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MODEL RAILWAY JOURNAL

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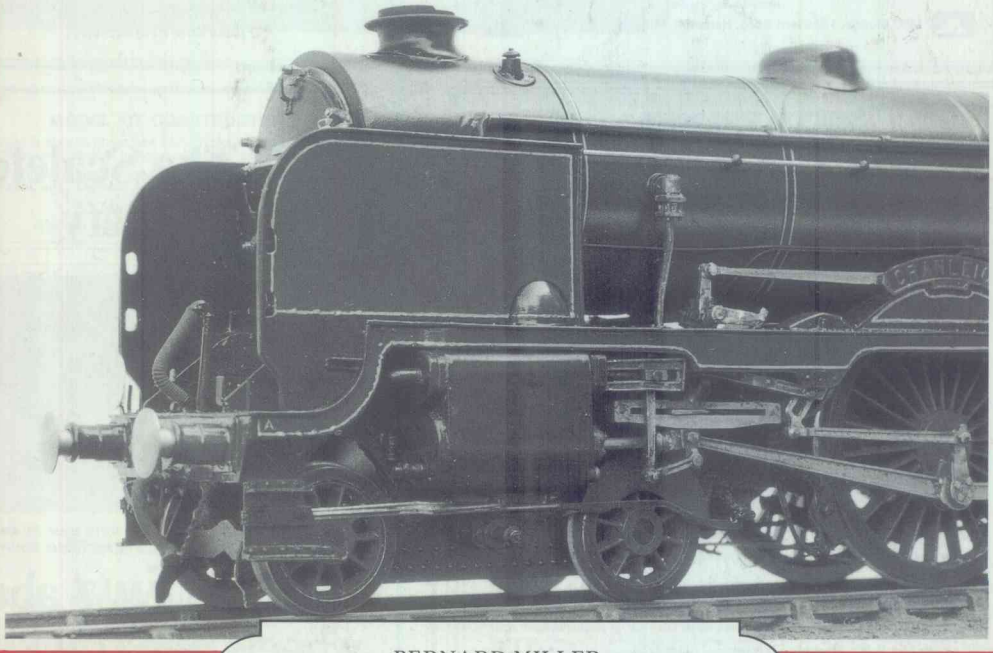
59

## Merry Christmas
to All Our Readers



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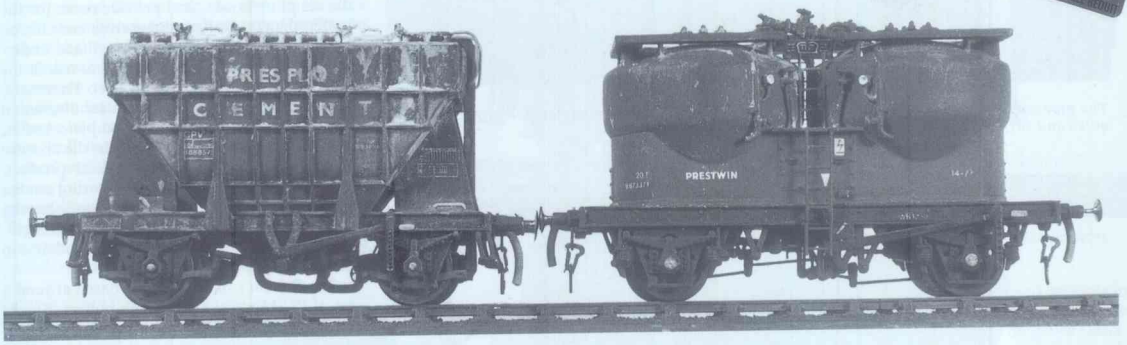
# UPGRADING 'Two Bob' Cement Wagons


**The Dapol/Airfix 4mm construction kits of the distinctive 'Presflo' and 'Prestwin' cement wagons are classically suitable cases for the kit-bashing treatment – cheap and cheerful, yet basically accurate examples of vehicles that would be hell to scratchbuild. FRANCIS SAMISH took both on:**




Even by today's standards, the Dapol — nee Airfix — Prestwin and Presflo plastic construction kits are quite sophisticated examples of the die-sinker's art. To scratchbuild the Prestwin, for instance, would almost certainly require the services of a lathe to turn the two complex cylindrical container vessels accurately; the situation with the Presflo is perhaps not so bad, although the intricate tracery of strengthening ribs around the tapering hopper do pose their own special challenges to the miniature wagon worker.

When the kits were first issued in the early '60s, the prototypes had just entered service on BR tracks. Technically, both are classed as 'covered bulk carriers'. The Prestwins lasted a comparatively short time in revenue service — according to stock census figures in OPC's *Illustrated History of BR Revenue Wagons, Vol. 1*, the whole 130-odd strong fleet was withdrawn some time after 1977. Apart from the more obvious cement and dry fertilizer traffic, Shell used a number to ship 'Teepol' out from Bromborough Port. The TOPS code was CQVC.

The Presflo story is a little more complex. The Dapol/Airfix model actually represents a 20.5 ton Presflo, which has the BR 'hopper' type of clasp brake underframe with two shoes per wheel, making eight in all (TOPS code here being CPVD). A slightly bigger 21.5 ton version also exists which has the more conventional four-shoe braking system fitted and a longer wheelbase (which goes under the CPVE TOPS code).

Just to complete the picture, BR use the CPVF and CPWF codes to describe a completely different family of Presflos, which owe more to rail tanker technology than hopper wagon construction, though both are rated at 22.5 tons. To make things even more confusing, some of the CPVE Presflos have now gone into ash service, under TOPS codes CSAD. At least one — B874127 — has also received the BR dual circuit air-brake system and combined disc/shoe brakes.

Back on the plastic sprues, there are some minor points to be aware of before you start surgery. For 18.83mm gauge, clearances are very tight on both wagons. I managed to compensate the Prestwin, but the virtually dead-scale depth of the solebars precludes any vertical clearance for the more usual form of rocking W-irons. Shame, because Mike Trice of MJT has just come up with a set of BR plate irons (his ref. No. 2297) that would fit either of these wagons to a tee.

On the Presflo, the space 'twixt the solebars is even more at a premium. If, like me, you are a firm believer in making all the moving parts get-at-able, a number of compromises have to be accepted. Sprung buffer heads, for instance, need space behind the headstock for the shanks to move back — not to mention room to get your chosen manipulative device in and out so as to slip in retaining collars and such-like.

Planning ahead like this is much more important with these latter-day BR wagons than when dealing with earlier Big-Four or RCH designs, because in the main their complex shapes virtually demand the use of a spray paint finish to get uniform coverage in all the nooks and crannies. And even then, items such as the Prestwin's mesh walkway may need to be painted and fitted separately.

When assembling the Prestwin's two hopper cones, care needs to be taken that all the flash is removed, and that the join between the various sections is flush. Though I used Humbrol Liquid Poly, it might have been an idea to use a polystyrene cement instead for this job, as this would probably have filled some of the gaps in one go rather than requiring the use of a separate filler compound.

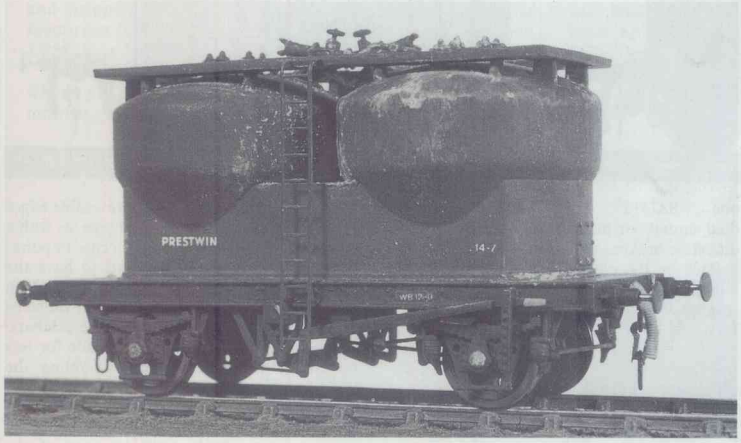
Thinning of some of the more visible edges can also be carried out to advantage, as with a whitemetal kit; axleguards are a case in point. Additionally the Presflo needed to have the footsteps slotted out as per the real thing. You might — as I did — also want to move the steps further outwards to the ends of the solebars. Use a sharp single-edged razor blade for this operation, preferably after assembling the underframe.

On the Presflo the end-platforms are moulded as overlapping sections rather than being represented as flush with the tops of the solebar. I found it easier to drop a completely new 40-thou sheet rectangle to sit between the moulded solebars than attempt to modify the existing part. However, do remember to shim up the four triangular hopper supports to make up for the resulting loss in height. Use slivers cut from the kit platforms, which will automatically give the correct and uniform height increase.

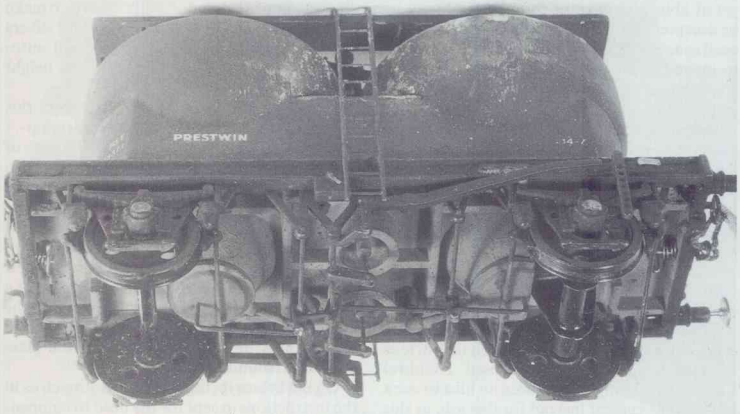
I chose to reproduce the BR version of this wagon rather than one in private ownership — the major differences seem to be the omission of the two 'billboards' on either side of the tank to carry a corporate logo. Apart from filling the two holes for the locating pegs, the air pressure gauge should be relocated further up the side of the hopper. If you cannot pare the moulding off successfully, it is an easy matter to make a new gauge up with a sliver of plastic rod on top of a square styrene 10-thou shim. Countersink the face of the gauge with an appropriately-sized drill to provide some semblance of the glass and its surrounding rim.

On the Prestwin, things went very much as in the instructions except for the need to compensate one axle. A section of brass tubing the same ID as the axle (2mm) was soldered in a U-section of brass shim with two holes drilled in the base of the bracket. These slip over two

*The pipework on the Prestwin, larded with muck and dust – interestingly complex, yet relatively quick and easy to do.*




*The Dapol/Airfix Prestwin kits make easy work of a vehicle that would be a problem to scratch-build accurately, surely the ultimate test of a worthwhile kit (especially when it comes this cheap). The new buffer heads and etched laddering make all the difference.*




*Tarted-up running gear. Note the compensating axle on the right, accommodated by a slightly butchered hopper base.*

wire pegs in the floor of the Prestwin chassis, and pivot on a 'knife-edged' slice of 40-thou plastic strip. The ends of the axle are cut off flush with the wheels, and that's all there is to it.

To make room for the scale drawgear, I removed all the ribbing behind the solebar down to the bottom of the floor. Despite this, recesses had still to be carefully ground — using a dental burr in a mini-drill running at medium speed — so as to clear the springs for the coupling hooks, and provide room for the buffer shanks. Buffers themselves are Gibson products; though they may be a shade under-size, the 1ft diameter head seems to match the proportions of the kit's own Oleo Pneumatic 1ft 8in buffers (note that this latter dimension refers to the length of the complete buffer, rather than the head diameter). In the absence of an easily available commercial product, I rashly made my own stocks by boring out the kit's buffers, cutting of the heads, and sleeving them with a piece of brass tubing for strength. These tubes were peened over at one end to stop the spring popping out t'other.

The Presflo's buffing gear is based around a set of PC Models' LMS coach buffers. Stocks were first 'turned' down with a file in a mini-drill to the requisite size, and bored out three quarters of their distance down to take a Kadee compensated bogie spring. Next, a slot was cut from the rear to take a trapezoidal section of brass shim, which represents the reinforcing angles on the prototype, drilled out after soldering up. The last job was to reduce the diameter of the PC Models buffer heads, and sleeve the shanks with more slices of tube — both to give the required 'thickness' and provide a seat for the springs to bear on. The shanks are tinned to give the impression of the prototype's bright steel rams. The end product should I hope be passably recognisable as a heavy-duty BR 2ft Oleo buffer. The Dapol/Airfix kit, incidentally, seems to come with a shorter Dowty pattern buffer which may well be correct for the first series of Presflos.

Both wagons' buffer shank are retained by thin sleeves of wire insulation of the appropriate size. Unlike super-glued collars, or blobs of solder, this method allows for removal at a later date. Likewise with the drawhooks proper, which on both wagons are retained by a form of P-clip which can be slid in and out without needing to bend the tag over each time. A spring-compressor device — in the form of X-Acto aluminium heat sink tweezers with slotted ends — takes the trauma out of drawgear assembly.

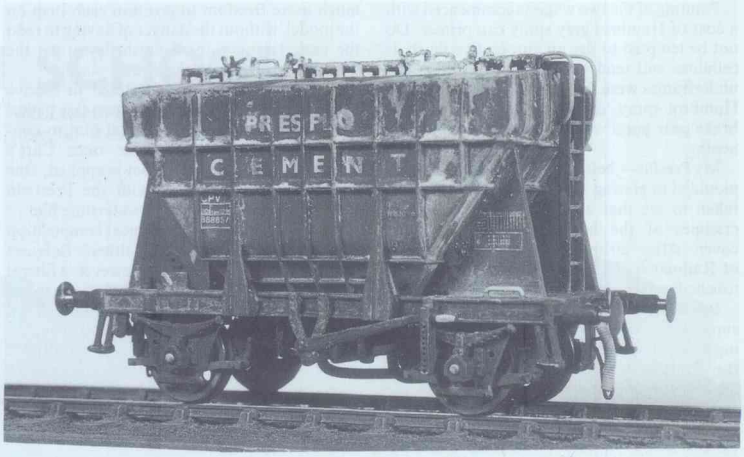
MJT coupling hooks from the BR plate wagon axleguard etch are used on the Prestwin — these are very close to scale, but, because of their size and length, are fitted with home-wound springs and similarly sized miniature P-clips as described above. The Presflo has Smith's couplings, and both wagons have the appropriate Instanter three-link couplings made from a mix of PC Models etched links and Smiths pre-formed wire loops.

Much time was spent cogitating the likely layout of the Prestwin's underframe. In the

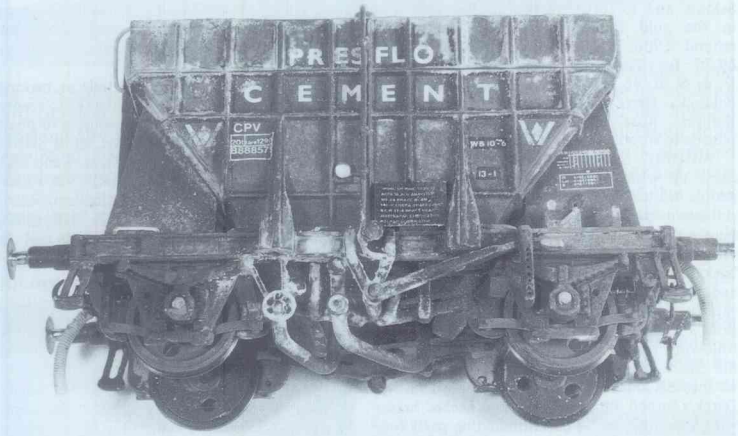
end, the plunge was taken with MJT shoe/hanger van sets, allied to bits of Gibson handrail wire and styrene 40-thou cranks. It all looks very impressive, but I am already quaking in expectation of a more learned MRJ reader gleefully writing in and pointing out the obvious errors.

To make things more interesting on the underframe of the Presflo, the only way of getting 100 per cent correctness seemed initially to scratchbuild the lot from brass strip! Again, compromise had to rule the day, so the kit's own assemblies were used, mounted as close to the wheel treads as space limitations allowed, and dressed up with detachable shim links to represent the under-axle pull bars of the BR 'independent' clasp brake. Even so, large lumps had to be carved out to accommodate the pull bars between the face of the 18.83 wheel and the plastic axleguards. Friends who have followed the construction of the Presflo have, however, kindly asked when am I going to make one in 009 with working brake gear.

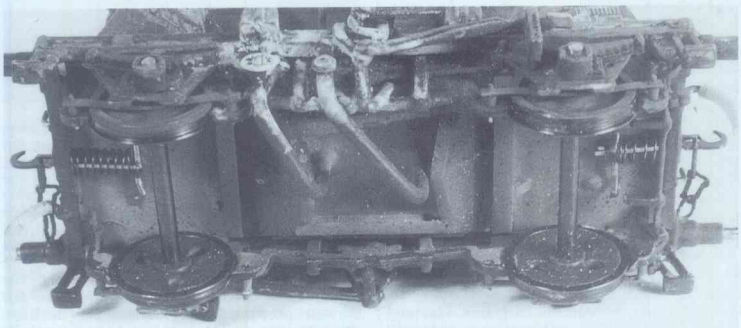
One of the most characteristic features of modern wagons is the see-through steel mesh walkways. The original idea was to cut slots in the kit's plastic roofwalk, and then Superglue fine etched mesh over the top. Things were looking good until the painting stage, when, in spite of my best efforts with an airbrush to mist on a fine coat of BR bauxite, most of the gaps in the etch became clogged with paint. In retrospect, it all seems to have been much ado about nothing as once a decent larding of simulated rain-streaked cement dust is applied, the whole thing cannot avoid getting clogged anyway!




*The Presflo, another tricky one to do without the benefit of a kit. A full train of these vehicles – which is readily attainable with these kits – looks mighty impressive.*




*This picture shows the additional transfers and the slotted out steps on the ends of the solebars.*



*Underside of the Presflo with brass wire and strip representing the plumbing.*

Ladderwork on both models is courtesy of Model Signal Engineering — their etched all-in-one ladder for the Prestwin, and a much-butchered fold-up variety for the Presflo. On the latter, the handrails extending over onto the roof caused much vexatious language because they could only be bent to shape after being soldered in to the ladder — so it was one shot or nothing! The Prestwin's hatches are a little too small to accommodate holding-down dogs, so, rather than spoil the model, I left them off. No such cop-out was available on the Presflo, so there was nothing for it but to solder each one up in turn and then Superglue individually in place. Drill the tiny holes before cutting a strip off, as this is much easier than trying to hold each ½mm wide piece on its own.

Unloading on the Presflo is from below, and the arrangement, so far as I have been able to fathom, consists of two outlet valves, one equipped with a large five-spoke handwheel. The Dapol kit only offers a pair of nondescript boxes hung from the solebar, and none of the underfloor trunking — a curious omission in the light of the Prestwin's completeness in this same area. 2mm thick brass bar was, however, pressed into service on the model, with the handwheel shafts and supporting bracketry simulated by strip and blobs of solder. Yes, the large handwheel has curved spokes rather than straight ones, but by this time I — not to mention MRJ — was getting a little impatient, so a bit of shortcutting was deemed 'politick'.

Painting of the two wagons commenced with a coat of Humbrol grey spray can primer. Do not be tempted to use an automotive finish as cellulose will tend to 'etch' into plastic. The underframes were then given a quick squirt of Humbrol spray 'earth' to make sure no bar brake gear parts would peek out from underneath.

My Presflo — being an Airfix original — was moulded in glaring yellow, and care had to be taken to see that all the various nooks and crannies of the hopper received adequate cover. After airbrushing on the base coat of Railmatch BR Bauxite, the solebars were touched up with a blackish-brown mix.

Lettering on the Prestwin is simply that supplied, except the overhead electricity warning flash which comes from an SMS sheet. On the Presflo, a combination of Woodhead Models rub-on transfers and SMS waterslide decals were used. After trying to create the intricate Presflo data with various bits and pieces of rub-on lettering, I hit on the idea of using the Woodhead items to create my own 'transfer' on blank areas of an SMS sheet. This gives you much more freedom to position each item on the model, without the danger of having to redo the underlaying painted finish if you get the 'one-shot' transfer in the wrong place.

In each case, the area destined to receive transfers were first varnished gloss; this makes it easier for the waterslide decal film to conform to the model's surface once Carr's Transfix or Walther's Solvaset is applied. One problem I did encounter with the Prestwin transfer set is that the Dapol waterslide film — either because of age or chemical composition — did not agree with the Walther's Solvaset softening agent I employed. However, a liberal coat of matt varnish did eventually succeed in persuading the offending panel to lie flat. Even so, some hand lettering was required. The diamonds in the centre of the Presflo's double-V symbols — which I think imply a bottom unloading hopper — were done in this way. On the same wagon's unloading panel, the lettering is made up of a mix of more conventional sentences from a Woodhead sheet; at normal viewing distance, most people will not be any the wiser.

Bearing in mind that the transfers supplied with the Prestwin effectively date the model as representing a wagon in service during the mid-1960s, I went slightly easier on the weathering here than with the Presflo. However, in both cases the technique was identical. First, streak thinned-out varnish mixed with just a smidgin of matt brown or grey downwards over vertical and sloping surfaces, going across the wagon, and then sprinkle ground-up white or grey chalk over the still-wet surface for the cement texture.

To ensure that this fine dust sticks in all the right places — on top of braces and walkways etc. — use a dry brush to tease out any unwanted 'balling' of the powder. Do not be tempted to try to airbrush another coat of matt varnish over the top in an attempt to seal everything in. After some initial loss, the majority of the 'dust' will not come off, even when subject to regular handling. If anything, the finish will absorb grease from the fingers, giving rise to yet more subtle variations in the texture.

*MRJ wishes to thank Eric Kemp for his help with this article.*

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**TRADE GRAPEVINE**

Brian Champion of SET SCENES has sent us some samples of scenic materials he produces. The first and probably most important to followers of the Barry Norman school of landscaping is the light brown 'hairy' felt carpet underlay which is so useful for all manner of ground cover and rough grass. It's quite hard to come by these days, especially in small quantities, so this is quite a valuable find. Brian charges £1 for about 2 sq ft, larger pieces pro rata, plus 50p postage on orders under £10. Before you order larger amounts, take it from us that a £1 piece will tease out to cover quite an area. Set Scenes also produce ground foam scatter material and while we don't normally go for scatters, these are very fine, superbly coloured and altogether a different class of scenic cover. In all manner of tree and earth hues, they cost 75p per bag, plus postage. An SAE to PO Box 63, Crawley, West Sussex, brings the list. Incidentally, we recently suggested that Kirtley Models produced Set Scenes. Well, whilst Kirtley are valued distributors, Brian actually produces them in Crawley. MRJ regrets the error.

Danny Pinnock of D & S MODELS shows us some examples of the 'methfix' type transfers, produced by Frank Rainger, he is selling to suit GNR/East Coast Joint Stock coaches in both 4mm and 7mm. Everything is there – company names and crests, class designations and such legends as 'Royal Mail', 'Dining Saloon' and so forth, all beautifully produced in the gold shadowed lettering used from around 1906. Sheets cost £4.50 for 4mm, £9.75 for 7mm, postage 25p, either from D & S at 46 The Street, Wallington, Near Baldock, Herts SG7 6SW, or from Frank Rainger, Rose Cottage, Waterhouse Green, Whittle-le-Woods, Near Chorley, Lancashire.

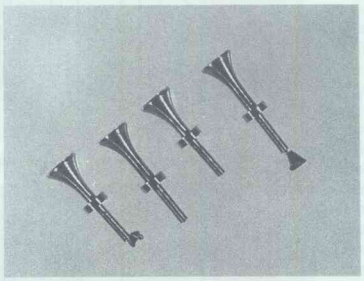
MODEL SIGNAL ENGINEERING has come up with one of those ideas that makes people wonder why they didn't think of it – rub-down transfers for signal arms. Everyone knows that it's hell to paint bars and chevrons on signal arms, so Derek Mundy has produced background colours and bars (in red, yellow and black) to suit pretty well every shape and variety. Each sheet carries enough for 33 arms, price £10.50 in 7mm and £6.75 in 4mm. Also, following the success of the 4mm kit for the old SECR 'dance hall' brake van (which lived on into SR and BR days right up to the 1980s), Derek's turned out a 7mm version. Etched brass with cast whitemetal parts (including parts for engineering, PW or crane vans) it costs £39.50 from MSE at PO Box 13, Leamington Spa, CV31 1GN.

Our thanks to Simon de Souza, who recently recommended readers to the Tamiya/Kirtley type of 'scrawker' tool (as shown in this column) when he couldn't find a replacement for the excellent tool he previously used (and wore out). Well, he's found the exact replacement now, sold as a 'plastic sheet cutter' by MENDIP MODELS of Christchurch Street West, Frome, Somerset, BA11 1EQ (0373 452522) at £2.95. Ring for availability and post costs.

CALEY COACHES, makers of 4mm Caledonian vehicles, is producing etched brass kits for Caledonian Railway non-passenger coaching stock. They are: 30ft six-wheel covered carriage truck to Diagrams 87A and 101 – first built in 1912, they lasted until 1960 (catalogue No. CC17); 30ft six-wheel fish van to Diagram 116, built 1914 (CC18); 28ft six-wheel meat van to Diagram 89, built 1912 and lasting to 1951 (CC19). Each kit costs £16.00 and is available direct (post £2 per order) from Caley at 15 Tay Crescent, Bishopbriggs, Glasgow G64 1EU.

Following Dave Holland's article on making small drills in MRJ No. 57, our thanks to reader J. K. Outram for the following sources of pivot steel and piano wire: H. S. WALSH & SONS, 243 Beckenham Road, Beckenham, Kent BR3 4TS (081 778 7061) and MEADOWS & PASSMORE, Medmaw House, Farningham Road, Crowborough, East Sussex, TN6 2JP (0892 662255). Incidentally, Mr. Outram – in common with a number of correspondents –

*Continued on page 304*



*Some details which fall out of the packet seem just too small to be worth bothering about, but it would be a mistake to treat these tiny, exquisite turnings by Taylor Plastic Models like that. Although they are incredibly small, being scale size diesel/EMU air horns for 2mm scale locomotives, they give an unexpected and worthwhile lift to any model and are worth the £1.49 they cost per two pairs – even if they do at first sight appear like grains of swarf. The straight tail, just 0.35mm thick, can be left straight (as for a Class 60, which TPM are planning to issue in kit form) or bent through 90 degrees for roof mounting. TPM, which has also just issued a new price list of almost 40 kits and components, is at 20 St. George's Square, Forest Gate, London E7.*