PRICE £1.50

MODEL RAILWAY JOURNAL

THE MODEL RAILWAY JOURNAL

36

INKERMAN STREET

Starts in this issue

Also in this issue:

PERSPECTIVE MODELLING
SLATER'S 7mm TANK WAGON KIT
'TALYLLYN' IN 4mm SCALE

9 770267 320005 01

HELPING MODELLERS IN THE SMALLER SCALES (2mm-7mm) TO BUILD BETTER MODEL RAILWAYS

Published eight times a year

'TALYLLYN' in 4mm

FRANCIS SAMISH builds a 1940 version of *Talyllyn* No. 1 – a locomotive which can still be seen today – using the new Meridian kit:

As running today, the Talyllyn Railway's Fletcher Jennings 0–4–2 is a subtly different animal to that which left Whitehaven back in 1864. Portraying the engine as it appeared around 1940, using the kit produced by Meridian Models (124 Blackheath Hill, Greenwich, London SE10) is, however, not difficult, although somewhat involved. Priced at £15-odd, Meridian's kit is intended to sit on the Ibertren 0–4–0 N gauge chassis, and represents the locomotive in current condition. A well illustrated and easy-to-follow 10-page instruction leaflet is included, together with a length of brass wire and two (!) handrail knobs. The rest is whitemetal, though Meridian have taken the trouble to have the works, number and nameplates etched.

Comparing the dimensions of the key components against drawings and photographs in J. C. Boyd's seminal *Talyllyn Railway* (Wild Swan), a number of anomalies do emerge. Leaving aside such straightforward issues as sandbox location and vacuum braking, the pre-preservation era loco had buffer beams made out of two different sizes of wood – and boasted a riveted join running from back to front across the cab weatherboard. In the running gear department, things are a little more fraught. Wheel diameter on the Ibertren 'Cuckoo' chassis is 6mm as opposed to the correct 9mm (or 2ft 3in) and Meridian have evidently compensated for this by mounting the superstructure a corresponding four or so scale inches higher. Moreover, the view underneath the boiler barrel is somewhat spoilt by the remnants of the Ibertren current collection plate. Though a perfectly understandable compromise from a commercial standpoint, it has also to be said that fitting the correct 9mm diameter wheels is not the simple answer it might appear. Their increased diameter would merely add another three scale inches to the height of the model. More to the point, the bigger wheels start to cut into the underside of the Ibertren motor . . . ah, the perils of going finescale!

What to do? One approach is to buy a set of Sharman 9mm wheels, brass bushes for the matching 3/32nd axles, and go from there. The Ibertren chassis can be dismembered by pulling off the contact plate, removing the motor and levering the wheels off. Next, the original brass axle bushes can be driven out with a pin punch, and the various pins holding the gears tapped out. For this operation a redundant coarse-scale 4mm pin-point axle is preferable, since the chamfer can go far enough into the hole to allow a pair of pliers to grip the pins from the other side. The pin holding the small idler gear that drives the front axle is pressed into a blind hole. So an access hole needs to be drilled through from the other side to punch it out – after first removing the main drive gear, of course! One of the brass drive gears fixed to the axles is then broached out progressively to fit onto the new Sharman axle. Make this a force fit – but if you miss and get it too loose, simply apply Loctite.

Whether or not to bush the chassis is debatable; having gone through the trauma of drilling the original axle holes oversize for Sharman bushes, I tend to the view that there is little in it. Better, perhaps, to save frayed nerves and let the axles run directly in the zinc chassis block. Similarly, forget any ideas of making the front and rear axles coupled as per prototype. Firstly there is no way that coupling rods can be 'made to fit' an existing wheelbase – it took me two tries and much filing to prove this much. And second, there is barely enough room between a scratchbuilt crosshead and connecting rod and the face of the front set of wheels.

For this model, I decided early on to leave off the gears tying in the front axle, in an attempt to cut down any sources of binding. On my chassis sample, production tolerances had stacked up so much that the foremost idler gear was barely in mesh. As the front wheels now free-wheel, they were 'quartered' to 180 degrees – that way either side will only be halfway out at any one time from the rear pair! File the redundant crank-pins right down to the wheelface to clear.

Balance weights can be made by temporarily Sellotaping across the rear wheel faces, and pouring in a generous amount of Devcon epoxy between the two spokes opposite the crankpins. Clean up with a craft knife to get the correct edges, and file flat to suit. Agreed, the prototype *Talyllyn* does have solid wheels with spokes cast on in bas-relief – but for some reason the see-through spokes do make the model much airier underneath.

Though only one axle is now driven, the weight of the body castings ensures that the model has adequate hauling powers. Smooth running is achieved by employing a Perseverance flywheel on the end of a Kemp Models KMT19 five-pole motor. Somewhat smaller than the Ibertren motor, this provides the much-needed clearance between the bottom of the pole-pieces and the top of the rear set of drivers. Mounting is simply done by cutting a pair of slots into the front upright face of the original Ibertren motor mounting bracket. By twiddling the KMT19 up and down around one of the two fixing screws, the correct backlash can be dialled in. Ibertren's existing worm can be used – although it does seem that the large double-reduction gear moulded in red plastic is a 64 DP set, so one could alternatively employ, say, a Saltford Models component, which would allow the motor to be dropped down a fraction more. The only way I could find of removing it from the original motor is by – wait for it – heating the worm to red heat with a blow torch, then quickly prising the glowing lump off the end of the shaft with a pair of long-nosed pliers. Conventional 4mm-sized gear-pullers will not work – either the cunning Spaniards have glued the worm on with their equivalent of a Loctite compound, or a very tight interference fit is used.

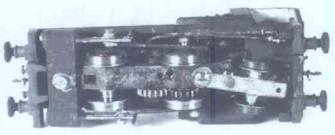
Before leaving the chassis, a rear frame extension has to be made up from strip brass. Meridian supply a cast whitemetal unit with a slot for the rear trailing wheel, intended to convert the Ibertren chassis to a rigid frame 0–4–2 – but, like its big sister, a model built in this manner may not have enough flexibility to go around typical narrow gauge radii. On the 'real' Talyllyn Railway, the gangers laid curves 3/4in wide to gauge so as to accommodate the loco . . .

That now-redundant frame extension is useful for getting the front and back halves of the superstructure level whilst fixing one end to the other. The idea is to initially assemble the saddle tank and smokebox, then fix the two bunker sides onto the rear footplate. Now, with the front footplate section temporarily slipped underneath the smokebox, slide that frame extension casting under the rear of the saddle tank – which props the assembly up at the right height for you to solder the rear of the tank to the front corners of the two bunkers.

Meridian have arranged things so that the standard Ibertren motor forms the sides of the firebox – the left-hand side being the coal

bunker, and the right forming a space for the reversing lever and the RH injector. Apart from being mechanically a very weak arrangement, on my own model this key join was complicated further by that new motor which protruded slightly higher into the superstructure than the Ibertren original. To provide the necessary 1.5mm clearance, the solution is to file away both the top of the inner saddle tank, and the underside of the front weatherboard to suit the new motor, the kit's own firebox top being shortened at either end and mounted higher up – between, rather than under tank and weatherboard – and the dome cut down by an equivalent amount to suit. Strips of thin shim brass can now be fitted up to close off the gaps at each side, the left being destined in any case to receive a dummy coal load.

Rather than use Meridian's front footplate section, a square of 0.5mm brass was employed here, which overlapped – rather than butted up to – the front buffer beam. Apart from making the front look a little less 'heavy' from the side, this allowed me to claw back some of the excess height accruing from the bigger driving



wheels. Another 0.5mm strip was laid in at the rear – again to give the effect of an overlapping footplate.

Buffer beams were shimmed up with 0.75mm whitemetal strip – painstakingly planed down to size by rubbing across a coarse file. In the process, the strapping had all to be replaced with suitably embossed brass strip, the technique being based on first tinning parts with ordinary soft solder, and then switching to low-melt to make the brass-to-whitemetal join. Take care to keep the bit clean, and watch that it is solder rather than flux which holds the part.

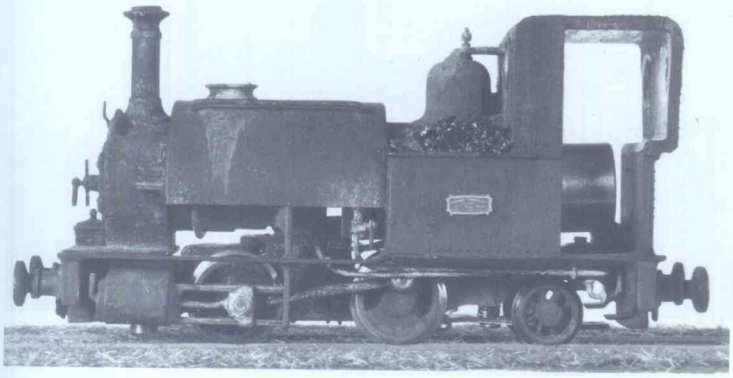
Admittedly, I did come unstuck on the riveted strip running over the top of the cab and down the back. The sheer mass of whitemetal present soaked away much of the heat, and also made it difficult to reposition the appliqué section when it wandered off the mark. To make the best of a bad job, I have flooded everything with low-melt in order to blend the mistakes into some form of oblivion.

Meridian's policy of placing dimples in strategic places so as to make drilling out mounting holes for various details is a mixed blessing. Some, especially those on the smokebox, are off-centre – that for *Talyllyn*'s chimney proved to be around 10 degrees out of vertical. Others, notably those for the RH handrail – not fitted until the preservation era – had to be filled in their turn.

For the sake of robustness, the long handrail atop the LH tank was made somewhat thicker, and all handrail knobs – the excellent Gibson products – were soldered onto their respective brass wires. Plumbing is N/S wire with little copper rings soldered on at strategic points to simulate the union fittings. A quite neat steam-cock can be made up in this way from a handrail knob and two such rings, with an operating lever made from a section of PC Models' 4mm screw-coupling fret. The whistle is an HO scale Bemo brass turning, with safety valve easing levers, back to their loading springs within the cab, made from flattened wire.

Plumbing on the RH side may be a little more conjectural – few photos in the Boyd book featured this side in sufficient detail within the period I was after. In the end, the prominent globe valve was made from an old American lost-wax Kemtron item, with the remainder of the pipework being run up from thick brass rod. And that, bar painting – as per Boyd's reference to the 'Black Tankie' being a dirty, dark, almost black-green – was that.

To the purists, the end result may be more than a little suspect – the buffer heads are still 1mm too high off the rail head, and the firebox crown is nearly six scale inches higher than it should be. But when checked against photographs of the real thing, the model does seem to capture more than just a passing flavour of the full-size *Talyllyn*, which must, after all, be the acid test.



SMALL SUPPLIERS FORUM

TRADE GRAPEVINE

Reader Gerald Grudgings (one of a number who keep us up-to-date on worthwhile finds) has sent us a piece of self-adhesive FABLON surface covering in real cork, just over 1mm thick. Cutting this into strips, peeling off the backing and sticking it down as underlay in fiddle yards couldn't be simpler; with a bit of work, it could easily be used on the layout proper, too. Available from better ironmongers.

As more and more modellers turn on to the fascination and potential of industrial railways, it is perhaps timely to point out the existence of the one organisation devoted entirely to the study of all aspects and gauges – from docks and defence depots to power stations and peat bogs: the INDUSTRIAL RAILWAY SOCIETY. Among other things, the IRS supplies superb publications and photographs. Membership details from the secretary, Mr. B. Mettam, 27 Glenfield Crescent, Newbold, Chesterfield, Derbyshire S41 8SF (with SAE).

Most people know by now that Warley Model Railway Club's annual exhibition is one of the biggest and the best in the country. If you don't – or you just need reminding – the Warley exhibition team, so ably led by Paul Jones, have put it on film. A semi-professional crew from Swindon, TEEZEE PRODUCTIONS, were brought in to record the whole of last October's event from before the doors opened until the end of the day and the result is now available on video, for sale or hire. It's not a super-slick production and it won't teach you much about the actual art of modelling railways, but it does provide a warm and rather uplifting insight into what makes this hobby work so well – its people. At £12.50 (plus 50p post) to buy, or £2.50 (plus £10 deposit) post-free to hire, it is a pleasant way to while away an hour or so. Order from Mr. A. Fantham, 52 Calverley Road, Birmingham B38 8PW.

BOLSTER WAGON, 2mm scale

Taylor Plastic Models, best-known as suppliers of 2mm scale coach sides, have introduced a kit for the two-axle bolster wagon; it can be built as type SAA, KTA or RRB, the genre being introduced in 1970 and still in use today. The kit comprises a Graham Farish chassis complete with wheels and couplings, ballast weights, a sprue of plastic parts and an instruction sheet. Decals are not provided.

The chassis needs minor alteration before the correct pattern brake levers and near-scale wagon floor, all supplied with the kit, can be installed. Generally, the mould quality is first class but for the movable plastic stanchions, which lack robustness and will jam with paint unless done very carefully. The instruction

Continued on page 372