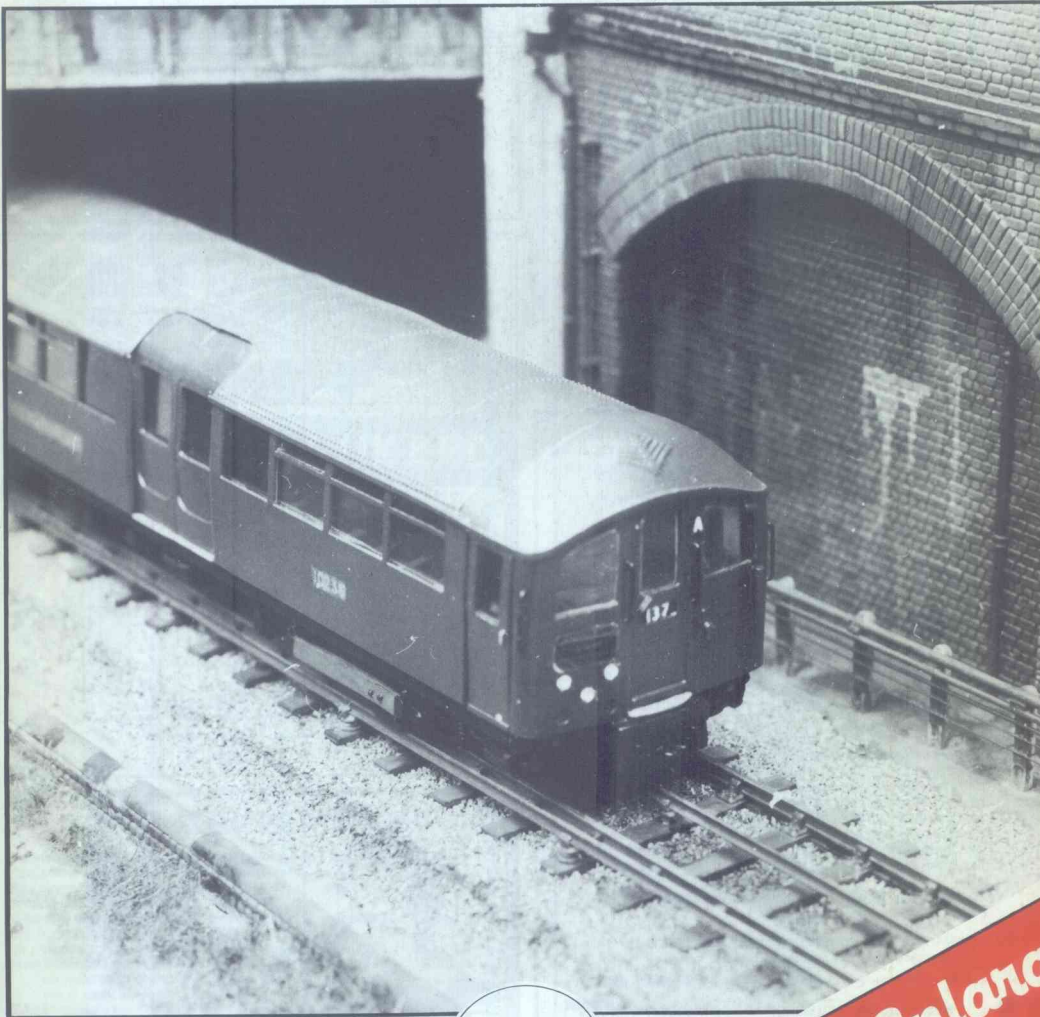


PRICE £2.00

MODEL RAILWAY JOURNAL



No.30

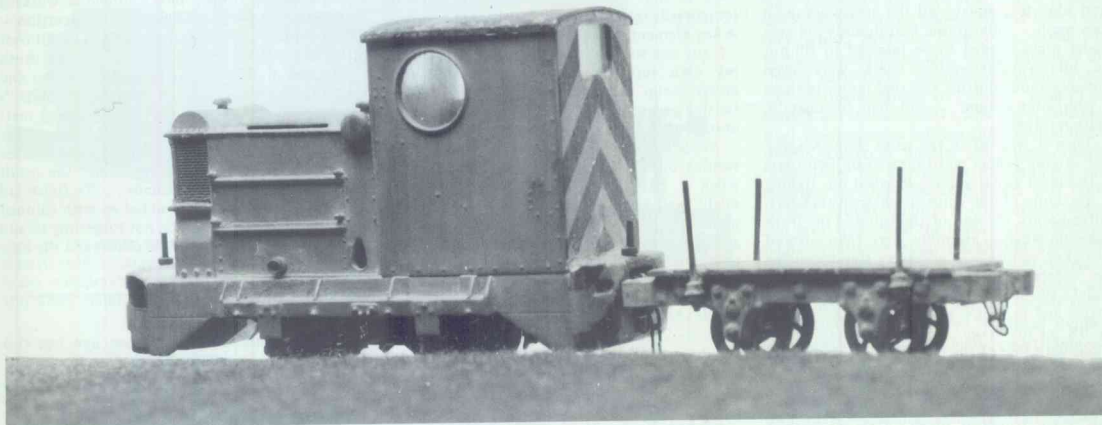
1989

*PUBLISHED EIGHT TIMES PER YEAR
Catering for the finescale modeller
in the smaller scales (2mm to 7mm)*

**Special Enlarged
Issue**

A Narrow Gauge RUSTON for 7mm

FRANCIS SAMISH builds the excellent Wrightlines kit and ends up giving it a scratch-built chassis when the initial quickie fails:



On paper, any prototype that offers steam locos with wheelbases as small as 3ft 6in, running around 20ft radius curves, should recommend itself to the modeller. A few simple calculations show that in 7mm scale – or 1/43 for the pedantic – this curvature translates to a radius of little over 5½ actual inches. The track gauge of the prototype in question being 18 inches, our miniature world shoots it down to a mere 10.5mm.

The two most publicised networks of this size which immediately spring to mind are the works railways at Crewe and Horwich; indeed Springside Models already offer a model of the latter's 'Wren' as preserved at the NRM. But there were others, ranging from the Woolwich Arsenal Railway to the common-carrier Sand Hutton Railway in Yorkshire. My own researches also turned up a set of four Fowler 0-4-2s for De Beer's diamond mines in South Africa – which topped out at 6ft wide and 10 or so feet in length.

To prove the concept, I needed a locomotive, but after a protracted start on a 40:1.5:1 double reduction gearbox for one of the Sand Hutton 0-4-0 Hunslet well tanks, reality demanded that efforts be directed towards a quickie. The same pragmatism dictated that the track gauge for the model would have to be 9mm rather than 10.5 – which is only 1½ scale inches out either side, but did allow the use of Peco track to get going.

The quickie itself materialised in the form of a Wrightlines Ruston 38/40hp four-wheel diesel. Once purchased, the search began for a commercial N gauge chassis of the same wheelbase, and possessing decent slow-running characteristics. A cheap Lima shunter seemed to fit the bill – initially – and work proceeded slowly on making the kit fit around it.

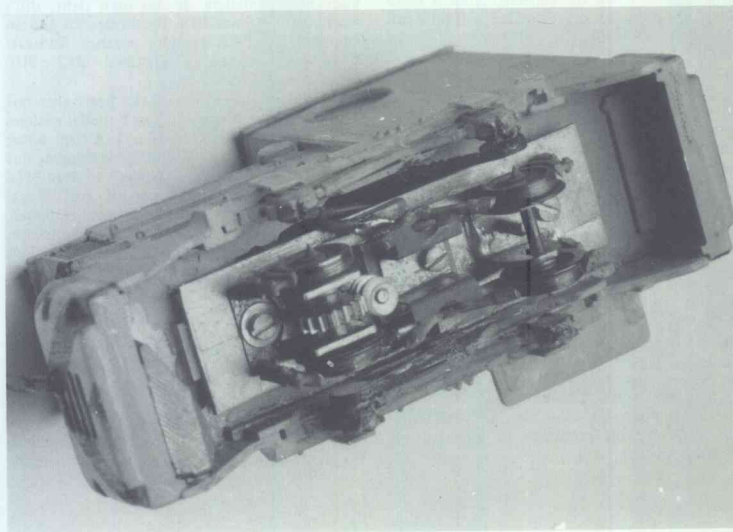
The prototype's wheel diameter varied between a nominal 1ft 3in to 1ft 4in. Allowing for a 'flange wear factor' of 2 inches meant that

it was possible to press some spare 8mm Parkside Dundas six-hole discs onto the Lima axles, and still end up with a reasonable-looking model. Indeed, one example now at Amberley Chalk Pits Museum arrived there with double-flanged wheels...

No real problems were encountered with assembly of the whitmetal superstructure. After carving out a big hole to suit the Lima mechanism, a brass box was made up to mask the protrusion into the cab area. Ultimately this was to be disguised as the driver's seat. One niggle concerns the position of the key locating

pips for the cab front plate; on my sample it seems that the RH lug had somehow migrated further forwards – leading to a just-discernible skew of 3 degrees of the cab front.

As supplied, the kit comes with optional outside frame extensions. These are clearly to be seen on the 18in gauge Ruston at Bicton Gardens in Devon – though are absent on gauges of 2ft. Presumably the makers needed the extra width to squeeze the drive chains in, since on such a narrow gauge, the back to back measurement only just clears the engine and gearbox sumps. On the model the chains are



The new chassis, built into a completed body after vain attempts to use a Lima 'quickie'.

non-working, and are made up from strips of plastic overlaid with tiny rectangles of micro-strip, each pivot pin being a 10-thou square cube of styrene floated on with a brush.

Detailing should have stopped at merely adding bonnet clips made from some old Kemtron (USA) HO pipe clamps; on reflection split pins would have served just as well. Being in a silly mood, I thought that it would be a good idea to replace all the grillework with brass mesh – only to find that dummy radiator header pipes needed to be inserted to fill out the all-too-visible void. There were even thoughts about putting a second motor in there to whirl a fan around . . . and then, fortunately, sanity returned.

Then it was off to the paint shop. A spray coat of grey primer was followed by two coats of Humbrol signal yellow, brushed on. Itching to use some of the Impetus chevron transfers, buffer beams, the end of the cab and the front tank-cum-radiator assembly were then covered with gloss varnish – a necessary step to getting the waterslide transfer to conform to the model's surface. A couple of evenings of careful cutting and matching saw the chevrons – from the BR set for 7mm – affixed. To match their colour with that of the body, each yellow stripe was washed over with dilute Humbrol signal yellow. At the same time, any places where the black had not exactly fitted were touched in with matt Humbrol black. After a coat of Humbrol eggshell varnish, the differences between all the various shadings were hardly visible.

THE BOMBSHELL

Then came the bombshell: the Lima chassis gave up the ghost. Or, more accurately, it led me a merry dance towards improving slow running with track-wiping pick-ups – even a skew' wound armature at one stage – and fruitless polishing and oiling of all the parts I could think of. Eventually, there was nothing for it but to build a new chassis, an infinitely more difficult task when the superstructure is completed. Deciding on drastic action, a frantic call was sent to Kemp Models; did they have a small motor? Yes, they did, said the voice, and a couple of days later a Kemp KM17 arrived in the post. This small five-pole unit was then fixed vertically to a simple brass plate chassis, fitted with two soldered-on U-shaped axle brackets. Mated with Salford Models 18:1 gears, and a cut-down Perseverance flywheel, the thing actually ran first time off the bench. Though only driven on one wheel – since the other is compensated around an adjustable centre bolt – it will still whizz along at a respectable trot.

Brake shoes and the sand piping are basically as supplied by Wrightlines, but have been cut away from their mounting brackets and soldered to brass mountings for added strength. 'Glass' – suitable cracked – was made up from scraps of Plastikard glazing, and, for good measure, a control panel was made up from the same material. Barring weathering and a driver, this particular 18 inch Ruston 38/40hp was complete.

FINISHING

My own personal preference is for weathering stock and locos with thinned-out washes of colours. These are made up using a palette of Humbrol orange to represent new rust, mixed with track colour and various whites and browns. Blobs of paint are dropped onto a piece of fine card, and mixed to taste – if they start to dry, the chosen shade can often be temporarily revitalised by a brushful of thinners. A key element is Humbrol's own Flattening Agent – I am not sure whether this is still available; my own supply comprises a much thinned down 'soup' kept in a screw-top jar. The flattening agent's major advantage is that it ensures that the colour applied dries truly matt – for some time now I have been plagued by various oil-based paints drying semi-matt, just when a flat finish is demanded. Old-hands might well say: "Ah, but you should stir the pigments thoroughly" – which I always do – and am continually perplexed when the finish goes 'off' all wrong like this. Can any paint

technicians or chemists out there suggest a remedy?

On the Ruston, care was taken to keep all this streaking vertical, using a brush dipped alternately into thinners and the chosen palette mix, the only proviso being that with the flattening agent, care should be taken so that the final shade does not dry too light.

In line with the loco's intended working environment – a stone quarrying operation – fine chalk dust was sprinkled liberally all over the still-wet superstructure. A soft, dry brush was used to spread this into all the nooks and crannies. I have deviated from Allan Sibley's suggestion (*MRJ* No. 18) of spraying matt varnish as a sealer, and opted instead for strategic additions of the thinned paint washes to fix the material into the finish, the result being not as awful as it sounds . . . To finish, oil and fuel oil drips were added in with thinned out dark greys and blacks, not forgetting to add a touch of gloss around the chains and the base of the control levers in the cab.

SMALL SUPPLIERS FORUM

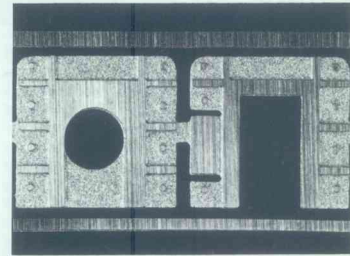
TRADE GRAPEVINE

BILL BEDFORD, the trader whose etching artwork service has already been widely advertised, is extending his service to offer complete kits for trade customers and custom etches – such as station nameboards and mileposts – to individual modellers. In his own right, Bill's working on a 4mm NER footbridge kit and no less than five NER corridor coaches. Address: Leebiton, Sandwick, Shetland ZE2 9HP (09505 327).

Modellers in 4mm can take heart that not all developments in off-the-shelf model vehicles are of interest to the 7mm boys. A firm called **EXCLUSIVE FIRST EDITIONS** is bringing out a range of buses and commercials to dead 1/76 scale, starting with a series of AEC Regal double-deckers and a wide variety of boxes, flats and tankers based on the AEC Mammoth. The ones we saw at the British Toy Fair looked good, with sensible liveries. Prices and details as they come in.

More still from **BRANCHLINES**, whose proprietor Andy Mullins is extraordinarily quick off the mark. Since seeing Guy Williams' work in *MRJ* (and in the new Wild Swan book *The 4mm Engine*), he has specially produced 12in lengths of brass tube to enable the rest of us to emulate Guy's loco bearing system. It has 3/16in outside diameter and an inside clearance for 1/8in axles and costs £1.50 per length.

Something else that caught our eye was this new set of hornguides and bearings for 4mm – they actually look like the real thing! The set



consists of three pairs of guides (two open, one closed for the driven axle) and comes complete with two Kean-Maygib top hats and four Impetus square-pattern sliding bearings. Cost: £1.75. Branchlines is at PO Box 31, Exeter, Devon EX4 6NY.

Look out for the newly-packaged Super-glue 3 from **LOCTITE** – it comes with a pin to seal the hole, replacing all those press-on, screw-on caps that weld up solid after a couple of uses. A real technological breakthrough . . .

Clive Croome, proprietor of **PERIVALE WAGGON WORKS** – producer of the finest 4mm wagon kits, bar none – has moved. The address henceforward is Flat 6, Warwick House, Links Road, Acton, London W3 0EP. All six kits in the range, being steel-underframe Gloucester 10T opens from one plank up to seven plank plus variants, are still available at £8 each post free. An SAE brings full details.

Of interest to those who were inspired by our piece on London Transport are some 4mm kits of Metropolitan Ashbury coaches by **KEITH THOMAS**, who will be supplying through Puffers of Kenton. The kits, depicting stock originally built before the turn of the