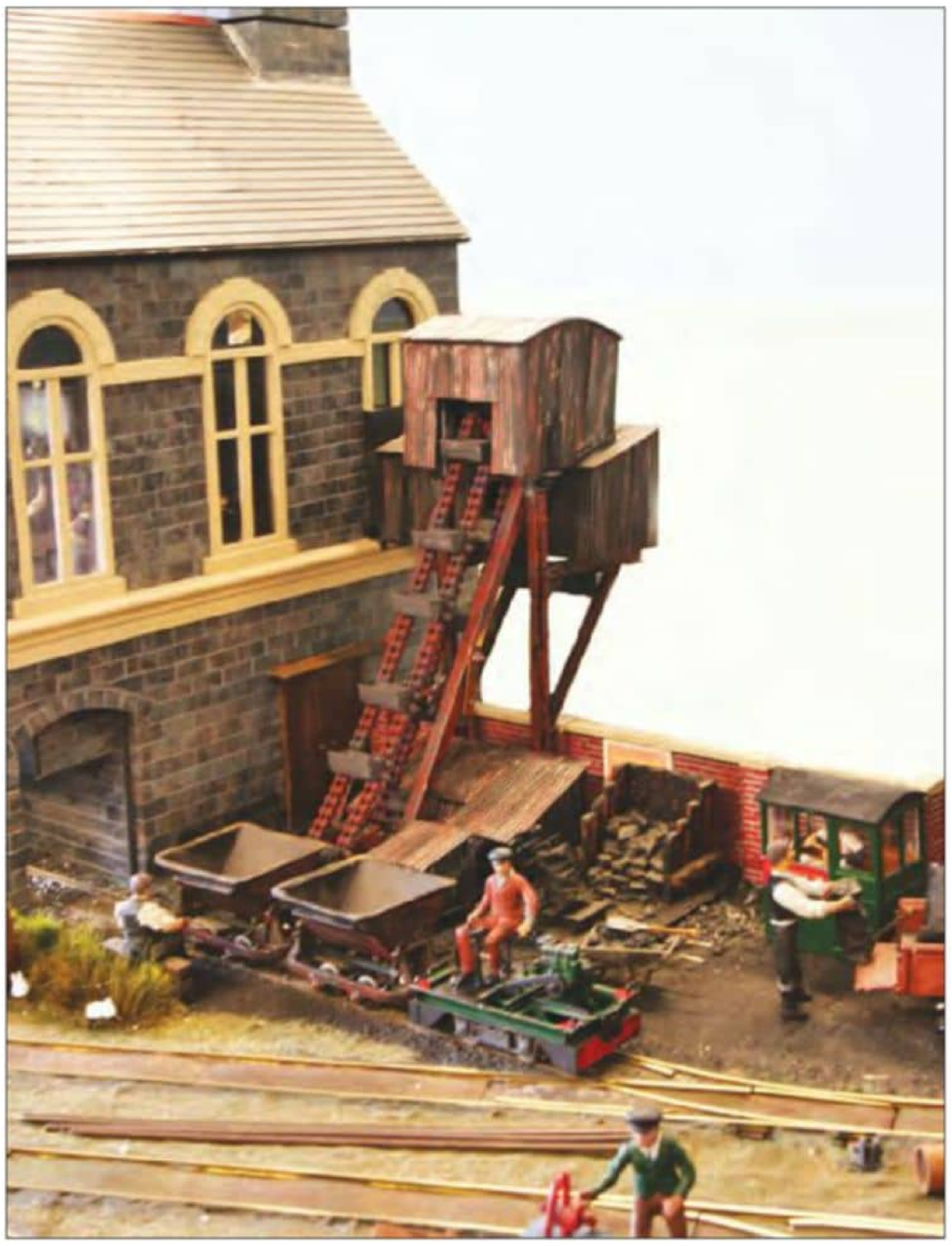
Above. **And over goes the coal load into the well below the elevator**

of coal coming from narrow boats on the wharf. In the transfer shed, over the canal wharf, there is Alf to tip skips of ash arising from the steam boiler into the other narrow boat now

emptied of coal. The ash is said to go off for road works, etc. Both tipping men are operated by Bowden cables connected under the layout to the hands of the model men. The arm and leg joints are freely pivoted but the feet have a fixed pivot, so depressing the cable (behind the scenes) induces the model man up to empty the skip. My pictures are taken from the side to show the movement, whereas the public only see from behind Fred so the cable is less obvious.

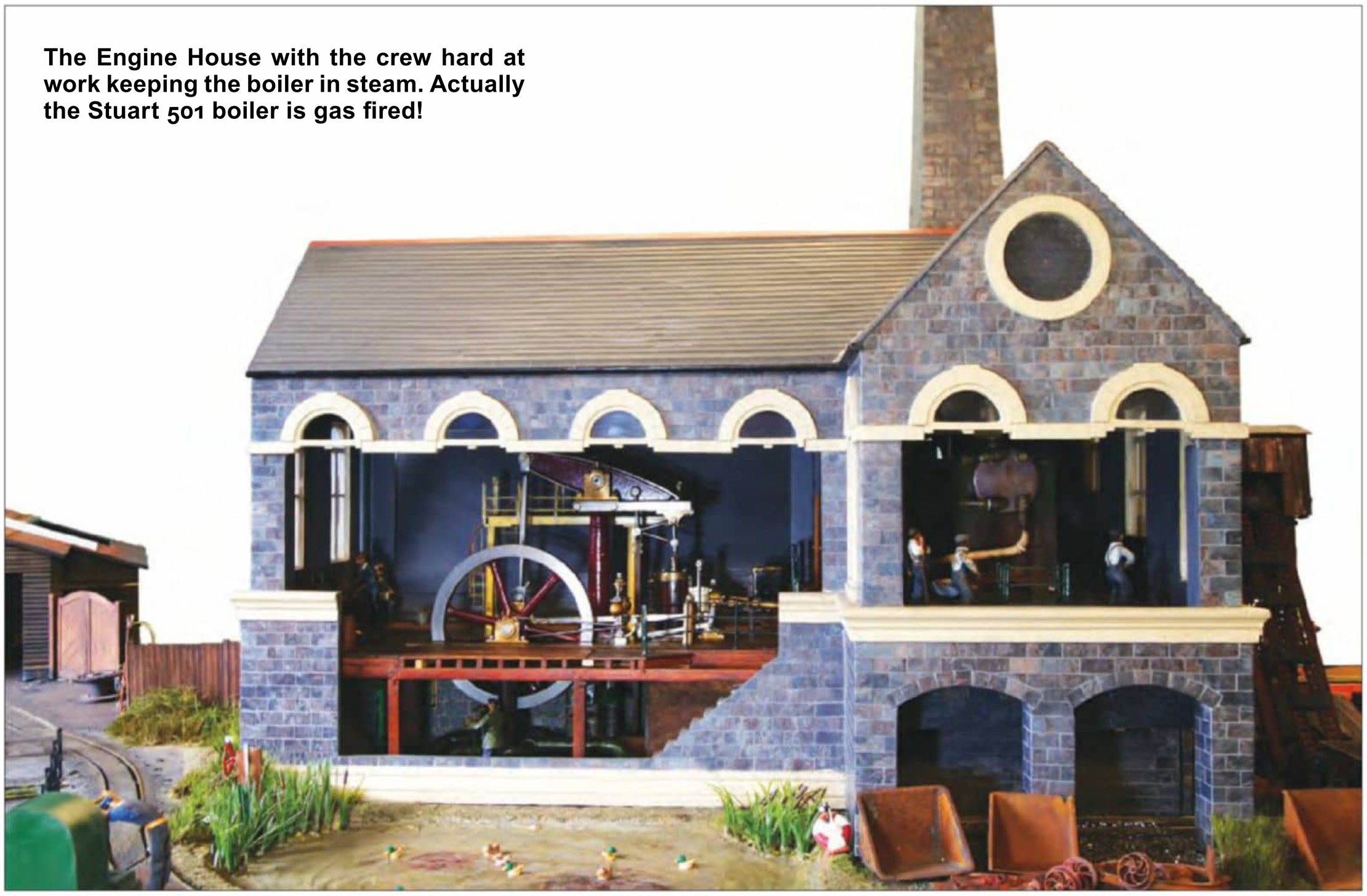


Alf waits patiently for the next skip of ash to be tipped into the narrow boat



The empty skips are taken away back to the wharf.

The Engine House with the crew hard at work keeping the boiler in steam. Actually the Stuart 501 boiler is gas fired!



18 inch Gauge Saloon Carriage

By Stuart L. Baker

There are very few prototypical carriage options for modellers of 18 inch gauge railways, the only carriage on a pre-preservation passenger carrying narrow gauge (rather than miniature) line being the Sand Hutton coach, which personally I have never found to be well proportioned.

However, the private railway that operated around the Woolwich Arsenal did have a number of different carriage designs to enable the staff working in the arsenal to get around the vast estate. These varied from very simple open knifeboard designs through to the two lovely curly-roof saloons, which are the subject of this article.

Regrettably very little is known about these saloons – builder unknown, no extant drawings, no definitive dimensions. In Mark Smithers' comprehensive history of the railways of the Woolwich Arsenal (The Royal Arsenal Railways published in 1916 by Pen and Sword) he suggests that the saloon carriages would have been 15ft long, 5ft 9ins wide, rail to centre of roof 8ft 6ins, end of solebars overhanging the body by 5 inches, and roof overhanging the body by 1 inch all round.

Assuming these dimensions to be close estimates to the actual carriage dimensions I have used them to scale against the photographs accompanying this article to determine all other dimensions.

Of particular note in respect of details: the saloons have tumblehome sides, half round beading, sculpted quarter round sections at each corner, louvred ventilators above each centre side door and complex carved ends to the solebar extensions. The roofs were formed in a double curved tramway style similar to that on the early Festiniog Railway bogie brake vans.

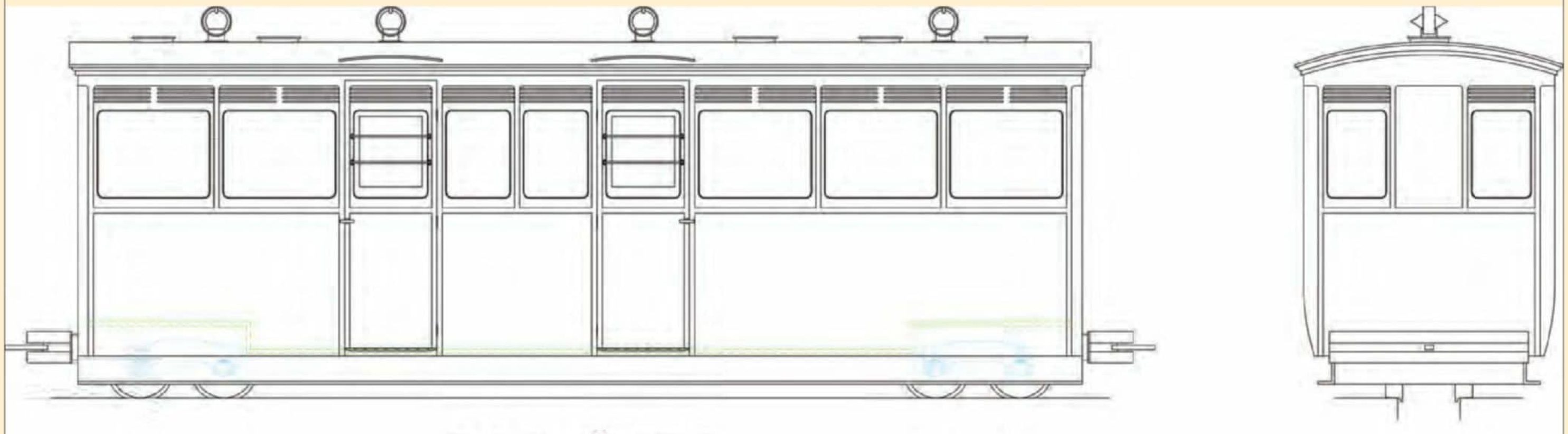
The composite coaches also have tumblehome sides, similarly sculpted quarter round corners, with louvred ventilators above all the windows and torpedo vents in the roof. I believe that the floor arrangement would have been similar to the early bogie coaches on the Festiniog Railway such that the main floor would be level with the underframe with raised sections extending above the bogies. With side bench seating this would allow for the majority of the floor to be level with the doorways. The doors were fitted with droplights and safety bars. The partition between first and third compartments would presumably have been solid and full height.

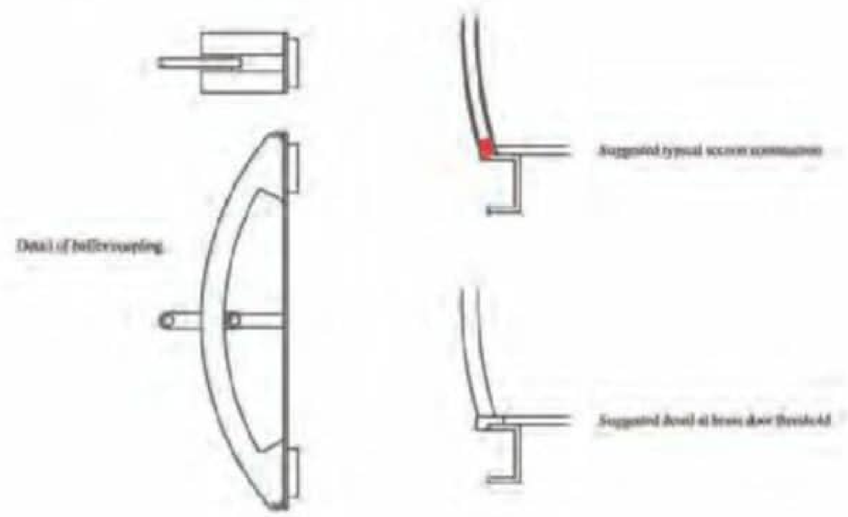
In his book there are reproductions of historic drawings for an open toast-rack coach and associated bogie, which assisted with the bogies and buffer/coupling assembly on the drawing.

One saloon, No.RAR77, appears to have been available in staff trains (though probably reserved for management) and

(John Palterman Collection)

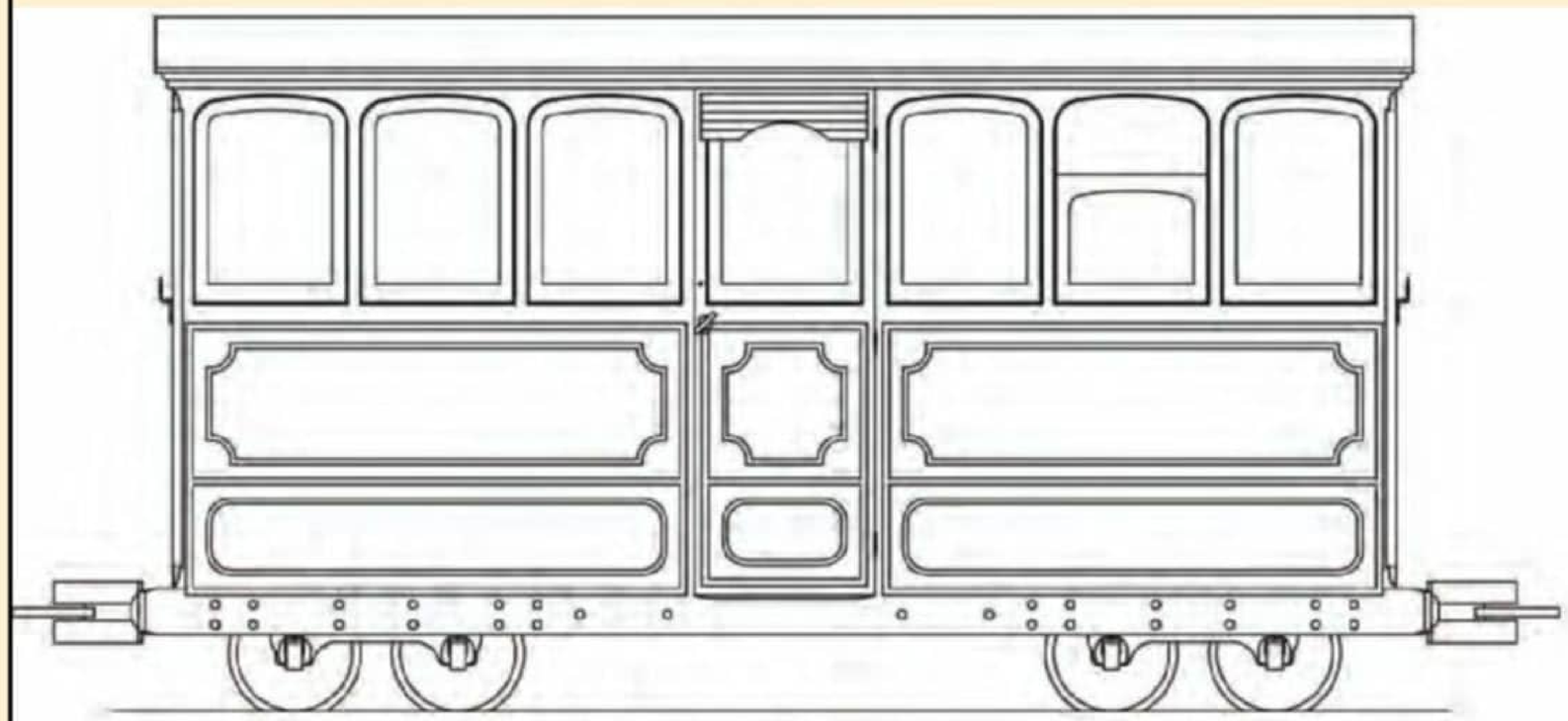
Saloon carriage RAR 77.



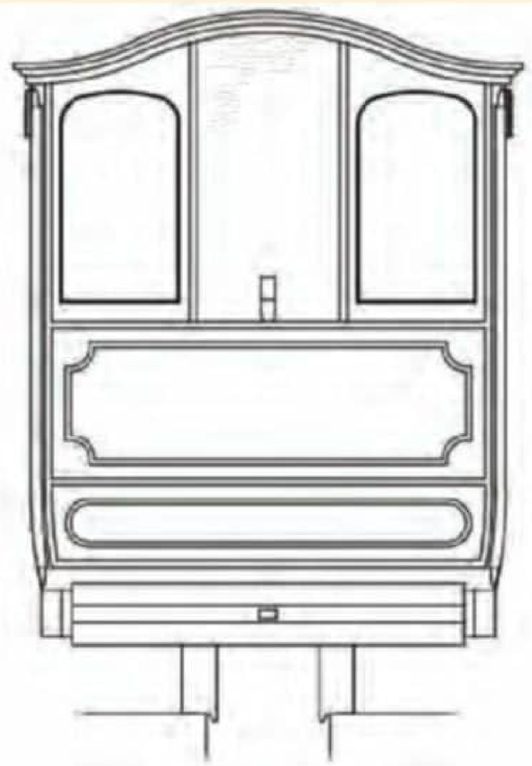


Woolwich Arsenal First / Second Class Composite Carriage

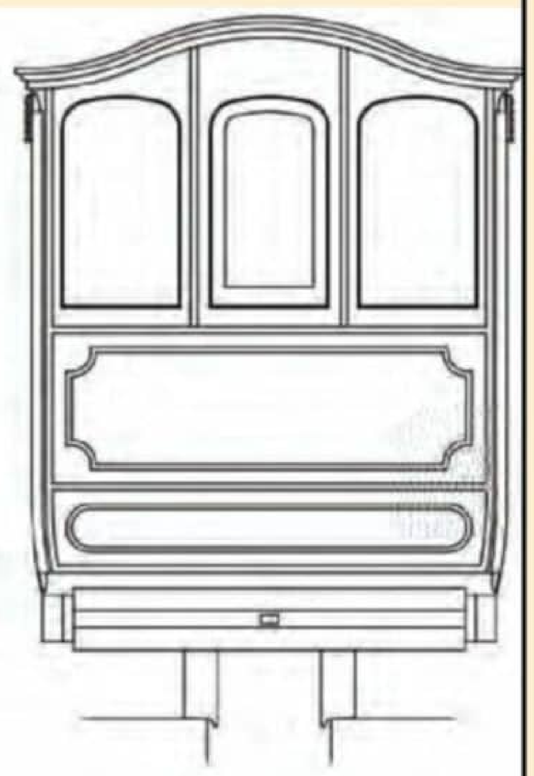
Drawn – Stuart L. Baker – July 2023
From published dimensions and only known photographs.
No dimension taken from this drawing can be guaranteed as accurate.



Side view of saloon - the Superintendents Saloon was similar.



Both ends of saloon



One end of Superintendents Saloon, the other end being glazed as on the other coach.

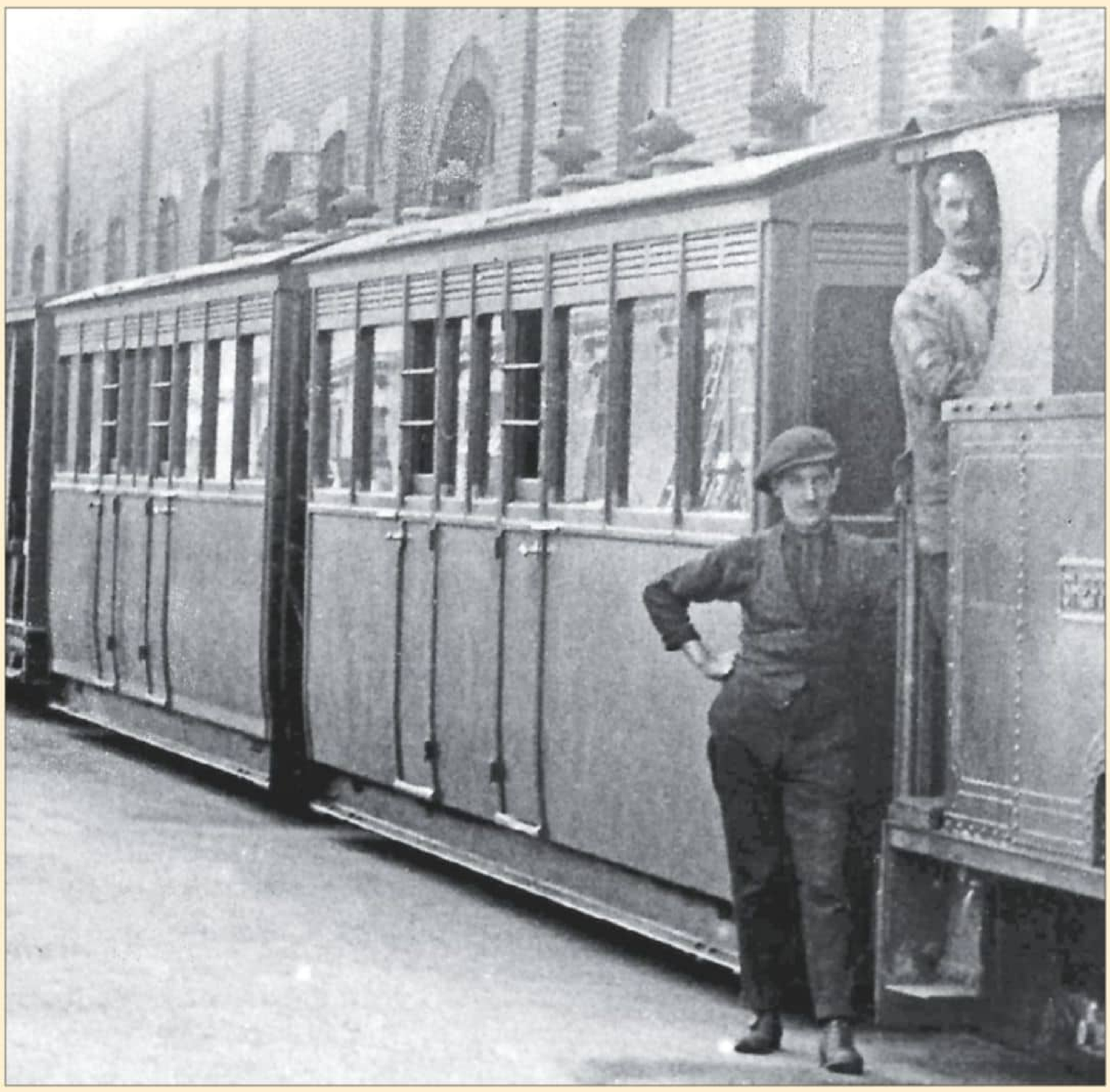
Woolwich Arsenal Saloon and Superintendent Saloon.

Drawn – Stuart L. Baker – July 2021
From published dimensions and only known photographs.
No dimension taken from this drawing can be guaranteed as accurate.

Detail of buffer coupling

(Don Boreham Collection)

Above. Superintendent Saloon carriage.



(Brockham Narrow Gauge and Industrial Museum)

had a lamp bracket on one or both ends, whilst the other (apparently un-numbered) was painted with 'Superintendent Saloon' and had a central end window at one end of the coach, and these differences are indicated on the drawing.

The photographs accompanying this article are scanned from prints in the collections of Jonathon Palterman and the late Don Boreham, Don's photograph stamped as being from the Brockham Narrow Gauge and Industrial Museum, which was the precursor to the Amberley Museum. These photographs were both taken by the late Major Taylorson.

Left.* Composite carriage. *Photo – the late Don Boreham Collection.

Shipley Survivors

By Gary Hatcher

One interesting piece of industrial infrastructure that will be familiar to many of our readers in the North is the diesel shunter in the scrapyard just to the south of Shipley station, which has had a sporadic rail connection for as long as anyone can remember. These are the premises of Crossley Evans Ltd, visible to the west of the line, although at the time of the present photographs the locomotive, though operable, had been out of use for some time.

There are two locomotives visible in this picture taken on 20th April 2023. To the fore is Ruston & Hornsby 459519, of 1961 described as a class LSSH 0-6-0DH of 275hp. Formerly WD 8219, and latterly ARMY 425 *River Tay*, 01507 was its last MoD number. When it became *Venom*, the name it currently carries, is unknown.

The blue Hunslet in the background is Prince of Wales, 7159 of 1969 a 0-4-0DH rated at 179hp. This was new to the Yorkshire Water Authority's Esholt Purification Worksnear Bradford and was acquired by Evans' in December1981. Thanks to Mr Nick Deacon for this information. Further locomotives are to be found rusting in the undergrowth further back. A comment on the RMweb site confirms this: *'…and by the look of it, at least one of the Sentinels was still there, along with the derelict R&H 88DS locomotives, Beth, and the unknown example parked behind. The 88s are pretty well buried in the trees and undergrowth but seem to be permanent features of the yard! The management must have a soft spot for the locomotives, for them to have survived unused in a scrapyard for so long.'*

Louisa, a Quarry Hunslet locomotive in 16mm Scale

By Paul Bertsen

The finished *Louisa.*

Louisa first came into my life a long time ago. Issue six of the Review contained a drawing by the late Roy Link in both 16mm scale and 7mm scale.

In 2011 I built a 16mm scale model of *Louisa* off Roy's drawings for my friend Ray Lantz in California.

Fast forward to 2021 and Statfold Barn Heritage Trust published a lovely book of Hunslet quarry locomotive drawings and photos. I don't think they had any idea just how popular this book was going to be but they were very efficient at getting it to me. It cost as much in postage as the book cost to get it to far-off New Zealand but what good value! The book is a complete delight, with original drawings and clear photos.

And, nearly at the beginning was another lovely drawing of *Louisa* and a very clear photograph. This was clearly the drawing that Roy had used for his source, and it caused me a problem, I wanted one for me!

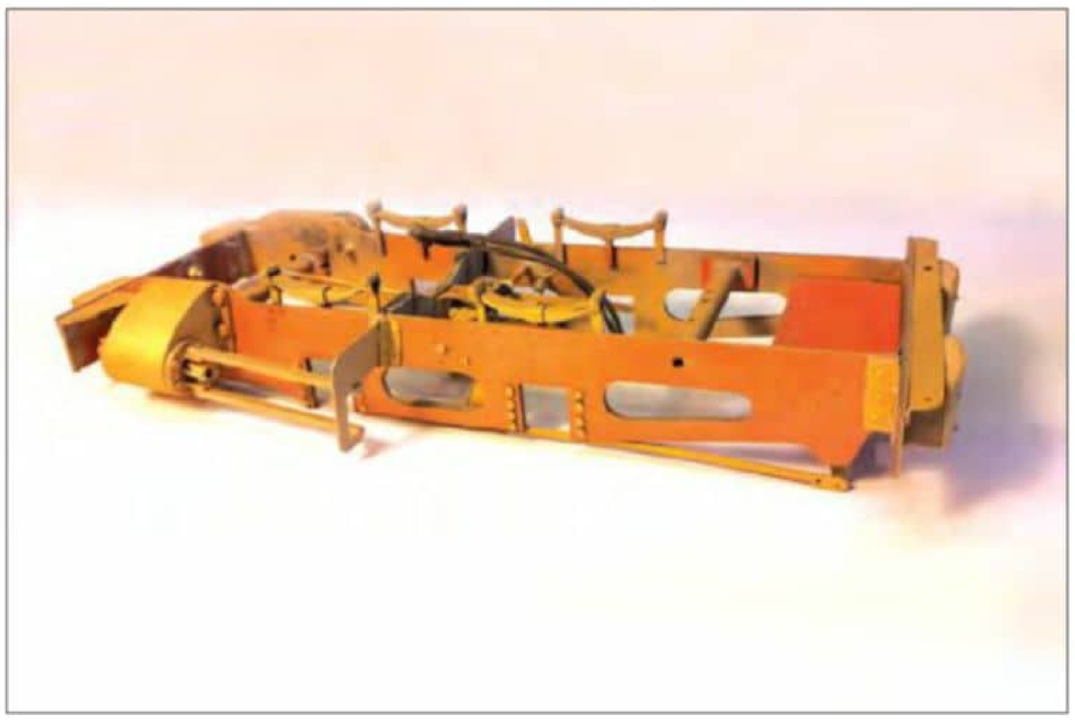
I started with the wheels. On the original model I machined these from stainless steel but I had no desire to do this again as my lathe is not heavy enough to use a form tool on stainless steel. Fortunately, I had some nickel-silver rod. This machines beautifully with the form tool. As is usual with my own 16mm scale models, I used 7mm fine-scale wheel profile.

I still had the pantograph templates and used these to cut blanks for the rods and cranks. The side rods are 1.5mm thick. A piece of 50mm square timber with a couple of small nails driven in to the same dimension as the wheel-base located the rods while filing down the centre area. The cranks on these little locomotives are surprisingly thick. I cut them from 4mm thick brass and drilled and tapped them 10BA.

The side-frames have a lot of rivet detail so they were made from two layers, an outer one of 0.3mm phosphor bronze and an inner one of 0.6mm brass.

Square axle-boxes and appropriate holes were made and the front axle has a rocker wire you can see in photo 2.

The wheelsets are retained with strips screwed to blocks on the inside of the frames. Photos 2 and 4 show the blocks and retaining strips. The frames are spaced apart with brass rods insulated from the frames by PC board squares.



1. The chassis, sandblasted and ready to paint.

2. The chassis underneath showing dummy valve gear

Everything is screwed up with 2 mm screws, soldered and then the screws removed leaving the frames insulated. This is an alternative to Tufnol spacers and is better where you want to screw things to the spacers. Photo 1 shows the completed frames. The headstocks are made from PC board and the buffer blocks are wood with brass overlays

The crankpins are brass tubes with 10BA cheese head slotted screws through them. The heads are left slotted until final assembly when they are turned down and locked in place with Loctite.

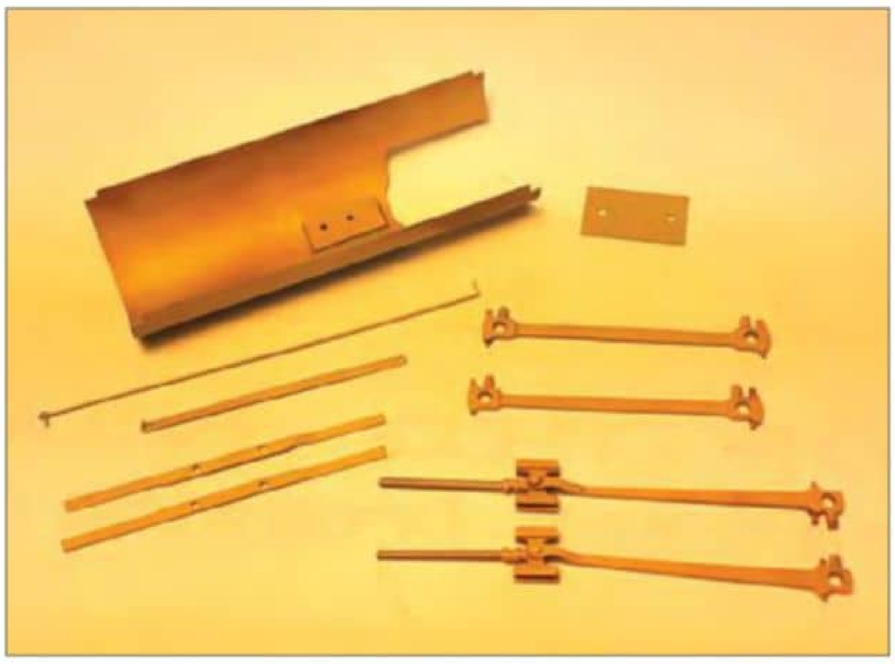
Cylinders are fabricated with a back plate, two sides and a wrapper. The caps are turned. I like to turn a ring on the rear cap to the inside dimension of the slide-bars. Most of this is cut away to leave two mounting lugs. The slide-bars are screwed to these with 1.4mm screws.

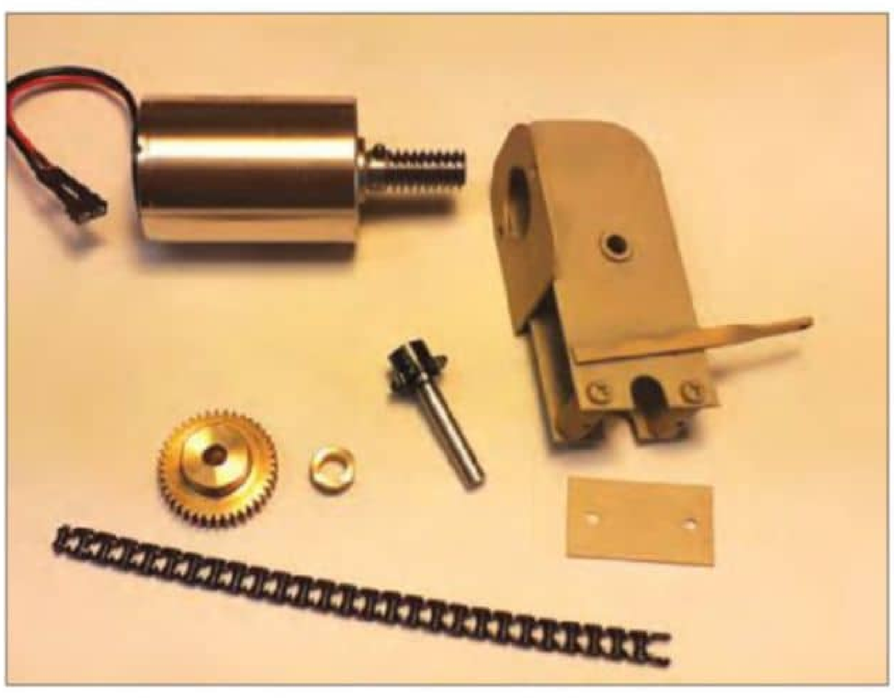
The crossheads are cut from solid. *Louisa's* connecting rods are made with a fork to fit around the crosshead. I make these but fitting a piece of brass strip to the rod with easy-flo, then sawing and filing it to shape.

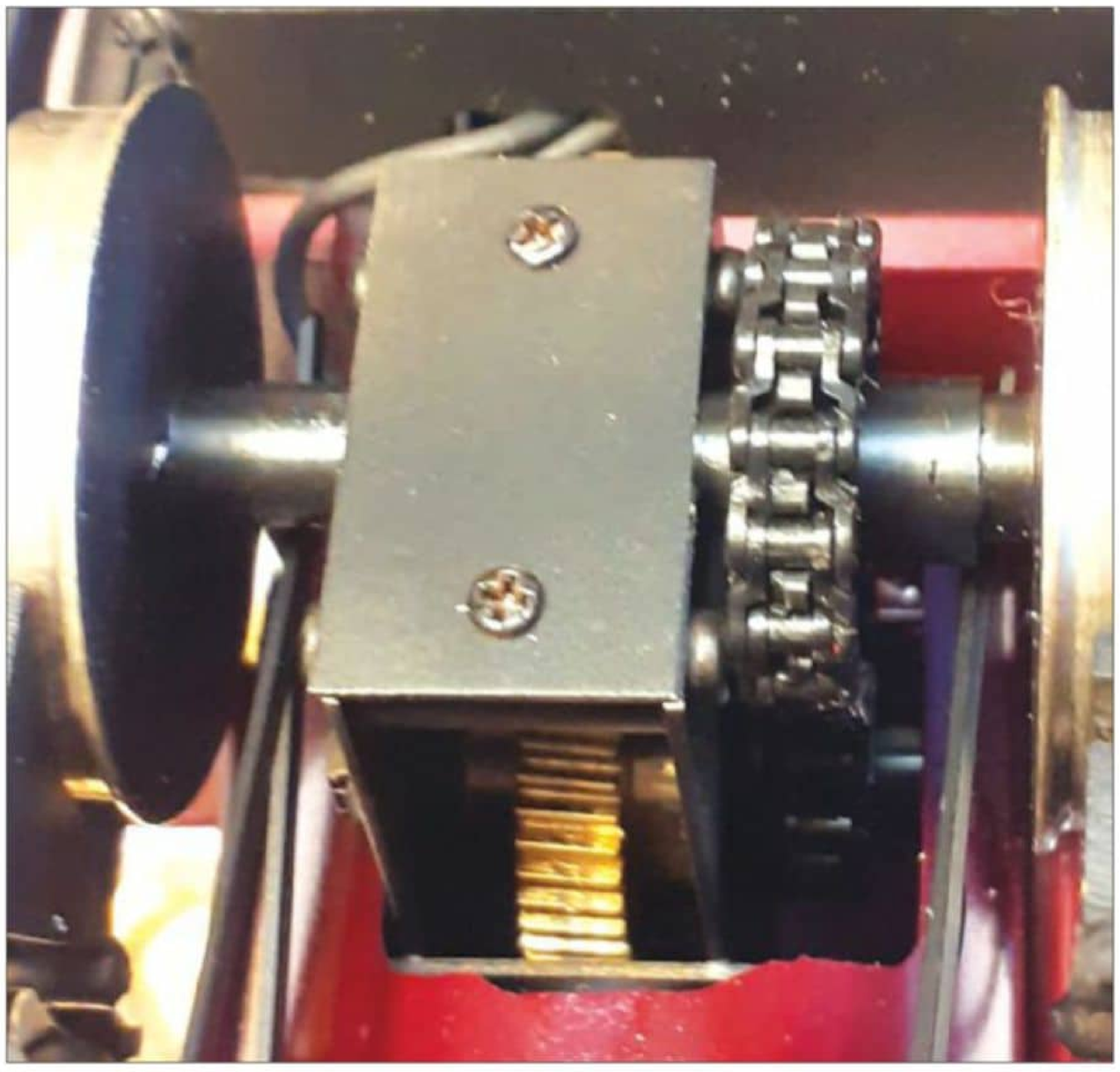
The loco is powered with a coreless motor and home-made gearbox. The gearbox started life as a conventional idler box but the spur gears I had bought off the internet proved very noisy (buyer beware!) so I replaced them with a chain drive. The chain drive is on the outside of the gearbox. Photo 5 shows the gearbox parts and photo 6 shows the gearbox from underneath.

The bottom half of the boiler is fastened to the chassis and the motor sits above, facing forward. The reason for this is the small size of the firebox.

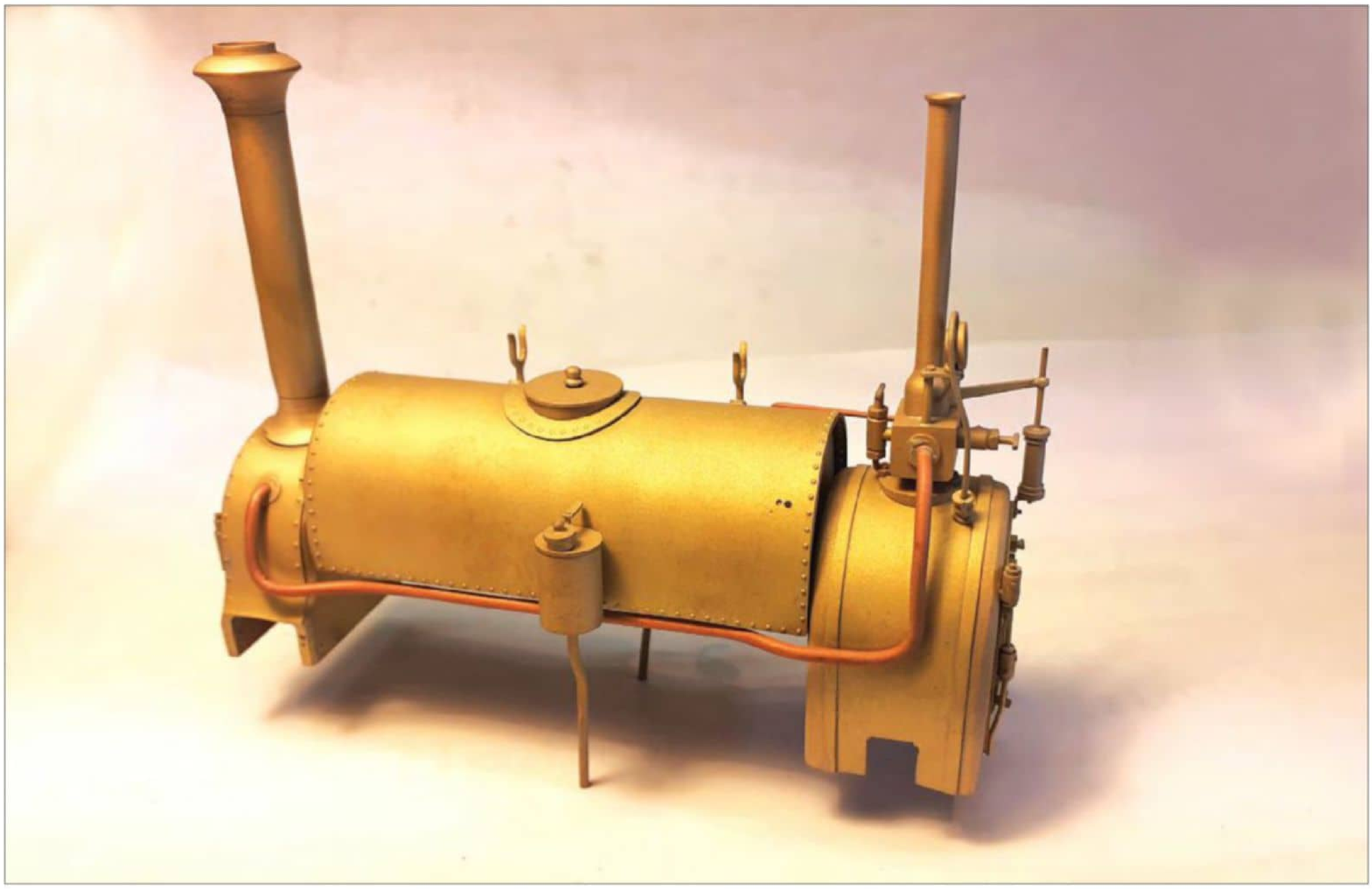
***Left* 3. Assembled wheelsets, rods and crank-pins.**







***Middle left.* 4. The boiler bottom, rods and wheel retaining strips.**
***Bottom left.* 5. The drive components.**
***Above.* 6. The drive, in place.**



7. The boiler assembly, ready to paint.

The smoke-box, firebox and saddle tank front have generously flanged fronts and backs. I represented these by cutting out pieces of 3mm brass sheet and rounding the edges. The saddle tank rear is reversed so this was made from 0.5mm sheet with a rivetted strip fitted to represent the flange inside. The three sub-assemblies were drilled and pinned together before soldering to ensure good alignment.

This unit fits onto the chassis cross-members and is screwed in place. The ashpan fits to the rear cross-member, underneath and is held with the same rear screw.

The cab floor is made from PC board and fitted to the chassis (photo 1).

Photos 9 and 10 show the cab rear. The rear handrail posts fit through an angle at the chassis rear. Two 12BA nuts lock this assembly at the rear and two screws lock the front onto the firebox.

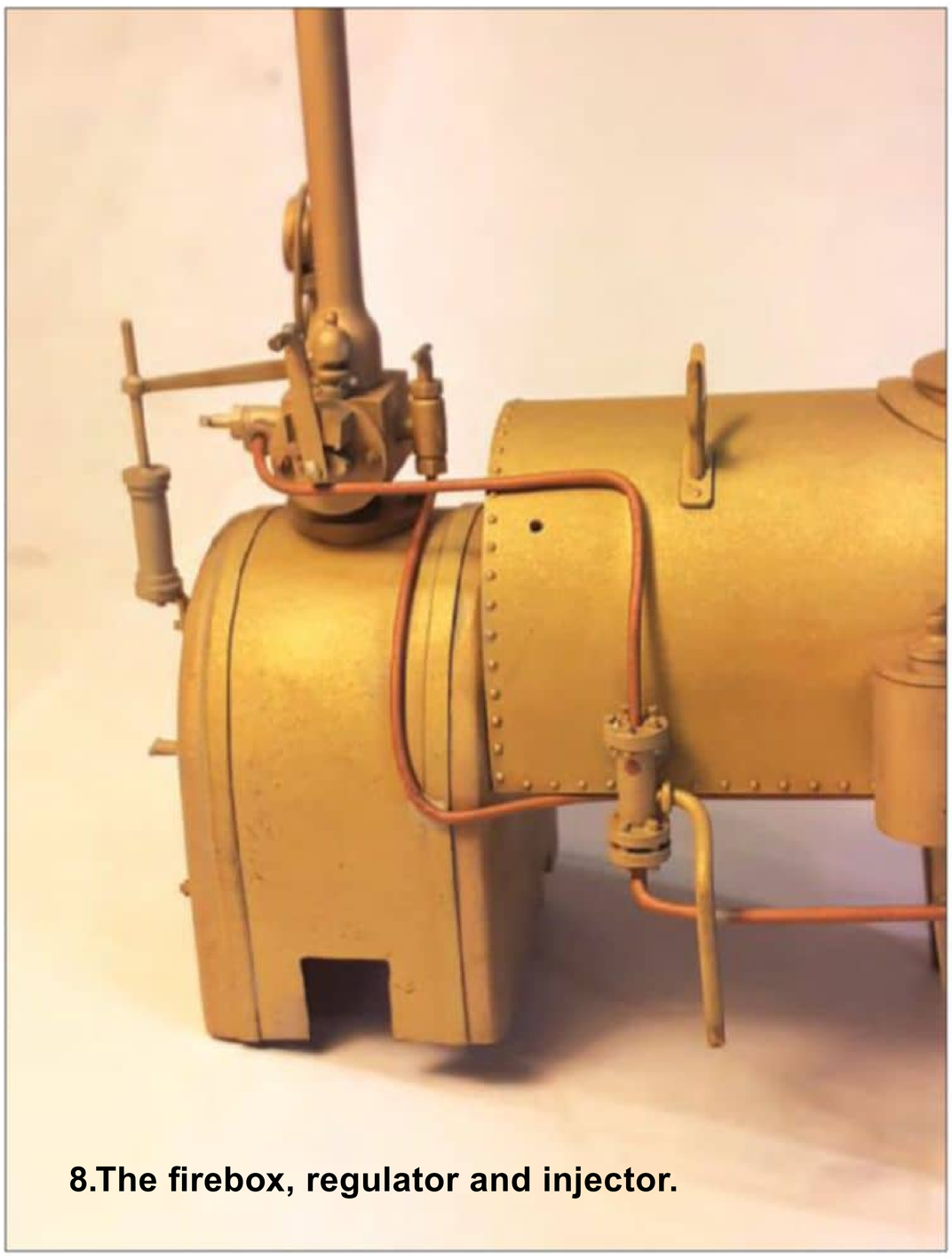
An awkward assembly, but the only way I could think of.

There's always a bit of work on the fittings on a 16mm loco as everything has to be hand-made. The biggest one here is the regulator and safety valve assembly. This was started with a solid block of brass.

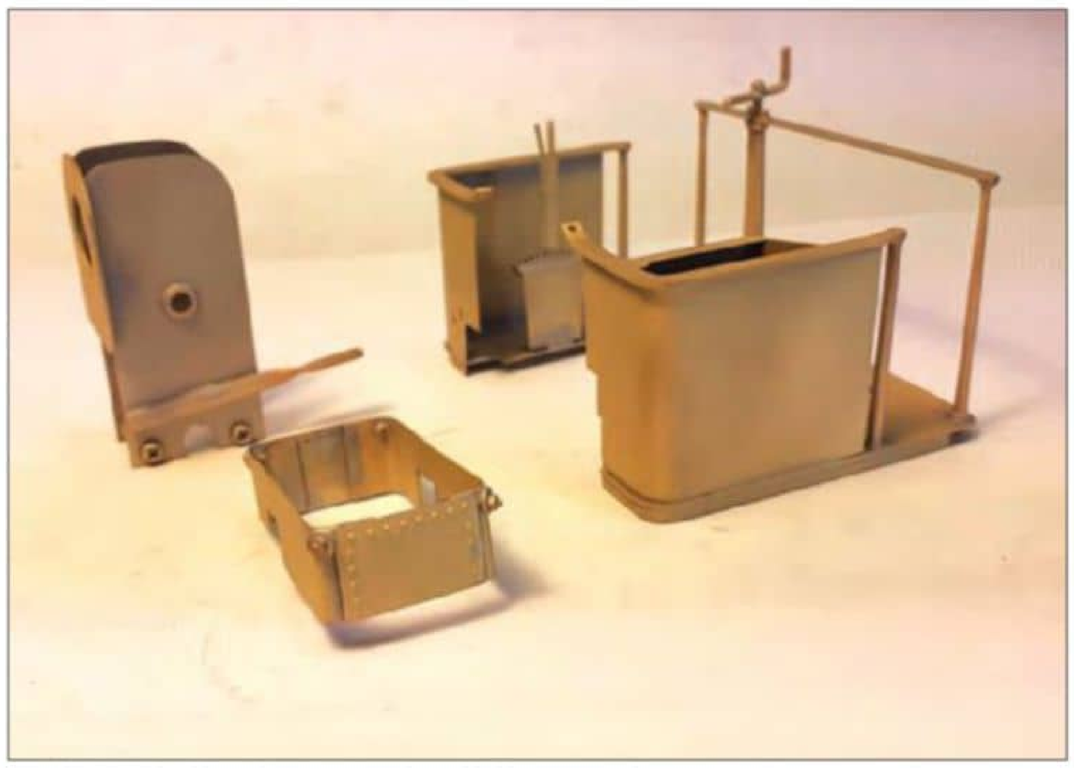
The fire iron brackets are another easyflo job with some careful bending and filing to try and get the character into them.

The loco was painted with Humbrol number 20. I didn't like it, and no matter how much I glared at her, she didn't improve!

Then I decided to try a bit of gold lining and some nameplates, after which I am much happier.



8.The firebox, regulator and injector.



9. The Cab floor with bunkers, the ashpan and the gearbox casing.

10. The cab and back-head all finished.

11. The finished *Louisa*.

UPDATES
Chattenden & Upnor Railway

By Sydney A. Leleaux

See article by Paul Myatt in REVIEW 131 – Volume 17 No.3 July 2022

107, Drewry 2263 of 1949, and train at Chattenden Railway Depot station. Note old coach body used as a platform shelter. Some later coaches, which were sold to the W&L, had cross seats but no compartment doors so they were draughty in a cross wind!

In March 1960 the King's College, London, Railway Club arranged a visit to the C&UR, including a ride along the line hauled by No.107, the Drewry 0-6-0D. The official who was our guide subsequently lent me some old photographs to copy.

To recap, the Chattenden & Upnor Railway was a distinctive narrow-gauge military line serving the ordnance depots and barracks around Upnor and Chattenden in Kent. Its origins lie in the early 1870s, when the Royal Engineers constructed a standard-gauge line to support the growing military presence in the area. By 1885, the system had been rebuilt as a 2ft 6in (762mm) narrow gauge railway, initially operating alongside the original track before becoming exclusively narrow gauge in the early 20th century.

The line played a crucial logistical role, linking Chattenden Barracks, the Chattenden Magazines, and later the Lodge Hill complex with the Royal Naval Ordnance Depot at Upnor and the river facilities at Pontoon Hard. It carried vast quantities of munitions - shells, torpedoes, and other explosives—between inland storage sites and the Medway, where they were loaded onto naval vessels. Its engineering was considered impressive for a military industrial line, and it operated for nearly a century.

Despite its significance, the railway closed in 1961, and the system was abandoned. Sadly it was not preserved, as its route and history would have made it a remarkable heritage attraction.

Illustrations either taken by the author, 9th March 1960, or copied by him.

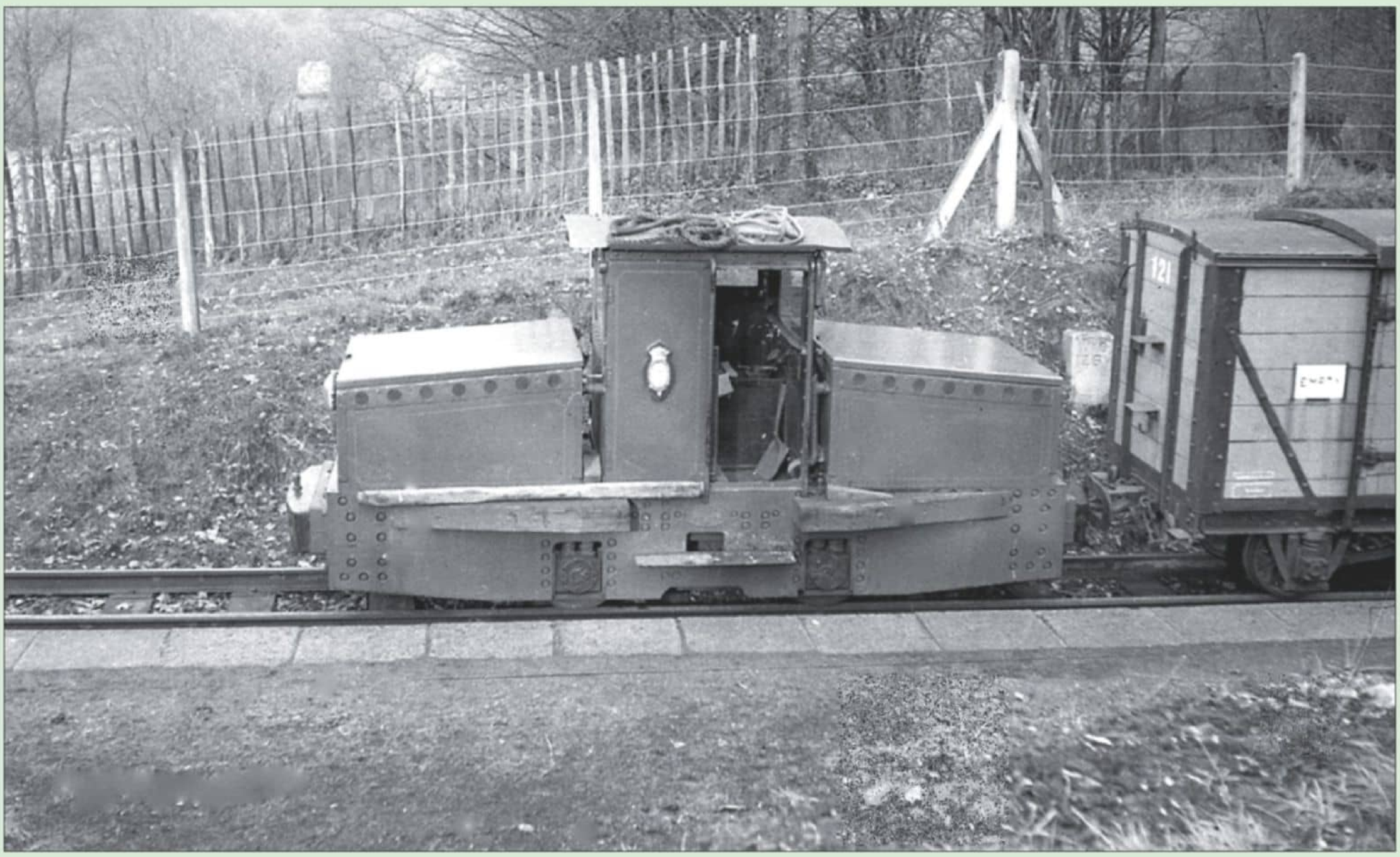
107 at Upnor station, the guard holding single line train staff. I think the superior coach we used was built by Wickham.

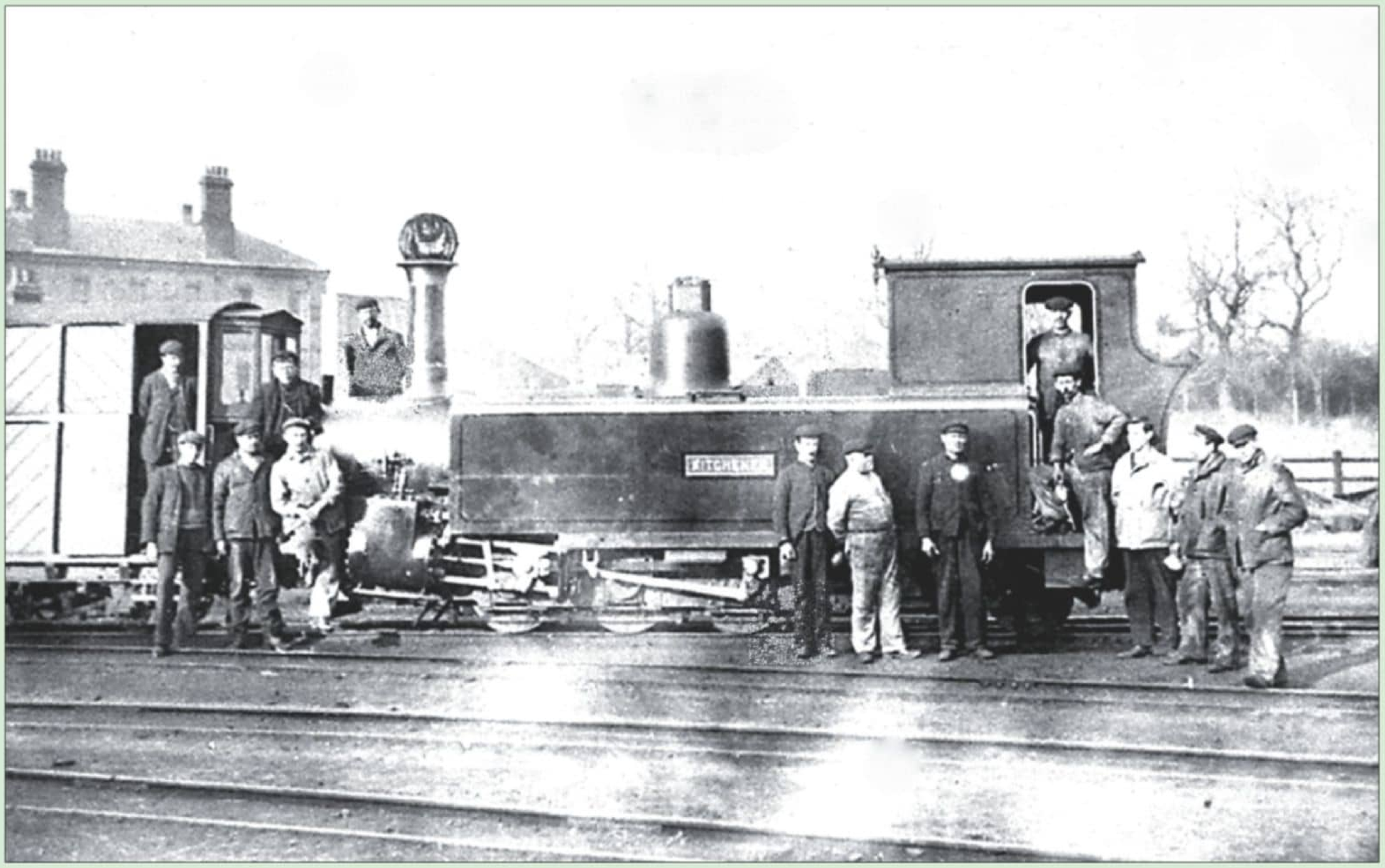
Superior C&UR coach at Upnor station.

Middle right. **The C&UR crest on the coach.**

Bottom right. **The train had to go into Upnor Dockyard, a secure area, for the loco to run round, so we had to wait on Upnor platform for it to return. This shot is looking the opposite direction to photo 7 on p.128 of REVIEW 131. Note the crossing gates secure only one side from road traffic. I think there was a similar pair of gates on the branch, which crossed the road about 50 yards away.**

At our request, one of the dockyard battery locomotives, 43, Greenwood & Batley 1581 of 1938, followed 107 out of the dockyard so we could photograph it.





(Collection Sydney Leleux)

Kitchener **0-6-2T YE 711 of 1902. Presumably the extension on the end of the van was to accommodate the hand brake lever.**

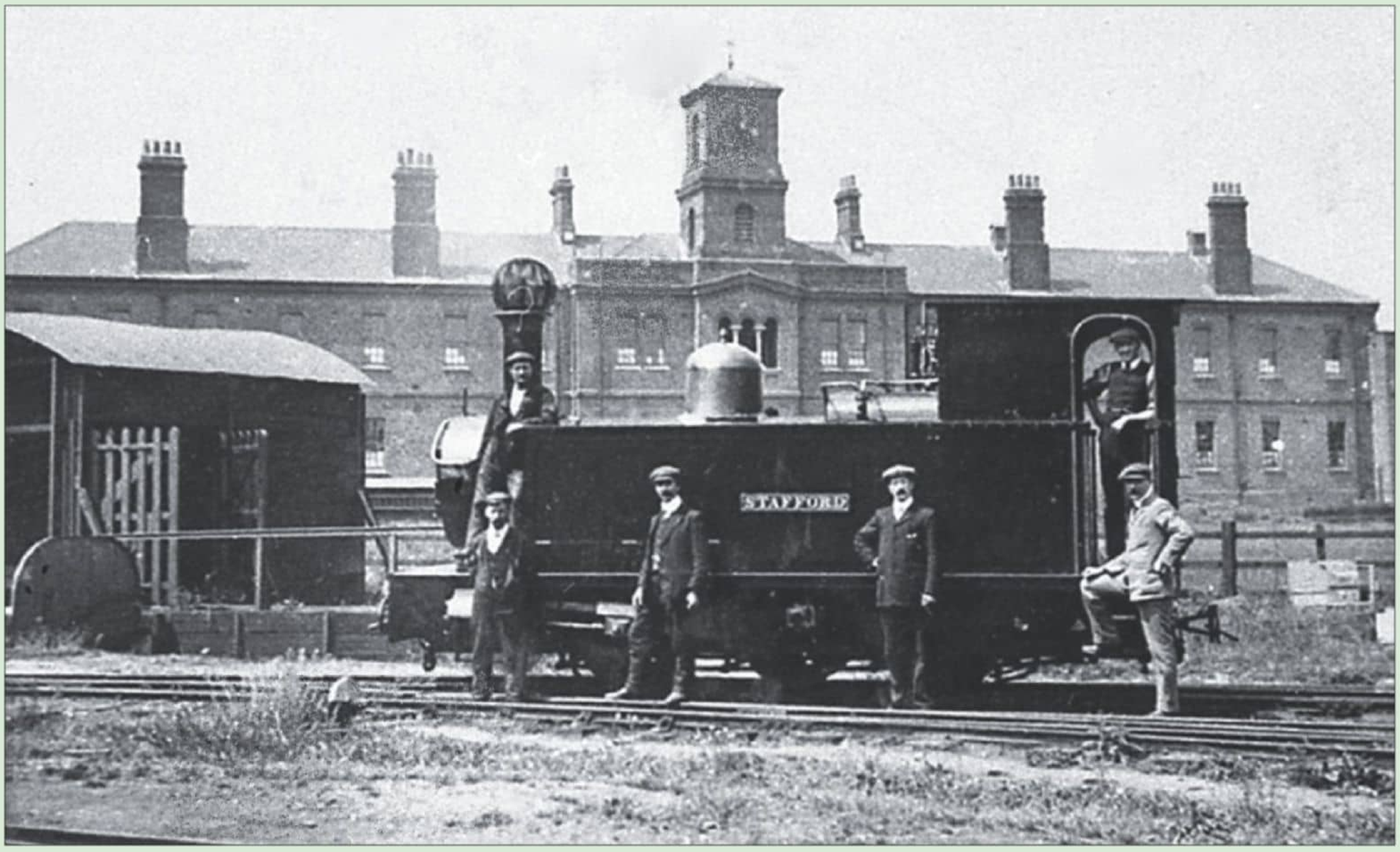
Battery loco, probably built by GB in 1918, at Chattenden. Note the detail differences from the 1938 model.

(Collection Sydney Leleux)

(Collection Sydney Leleux)

Yorkshire, 0-4-4T JF 5350 of 1887 at Chattenden. Note spark arrester.

***Stafford,* 0-6-0T WB 1513 of 1897. This loco was probably very similar to Snailbeach District Railway Dennis, although slightly smaller.**



(Collection Sydney Leleux)

L'Érablière du Lac / Maple shack

By Franck Combe

Location : Quebec / Canada

Gauge : 15" - Scale : GN15

I am a narrow-gauge model railroader working in GN15, ON30 and 7/8th scale. I am a member of the RMB club near Paris in France. This is my second layout, which I built in 2011.

While Jean brings maple water to the shack, two employees are deep in conversation. The locomotive is battery powered. It is a Pepper 7 kit with a Tenshodo motor.

I discovered GN15 scale on the gn15.info website and caught the bug immediately. This is my first layout in this scale and the second layout I have ever built. GN15 allows you to create a layout in a very small space with an unexpected amount of freedom. For those who are not familiar with this scale, it represents the real 15-inch rail gauge at 1:22.5, or nearly half-inch scale for British modellers. GN15 has many advantages: it allows the use of HO/OO track systems and all kinds of motive power and rolling stock that are easily available at affordable prices. It also lets you reuse elements from G scale such as structures and accessories, and, last but not least, all the incredible items from the world of doll houses.

This layout represents a fictional maple shack called *L'Erablière du Lac,* located in the south of the beautiful province of Quebec in Canada. The scene is set in April, during the thaw, when the snow is melting and it is time to harvest maple sap. To improve the process, the maple shack is equipped with a complete 15-inch narrow-gauge railway.

The train carries the maple sap from the forest to the shack in barrels. The train enters through the left-hand doorway. The barrels are then unloaded inside the shack and the sap is poured into the evaporator located on the central ground floor, where it is concentrated. To obtain one litre of maple syrup, you must concentrate thirty-five litres of maple sap. The evaporator is fuelled with wood, which also arrives from the forest by train. The syrup is then processed and packed in the right-hand section of the shack. Crates and cardboard boxes are loaded onto wagons at the right-hand entrance for shipping. On the first floor there is a storage area and an office.

A turntable allows materials to be turned, locomotives to be refuelled, sanded and, if necessary, repaired. The owner of the maple shack is well supplied with critters, bought

from closed lines in Canada or built at home. He is probably as passionate about trains as I am.

I took my inspiration from a drawing by Carl Arendt called Botts Cotton Gin Tram, which I modified slightly to suit my theme. I dedicate this layout to Carl Arendt, who died in 2011, a true gentleman who was open-minded, creative and joyful. His former website, carendt.us, was an amazing source of ideas for micro and small layouts for me and many other modellers.

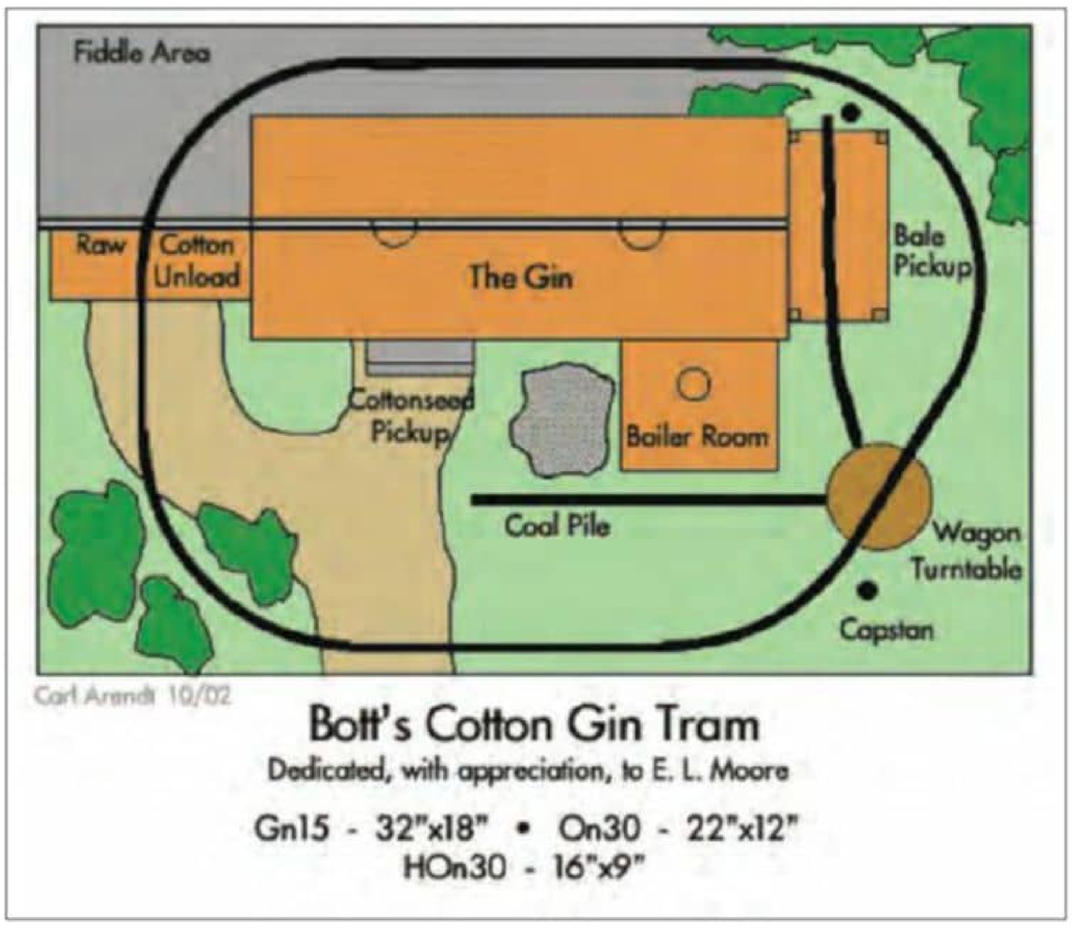
The layout measures 96cm by 52cm. The track plan is an oval hidden by the shack. The baseboard is made from a sheet of plywood on a pine frame. The track is Peco Streamline O-16.5 (On30) code 100. I removed every second sleeper to achieve realistic sleeper spacing at this scale. The turntable is homemade, built on a CD. I added a DPDT switch to reverse the direction of the motive power and avoid short circuits.

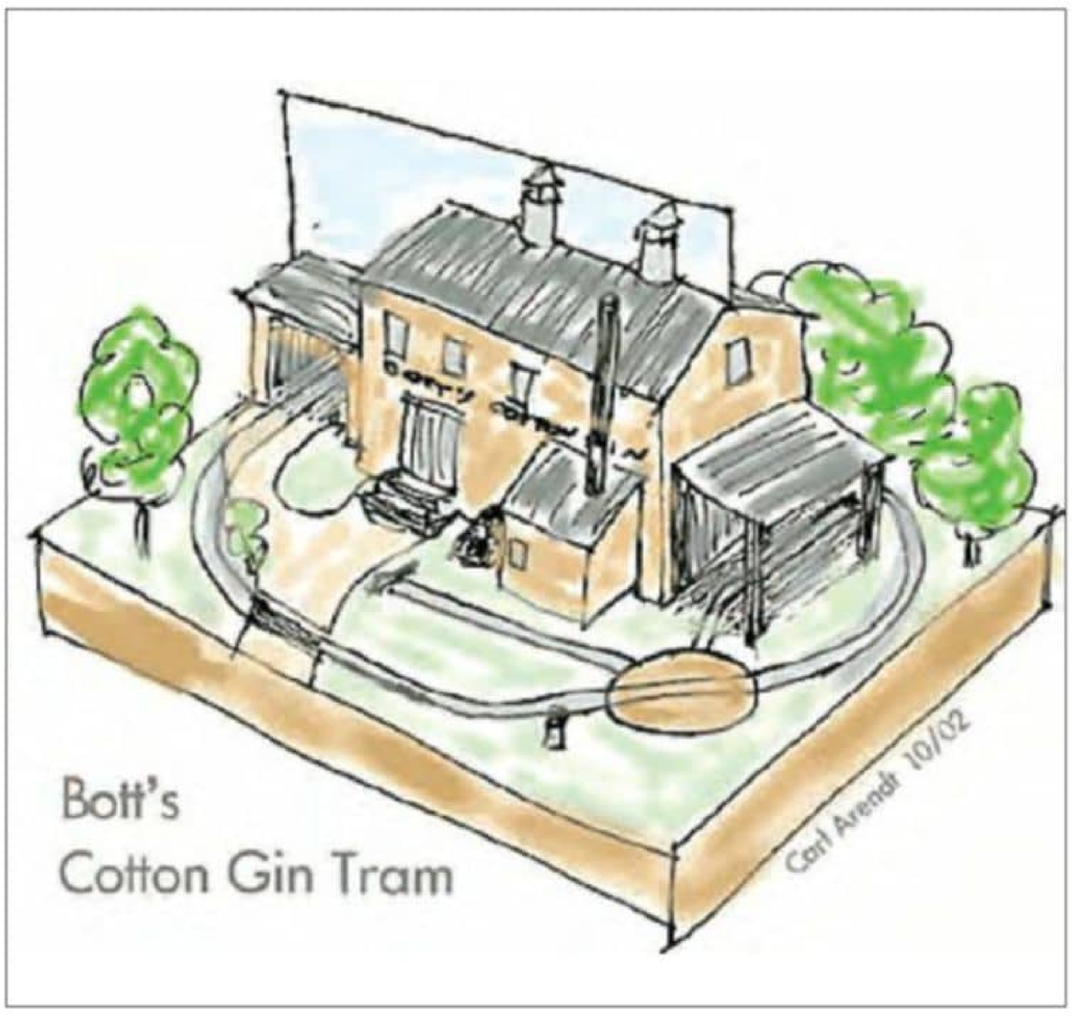
DCC and Sound

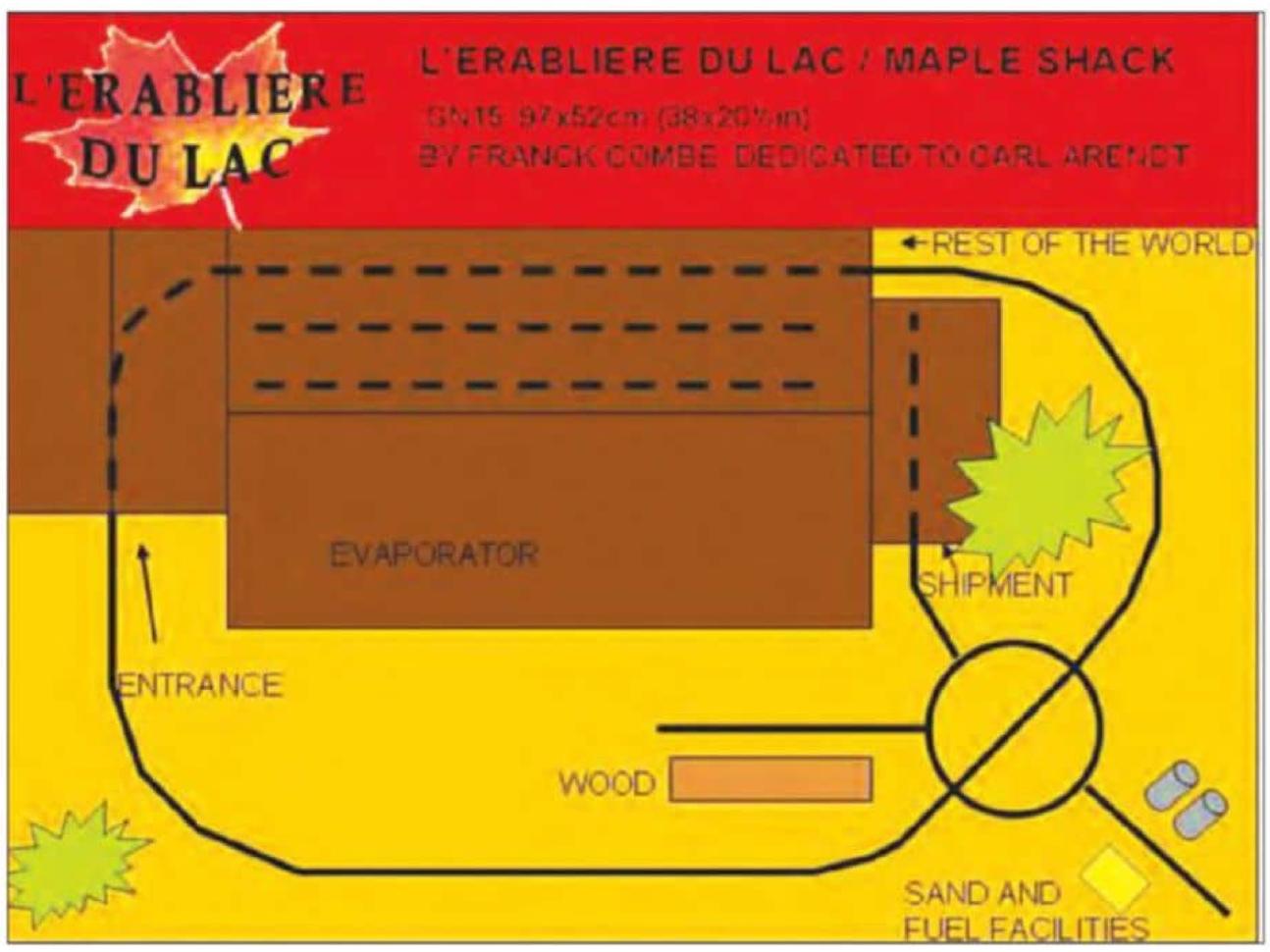
I initially ran the layout with a Gaugemaster Single Track Walkabout Controller, and later changed to the Spectrum EZ Command Control System Dynamis Wireless Infrared System. The DCC system allows me to run locomotives smoothly at very slow speeds. DCC also allows the use of sound, which adds another dimension to the layout.

It took me some time to solve the sound issue. I knew I wanted sound from ESU LokSound decoders. The sounds of the Feldbahn locomotive and the VW Combi are fantastic and perfectly suited to my locomotive fleet. However, at around £100 each, and with the tiny size of GN15 locomotives, it was impossible to fit a powerful speaker inside each one. For exhibitions, I needed a larger speaker to achieve the sound quality I wanted.

After reading an article by Lance Mindheim, chatting with friends, and visiting my hobby shop, CDF Informatique (a specialist in DCC and electronics), I discovered the solution: placing the sound system under the layout. It is both practical and economical. I added a cheap HO Bachmann decoder to each locomotive at around £10 each. From the DCC command station, one feed goes to the track and another to the sound system. I built a box containing two ESU LokSound decoders, two motors, and a DPDT switch to select the sound I want. The ESU decoder requires a motor for feedback. The box is connected to a powerful Hercules XPS2-135 system, consisting of a subwoofer and two satellite speakers. The sound is extraordinary. Because I run only one locomotive at a time, all decoders are set to number 3 by default, both in the locomotives and in the sound box. Ten years later, I found an even simpler and more effective solution. In parallel, I play a CD on a CD player connected to another Hercules XPS2-135 system. The CD is homemade, providing ambient sounds such as dogs, moose, bells and birds. I sourced all the sounds from the Internet.







Top and Middle right. **The original drawings of the Botts Cotton Gin Tram by Carl Arendt, which inspired me.**

Bottom right. **A plan of the layout.**

The Layout

The maple shack itself is a combination of two modified kits from the Colorado Models Company. I had to scribe all the planks to create a realistic wood-grain effect. I then weathered everything with acrylic paints and grey shoe polish. The interior of the building is completely scratch built, fully detailed and lit, even though it cannot be seen clearly in daylight conditions. The evaporator is entirely scratch built from an original drawing, and I added a light inside to simulate a wood fire. Most of the other elements come from dolls' house accessories such as tables, telephones and armchairs, or from 1:24 scale kits.

I also simulated the evaporation using a smoke generator, but unfortunately it created an oily deposit on the roof, so I had to remove the system.

To reproduce the ground typical of this season, I used real earth, followed by real crushed leaves. To simulate melting snow, I used sodium bicarbonate mixed with PVA glue. By adjusting the proportions of the two components, you can create a wide range of effects, from fresh snow to melting ice. On top of each pile of melting snow, I add a little sodium bicarbonate to represent fresh snow. Thanks to capillary action, the base of the melting snow naturally

---

Top. **Overall view of the maple shack.**

Middle. **A freelance Gmeinder-type locomotive pushes two wagons carrying wood for the evaporator. The locomotive is based on a Bachmann o-4-o; the rest is entirely scratch built.**

Bottom. **A close-up view of the critter.**

becomes tinted brown, just as in reality where snow mixes with mud. To create a wet effect, I airbrush gloss varnish onto the snow piles and apply more gloss varnish around them with a brush.

Vegetation is relatively sparse in April. The small grasses come from a broom made with coconut fibre. The pine tree is made from a wooden branch, onto which I glued American moss from a US hobby supplier to represent the branches. The other tree, without leaves, is a real thyme branch that I collected in Provence after a two-hour walk in the hills during the hot summer, but the result was worth the effort.

The backdrop is a photograph of an American mountain fixed to a medium board.

The figures come from Preiser, Tamiya and Supply Line. They are modified to alter their appearance, mainly by adding details, changing colours or replacing heads. Some figures are lightly dressed for April, but Canadian lads are strong and hardy.

Top right. **This locomotive is a skip fitted with a Lister-type motor. It is simple, cheap and clever. It is a kit from Cast Away Model with Tenshodo motorisation.**

Middle right. **This convoy returns to the forest to collect more maple water. The freelance locomotive is a Bachmann 0-4-0. The cab is from Pepper 7 and the rest is entirely scratch built. The rolling stock comes from Pepper 7.**

Below. **Shipment of the maple syrup. The locomotive has a Pepper 7 chassis and cab, Tenshodo motorisation, and an exposed motor taken from a 1:35 scale tractor toy. The rolling stock comes from Pepper 7.**

Another locomotive. It has a Pepper 7 chassis and cab, Tenshodo motorisation, and a bonnet taken from a 1:35 scale Opel Blitz.

The 3D mock-up of the layout.

A freelance German-style locomotive pushing a wagon from Bachmann. The critter is based on a Bachmann 0-4-0.

Above. **An aerial view of the layout.**

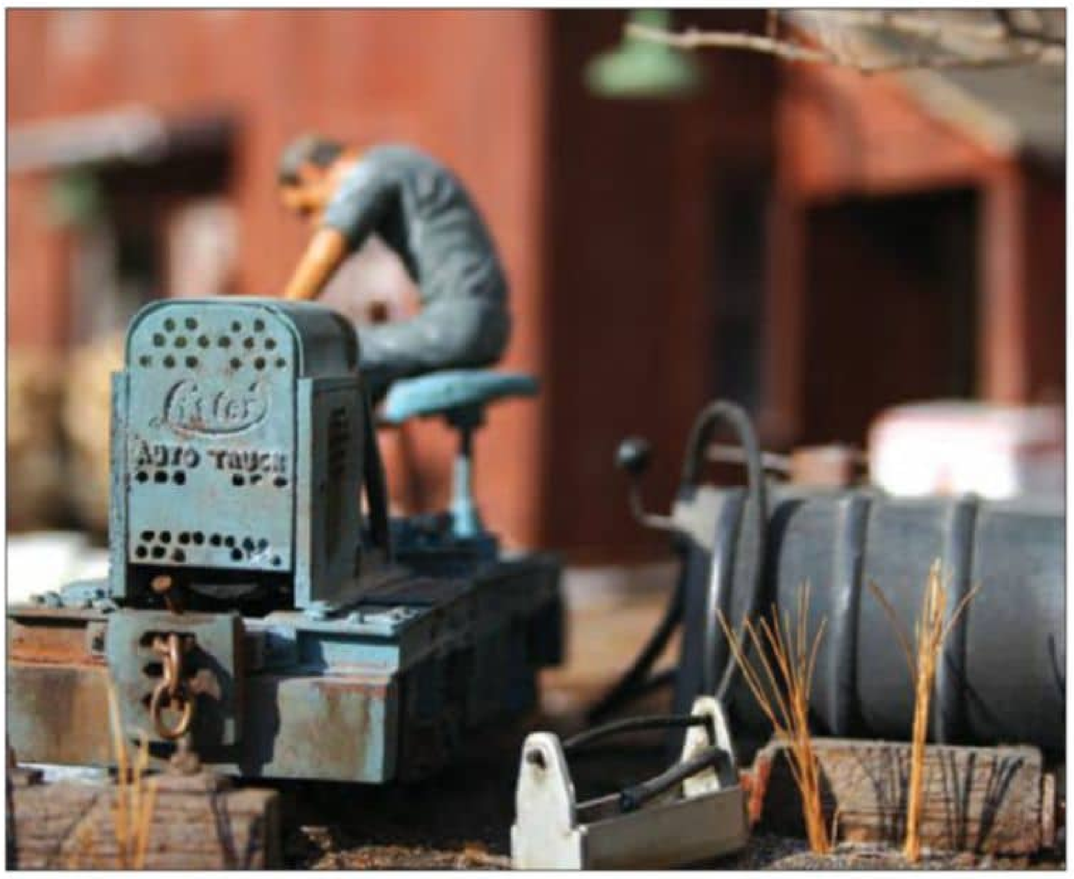
Below. **An aerial view of the evaporator.**

L'ÉRABLIÉRE DU LAC / MAPLE SHACK

Above. **Details of the office room located on the first floor.**

Middle right. **A Lister-type locomotive stops at the fuel facility. It is a kit from Cast Away Model with Tenshodo motorisation.**

Bottom right. **A view of the evaporator while Pierre takes a break with a mug.**



Locomotives

My main passion is scratch-building locomotives, so I have a sizeable fleet of more than ten. All models are either entirely scratch built, assembled from kits such as Pepper 7 or Cast Away Models, or are modified commercial models such as trolleys or the Bachmann 0-4-0 Davenport. The mechanisms are Tenshodo or Bachmann. I particularly enjoy modifying the Bachmann 0-4-0 because it is reliable, runs well, is pre-DCC equipped and is affordable. I have a weakness for used and abused critters with maintenance reduced to the minimum for reasons of profitability. All locomotives from Pepper 7 receive additional weight to improve reliability. I am not completely satisfied with the Tenshodo units, which are too fast and very noisy.

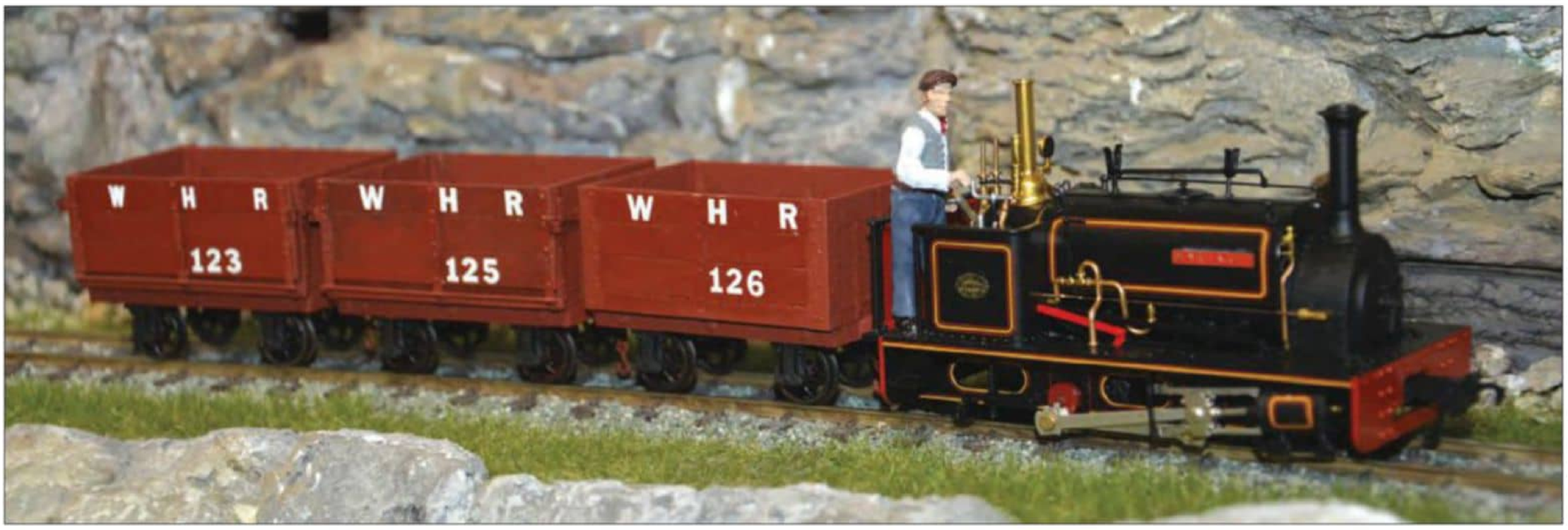
Rolling Stock

The rolling stock comes from Bachmann or Pepper 7. As with the locomotives, Pepper 7 rolling stock receives additional weight to improve reliability. At first, all rolling stock was fitted with pin-and-link couplings for prototypical reasons and for photography, but I was disappointed by the poor running reliability. I then converted the pin-and-link system to Kadee number 5 couplers, with complete satisfaction.

Latterly, I have given this layout to a friend because I no longer have enough room to store it, and all the locomotives have been sold to GN15 enthusiasts in the USA, Germany and Great Britain.

Granite Wagons of the NWNG / WHR

By Keith Millard



My friend Stuart L. Baker, my self and others of our small group collaborated on a particularly obscure type of wagon used by the NWNG/WHR for granite chippings. There are no known good photographs of a complete wagon in good condition only the half dozen photos of Nos. 123 & 124 in various states of decay in Dinas yard. There were supposedly 12 of these wagons but only Nos. 123 &124 can be confirmed. Under the fading paint work of No124 can be seen another 124 in the corner, on the top rail can be seen ghostly lettering, which looks like NWNG

to my eye. The full-length, bottom-hinged door had catches at the top on both ends. The door was only on one side and the body did not tip. JIC Boyd stated that these wagons were for transporting granite chippings to Dinas. Stuart estimates that the wagon would have a capacity of 3 tons of granite chippings. The views of the underframes are somewhat obscured by vegetation but the wagons seem to have the 'tall' type of axle boxes. There are no signs of any brake gear.

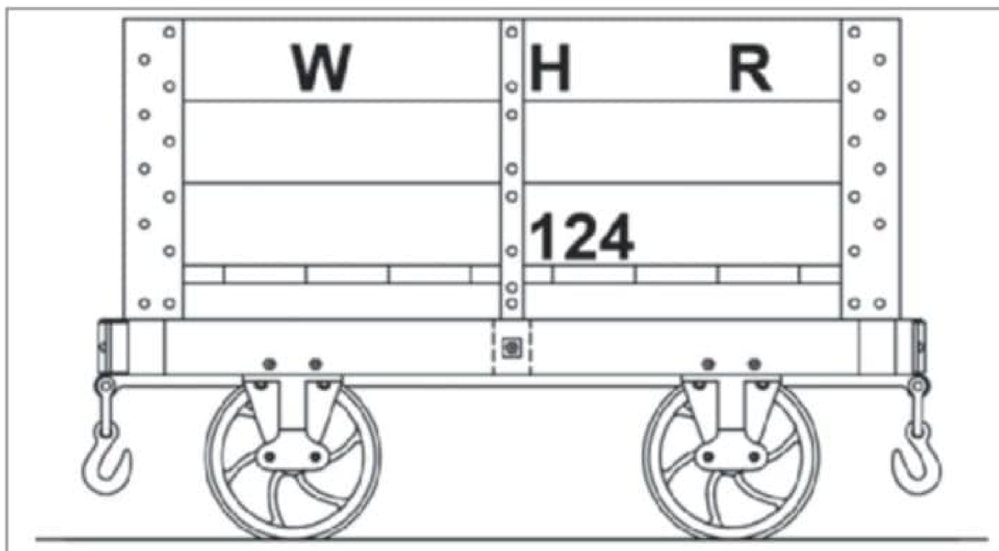
The Model Granite Wagon

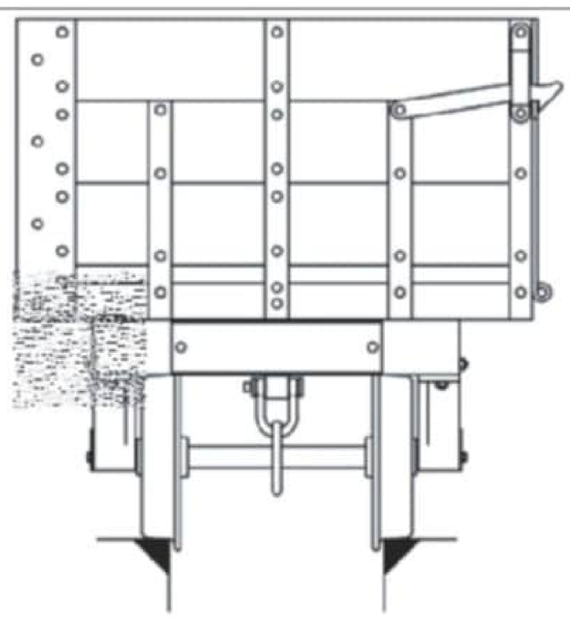
I model in 7mm scale on 16.5 mm gauge track. I had been looking at building models of the WHR goods wagons and some time ago I had to make some Master patterns for a loco kit so I quickly made up some patterns for the NWNG/ WHR wagon axle boxes. I made up a 'low' type and a 'tall' version of the axle box. These were sent away for casting so I got my unique axle boxes quite cheap! A jig was constructed on an odd bit of plywood and Plasticard to drill the backs of the castings for brass top hat bushes, which were then glued in.

The real wagons appear to be all wood apart from the iron/steel strapping, a few bolts, the iron/steel bar or rod door pivot etc. My model was nearly all plastic! The main chassis was from 3.25 x 2.5 wide, white plastic strip, doubled up for the centre beam. The body frame was from white plastic strip 2.75 x 1.75mm. The sides and floor were from black Plasticard 1mm or 0.40" thick. All the plastic was treated to a brushing of coarse sand paper and the back of a scalpel to give a 'wood grain' effect on the visible sides.

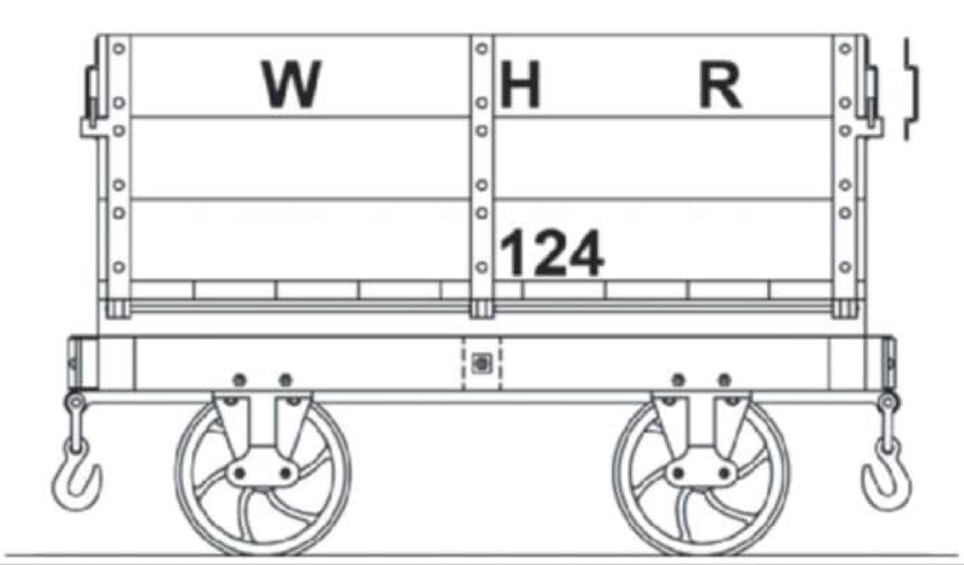
Yet another little jig was made up to set the 2 tall -ype axle boxes onto one solebar at the correct wheel base. I used a couple of heavy metal blocks to hold up the pair of solebars, with a pair of 24.5 axles fitted with 10.5mm diameter curly wheels trapped in their axle boxes. I measured the distance over the solebars, cut off 2 cross members to fit and dabbed on some liquid glue and left it to set. The centre brace was also fitted and glued into position.

The upper body frame was cut from the 2.75 x 1.75 plastic strip and assembled on the underside of the floor and the liquid glue brushed into the joints. A strip of Plasticard, with scribed planks, distressed with coarse sand paper and scalpels was cut up carefully for the sides, the ends fit inside the main sides. The somewhat tedious job of making all the strapping come next, I started with the big corner items, they are a scale 7" on the length and 6" across the ends. I made them from 0.005" thick brass shim, carefully marked out on the inside for the 'rivet' press and then folded to 90 degrees. I have to admit to quite a few failures! The narrower strips were from strip in stock, again all marked up, riveted and stuck in place. I used a thick piece of brass, a little thicker than the straps to make a slot the length of the





Scrap plan on buffer beam.



WHR Granite Wagon 124

Drawing derived from scaled dimensions off photographs.

No dimension taken off this drawing can be taken to be accurate.

Estimated capacity	-	3 tons
Estimated outside body length	-	7ft 0in
Estimated outside body width	-	4ft 9in
Estimated internal body height	-	2ft 3in
Assumed Wheelbase	-	4ft 0in
Estimated overall height from rail	-	4ft 9in
Inside width of body	-	3ft 6in
Wheel diameter	-	1ft 6in

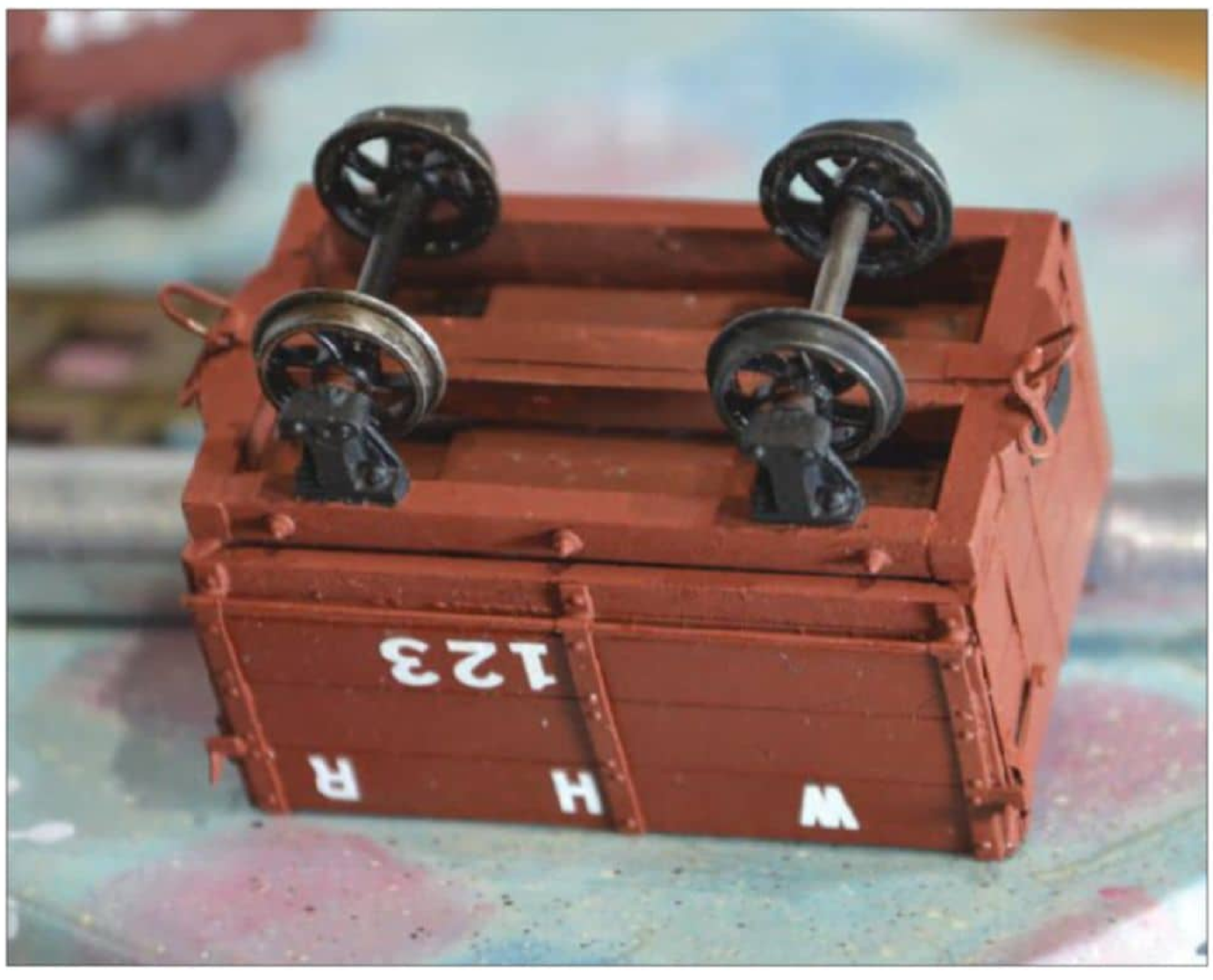
Drawn - Stuart L. Baker - March 2025

'bridge' that the holds the latch in place. Another piece of brass was made into the 'male' portion. The main portion of the jig was held in a vice with smooth jaws. An over length strip laid between the vice jaws and the male bit tapped down into the female bit of the 'bridge' - if it is OK you have one done! Before cutting it off, use the strip to hold the bridge whilst the rivet press gives it a 'rivet' at each end of the 'bridge'. The 'catches' were filled up from strip, drilled and special small headed brass pins pushed through both catch and strap and glued up. The brass pins had their heads filled down by holding the shanks in a Dremel-type drill and holding the heads against a fine needle file.

The prototype wagons had curved ends with an iron or steel reinforcing strip bolted on. Underneath was a shackle and hook hanging down from a lug on a strap, which was probably all in one piece, the length of the wagon, a good bit of craft skill by a blacksmith.

A small 22 x 22mm piece of lead sheet (roof flashing) about 1.5mm thick was added under the floor to each wagon, the complete wagon weighs 20 grams. If they prove a bit 'light' I will have to give them a gravel chipping load with another chunk of lead flashing in the load!

Information on these wagons is scant so I took an educated guess and painted them Red Oxide with a Halfords Plastic spray can. The numbers are just some 'rub down' lettering I had in stock. It seemed to me to take months to build these 4 wagons. I suppose the winter in my workshop does not give encouragement so I don't think I will be making any more. I will have to wait for somebody to 3D print some more rare WHR/ NWNG wagons.



References:

Stuart L. Baker Drawing, Various books by J.I.C. Boyd, postcards of NWNG and WHR rolling stock from the WHHR shop at Porthmadog.

BOOK REVIEWS

New Books
Reviewed by D. Wiffen

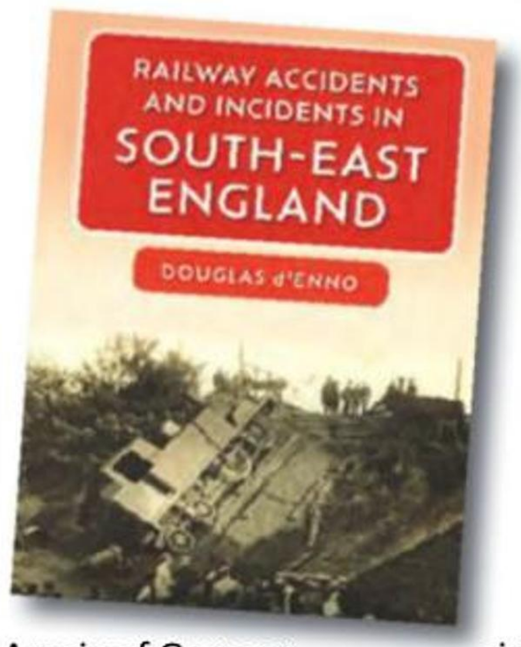
Railway Accidents & Incidents in S.E. England

Author: Douglas d'Enno
Publisher: Amberley Books
ISBN: 978-1-44568-119-1
Format: Softback, 96pp. £15.99
www.amberley-books.com

Author Douglas d'Enno has put together a clever and interesting book bringing railway collisions, flood washouts, and derailments, together with wartime attacks and even murder. The three counties of Sussex (1841-2018), Surrey (1839-2010) and Kent (1846-1994) have between them 90 such incidents and accidents listed in chronological order, and these make for an intriguing read.

Some may be well known, such as the Clayton Tunnel accident of 25th August 1861, which is reported as one of the worst in British Railways history, or the 1865 Staplehurst bridge derailment, which had a high loss of life and saw a famous passenger Charles Dickens survive to live another 5 years, although he is reported to have been a nervous passenger after his narrow escape.

Light Railway pioneer Colonel Stephens is mentioned in the Kent chapter with a map including his Kent lines and there are two accidents on his railways included, one in Sussex, the Selsey Tramway's derailment near to Golf Club Halt Station, which happened on 3rd September 1923, and also in Kent a crash on the Hawkhurst branch line on 18th February 1948 when a Horsmonden-bound train crashed into the buffers at Gouldhurst Station.



A pair of German aircraft being pursued by Polish Pilots in Spitfires while they were attacking a train passing near to Lydd Town Station is an extraordinary wartime account, is just one of several wartime incidents included. Many of these reports are supported with some wonderful photographs from the collections of John Alsop, Philip Barnes, and Laurie Marshall as well as information and pictures from the online Railway Archive and Railway Unions Records, adding an original touch as many of these photos have not been seen before.

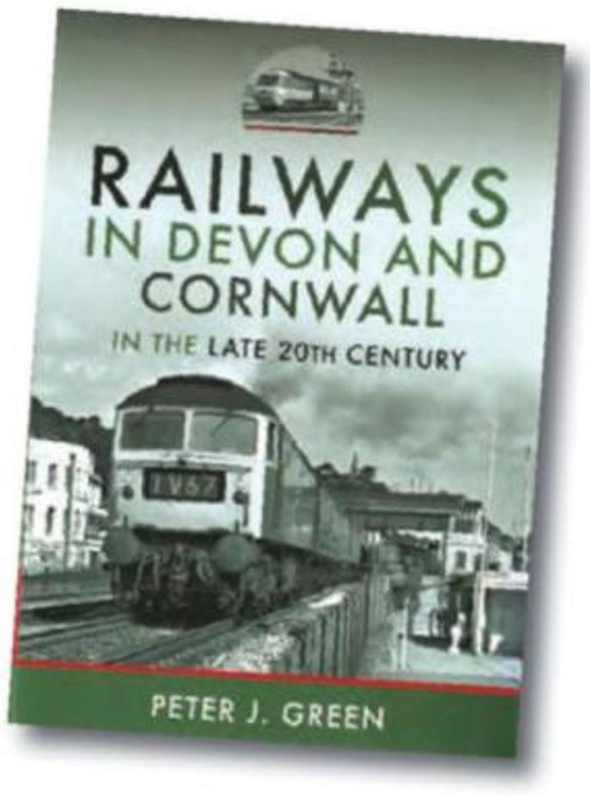
Full details of railway locomotives involved are given, including whether they survived to run another day, and also added is the number of injuries/fatalities, with the names of deceased railway staff mentioned giving this book a poignant edge, although it is far from a gloomy read.

Railways in Devon & Cornwall In the late 20th Century

Author: Peter J.Green
Publisher: Pen & Sword
ISBN: 978-1-39903-429-6
Format: Softback, 25cm x 18cm, 206pp. £25.00
www.pen-and-sword.co.uk

The Railways of Devon and Cornwall have always had a particular attraction for many railway enthusiasts, whether it's the wonderful viaducts of Cornwall, or the busy junctions at Cowley Bridge and Aller, the rolling Devonshire hills, or the wonderful branch lines like Looe or St.Ives.

There is something for everyone is this boo,k which covers them all and more. Diesel rules during this period with many large diesel Locomotives, DMUs and also the odd shunter covered by the numerous photographs. While all the photos are in Black & White they are high quality and echo the period superbly. There are interesting photos of the now closed North Devon & Cornwall line through Meeth & Torrington stations and there is a good mix of passenger and goods trains exemplified by a 1984 photo of an expanded Meldon Quarry at the height of its business.



Modellers will enjoy the large number of industrial lines included, and while the map at the front does not include freight or heritage lines they are included in this book.

Peter Green passion for Devon's railways was ignited when he was holidaying with his family in 1959 and travelling by train along the Dawlish Wall to Teignmouth, while later holidays in the 1980s was to expand his interest into Cornwall. This wonderful pictorial journey is a must for many collectors of books that take you right there.

The Welsh Marches

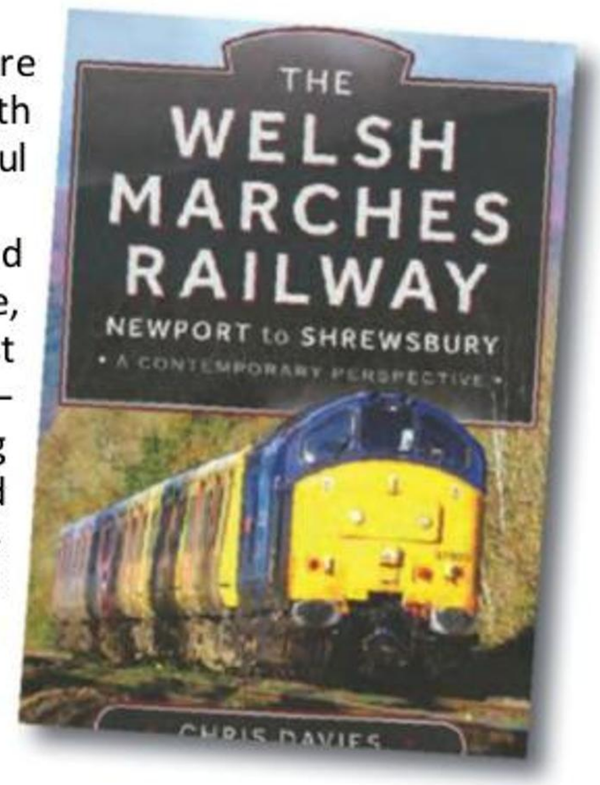
Newport to Shrewsbury

Author: Chris Davies
Publisher: Pen & Sword
ISBN: 978-1-39904-701-2
Format: Softback, 215pp. £29.99
www.pen-and-sword.co.uk

Author Chris Davies grew up in South Wales and from a young age was interested in railways, especially those locally. In this book he concentrates on the Newport to Shrewsbury section running along the borders of England and Wales, covering in detail its trains, stations, freight flows and passenger services, junctions and wonderful signal boxes.

The line was built by two independent companies and opened in 1853. By 1870 the smaller independent companies had merged into the GWR and LNWR, and it was extended in 1874 via Maindee Junction in Newport by the PC&NR, who also later merged with the GWR in 1876. Prior to Nationalisation, the section from Newport to Hereford was operated by the GWR, and the section from Hereford to Shrewsbury jointly by the GWR and LMS.

In 1958, under British Rail, the line was hit with closures, beginning with numerous intermediate stations that had served rural communities. In 1960 further closures included several branch lines, as well as the withdrawal of passenger services from Birkenhead to London Paddington in 1967. From the 1990s freight services declined further, but passenger services continued to increase as the line became an important route between South Wales and north-west England, and more recently for connecting the North to South Wales via the wonderful Shrewsbury Station.



The 'Absolute Block' method of signalling from 16 consecutive, mostly large signal boxes – the most used in this form across the UK – together with the largest working mechanical signal box in the world at Shrewsbury Severn Bridge Junction, is highlighted in this book for its grandeur and historic importance. There are lists of the original 35 stations along the line from Shrewsbury to Cwmbran via Hereford, of which only the nine main stations survive today. This includes the railway enthusiast's favourite, Craven Arms Station.

This book contains wonderful photographs of the picturesque rural routes, the continuing freight and busy passenger services, including the various diesel classes that run along the line. There is also a chapter featuring the many steam charters that have operated on the route, together with a few photographs of some of the final steam locomotives in service before withdrawal. The highlight, though, is the unique stations and signal boxes that still stand majestically along this railway line, making this book a great Christmas present for any railway-enthusiast relative or friend.

REVIEWS & NEWS

PRODUCTS OF NARROW GAUGE & INDUSTRIAL INTEREST

3D Minetubs

Brooks 3D Models
www.brooks3Dmodels.com

Following shortly on the heels of the releases in our last issue Brooks have added a set of 3 Mine Tubs / Minecarts to their 009 range. These are typical mine tubs, widely used and were designed and developed using original photos and drawings and extra help from Apedale Valley Light Railway

Height from rail top is 14mm, width 12mm, and length excluding couplings is 21mm. Parts supplied unpainted include three bodies/ chassis, six coupling sets - fixed loop and double-link close-couplings, three pairs of Kato solid metal wheels/axles, normally pre-fitted to the chassis, and three pairs of spokes resin wheels. The

manufacturer notes that the pin points on the metal wheels should be ground down flush to give the correct profile using a mini-drill or file. The spoked resin wheels provided are more suited to static display.

Brooks 3D are working on a small mining loco to go with these in due course.

Jottings: news, notes and nothings, in brief...

Sheppey Railway 200 Celebrations

As part of the Railway 200 celebrations on Sunday 28th September, a special Heritage Day was held for members of local groups and the wider community. Organised by the Sheppey Light Railway Greenway Group and the Kent Community Rail Partnership, the day commenced at the Criterion Heritage Centre in Bluetown on the Isle of Sheppey.

Various groups were invited to set up their stands and give talks to visitors. These included (in order of speaking) Martin Hawkins on the Sheppey Light Railway, Mark Kennedy from the Queenborough History Society on Flushing Pier, and Graeme Greaves on the railways of the Isle of Sheppey, on which he has recently published a book. Chris Jackson from the Colonel Stephens Society then gave a talk on the Colonel and his railways, and finally Lee Jarmain spoke about the Sheppey Light Railway Greenway Project, its progress so far, and plans to extend it all the way to Leysdown.

This plan is being well received by local people and businesses, and is supported by the Council. With many new houses being built on the Island, the project will become even more important as the population increases. After the final speaker, there was a 30-minute lunch break before a heritage bus arrived to take those who had booked on a tour along the Sheppey Light Railway route.

We were fortunate to have a 1960s Routemaster for the afternoon. This was RMC 1453, which had previously run on Green Line routes and was the first Green Line RM delivered in 1962. It was provided by the London Bus Company from Northfleet, who stepped in to help when the planned M&D bus became unavailable. The bus had a passenger capacity of 57, and it was full.

Our first stop was Queenborough Station. Unfortunately, it was not open, and the newly delivered noticeboards about the Sheppey Light Railway, which once ran from this station, had not yet been installed. However, we were able to see where the platform had been, and a brief

talk was given by Jonathan Fryer. We were lucky enough to have several experts on board who pointed out where stations had once stood and where evidence of the railway, which closed in 1950, could still be seen.

After various stop-offs, including one at Halfway to see the new information board recently installed in Power Station Road, we took a walk along the trackbed towards Scrapsgate. We eventually arrived at Eastchurch via Leysdown, where there is an excellent aviation museum, which was opened especially for us on the day. This once-busy airport had been supplied during both wars by the railway, which had a branch line into the site. The original depot where goods were unloaded and stored still survives.

After a great day, we eventually arrived back in Bluetown, packed up our exhibition items and returned home. It had been an informative and enjoyable occasion, bringing together many historical groups for this important celebration and local project.

Richard Trevithick 13th April 1771 – 22nd April 1833

While Richard Trevithick was a well known engineer and inventor, and the pioneer of high pressure steam, his contribution to railways and mining safety is recognised across the UK. He is commemorated in his home town of Camborne in Cornwall and also in Merthyr Tydfil in Wales, where he worked for many years. Lesser known,

however, is that there is another town that also recognises him.

There are statues commemorating the great man's work. Erected in 1932 in Camborne is a statue of him holding a small model locomotive, unveiled in the town square. A year later, in Merthyr Tydfil, a large model of his locomotive was placed on top of a monument, representing the engine that had run into the town on rails in 1804. One of Richard Trevithick's high pressure steam engines (No. 14) can also be seen in the Science Museum in London today.

Richard had found it difficult to continue working on steam locomotives due to a lack of funding. George Stephenson had always argued that Trevithick's work had been vital to his own locomotive development, and it was George – via his son – who would later come to Richard's rescue.

An unsuccessful attempt in 1808 to run a locomotive for circular public rides in Euston Square, London, failed due to constant track problems. Richard then turned his attention to developing a steam dredger, and he used the profits from this venture to invest in a silver mine in Peru.

When civil war broke out in Peru in 1826, Richard lost everything. Penniless, he became stranded in Colombia. Fortunately, a chance meeting with George Stephenson's son, Robert, in Cartagena resulted in him receiving his fare of £50 to return to the UK, and he arrived back in October 1827.

He was successful when he answered an advert for a job to build a steam engine for a new vessel with J & E Hall Ltd at their engineering works in Dartford, Kent. For this work he was paid £1,200. He became unwell in 1831 and, with limited funds, moved into the Bull Inn (a former coaching inn), which forms part of the Royal Victoria Public House and still stands in Dartford High Street today.

He sadly passed away in his room on 22 April 1833. His fellow workers from Halls Engineering carried his coffin to St Edmund's Cemetery at Dartford East Hill. Today, the cemetery has been turned into a park, but a stone, headstone style plaque has been placed on the wall facing Dartford town, close to where he was buried.

There is also a road named Trevithick Drive in Dartford, confirming his recognition in the Kentish borough. This was highlighted again in 2007 when Dartford Council unveiled a blue plaque on the outside of the Bull Inn, where he had lived during the last years of his life.

Corris Railway Society

Registered Charity No. 506908

Benefits of Membership

- Members are entitled to 4 free trips on the railway per year.
- Members receive a high-quality, illustrated, quarterly news magazine, the 'Corris-Pondent', which keeps them up to date with what is going on with all the railway's projects as well as with its operational activities.
- From time to time, a 'Journal' is issued, which records the ongoing research that is undertaken on the history of the railway.
- We hold an annual raffle, tickets are sent out with the 'Corris-Pondent'. We also operate a '100 Club'.
- Admission to the Society's Annual General Meeting where you can use your vote to influence the future of the railway.
- The opportunity to enjoy practical voluntary work on the Railway.
- Good company and new friends of all ages.

Members are encouraged to volunteer to assist with the building, operating and maintenance of the Corris Railway. If you want to remain an 'armchair member', you are more than welcome and can follow our progress online.

For more information please go online
and visit **www.corris.co.uk/memapp**
or email **membership@corris.co.uk**

Membership rates:-

Adult	£22.00 per annum
Junior	£10.00 per annum
Family	£45.00 per annum
Life	£440.00

(*Information correct as at June 2024*)

The COLONEL STEPHENS SOCIETY

For enthusiasts of the railways of Colonel Holman F Stephens

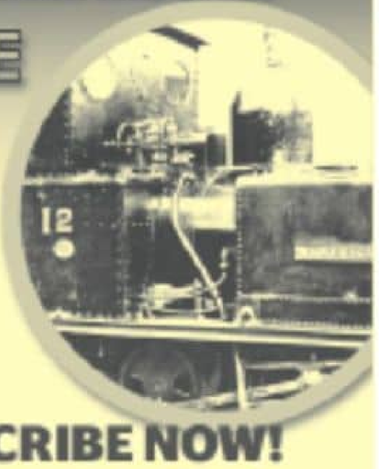
- ***Quarterly Magazine***
- ***Annual visits***
- ***Donations Programme***
- ***Low subscriptions***
- ***Drawings service***

For details: write with A5 SAE to Sheena Baylis
10 Cedar Court, Farrond Road, Hedon,
East Riding of Yorkshire HU12 8XL
css@thetrackside.karoo.co.uk
www. colonelstephenssociety.co.uk

The indispensable reference work on narrow gauge and industrial railways, and how to model them

NOW FROM THE PUBLISHERS OF *BYLINES* AND *BRILL*

NARROW GAUGE & INDUSTRIAL RAILWAY MODELLING REVIEW



- **Published quarterly.**
- **Never less than 56 pages.**
- **Always in full colour.**
- **Detailed, how-to pieces.**
- **Top quality references.**
- **Rare, hard-to-find material.**

SUBSCRIBE NOW!
4 UK Issues from £28.00
EU: £38.00
USA/World: £42.00

Scale drawings, prototype and model photos. Layout plans accompanying expert articles. History and facts behind narrow gauge and industrial railways old and new, near and far.
From narrow gauge lines of England and mountain railways in Wales to the most obscure logging, mining and agricultural lines in Europe and beyond.

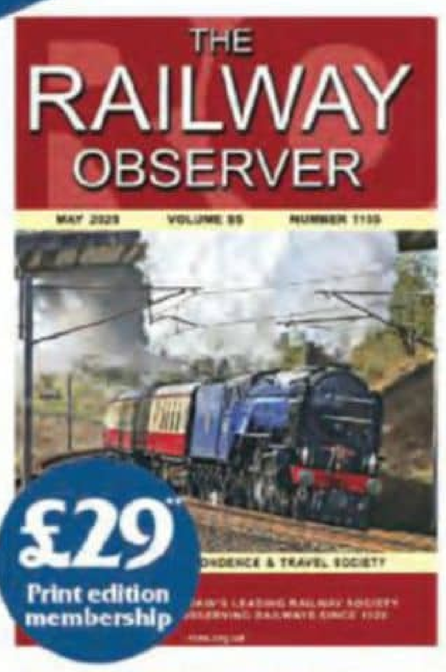
Subscribe Online at:
www.guidelinerailwaymagazines.co.uk
Call: 01582 668411
Email:
stella@guidelinepublications.co.uk
Or write to:
NGI Subscriptions,
Guideline Publications Ltd,
Dunstable Business Centre,
Office Suite no 2,
Blackburn Road,
Houghton Regis,
Bedfordshire,
LU5 5BQ

www.guidelinerailwaymagazines.co.uk

VISITS • BOOKS • DIGITAL ARCHIVE • LOCO DATABASE

Join Britain's Leading Railway Society

Just £10 for membership until December 2026*



Membership benefits include:

- Discounts on many of the Society's books
- Exclusive visit programme to railway facilities and heritage sites
- Talks and illustrated presentations at branches throughout the UK
- Discounted access to the Modern Traction locomotive database
- Extensive library and archive, **plus...**

***The Railway Observer* (digital edition) – A monthly 64 page full colour magazine, featuring:**

- Superb quality pictures
- Network operating reports
- Loco and unit stock changes
- Infrastructure news
- Articles on a range of railway subjects and much more...

www.rcts.org.uk/join

*Offer available until 30 April. Applies to new members, with digital magazine. Terms and conditions apply – total annual fee = £10
** Offer available until 30 April. Applies to new members, with printed magazine. Terms and conditions apply – Total annual fee = £29
RCTS is a charitable incorporated organisation, registered with the Charity Commission for England and Wales. Registered Number 1169995

RCTS
THE RAILWAY CORRESPONDENCE AND TRAVEL SOCIETY