

Heyside signals and locomotives

Since the article on the 7mm scale layout Heyside in Magazine 251 there have been continuing developments, both on the signalling side and in additions to the locomotive fleet, as its owner RICHARD LAMBERT, who also took the layout photographs, explains...



The main impetus for this work was the Aylesbury Raillex exhibition in May 2013, as I wished to present as complete a picture as possible. There were two important signal items I had to build, those on the footbridge and the gantry, and I particularly wanted to get the saddle tank finished as an iconic L&YR locomotive.

The footbridge signals

The layout initially had a steel plate footbridge with just the one signal on it. With the creation of a goods loop on the Up Main, there was need for a second home (albeit short arm) and if I could build a lattice footbridge, then it could be modelled very closely on the footbridge and signals at Werneth. In an afternoon, Cynric Williams and I designed a lattice footbridge kit – a scale 60 feet, in 10 feet



sections; Cynric did the CAD work, and a short while later, I was presented with three etched brass footbridge kits.

The footbridge made up exactly as intended, fitting the space perfectly, and providing a sound base to mount the signals. The signals themselves are made from wood, with etched and cast components from Scale Signal Supply for the fittings. The decking was made of copper-clad strip, stanchions from nickel-coated brass lace pins and the various brackets and smoke shields from brass sheet. The operating wire is 0.4mm nickel silver and the operation is by servos mounted under the baseboard.

The gantry

This was felt to be the signature piece of the layout with five dolls and nine arms. It is based on the gantry outside Victoria East Junction signal box and illustrations in the Society's *Focus on Signalling* (No.3). The legs are made of wood, with brass 'X' pieces, while the support for the decking is four strips of brass. The decking itself is made from 84 P4 copper-clad sleepers, while the spandrels were commissioned by me from Scale Signal Supply. The dolls and hardware were built as before, but it was in the operation of the signals that most thought had to be given.

One particular issue I needed to resolve was the fact that the operation was via pulley wheels, with cranks used only where the direction was changed at the very edge of the decking. Wheels as such were a non-starter, as I could not see any practical way of making them drive back, so I had to come up with something that looked like a wheel, but operated as a crank. After a bit of experimentation, I came up with that shown – a cast wheel (C&L), with two pieces of brass strip soldered in to create a crank. I filed a spigot on these 'cranks' and drilled a locating hole in the wheel to provide long-term strength and operational reliability. There is just enough movement in the cranks to enable the signals to work properly. I also had to provide guides for the horizontal runs as the 0.4mm nickel silver wire had a tendency to bow when being driven back, rather than operate the signal arm. In addition, we had to find space for nine servos under the one leg!

Aspinall Radial Tank

This was built by another member of the Heyside Group, Allen Hammett. A London Road Models kit now with Lanky Models, it was initially built to finescale standards, converted to S7, then back to finescale in time for the Aylesbury exhibition. I bought it off Allen, added pickups to the pony and trailing wheels and weathered it. All wheels are sprung except the driven axle, and there is considerable sideplay on the pony and trailing wheels to allow it to negotiate model curves – it's not a radial model! Powered by an RG7, it glides over the trackwork, and looks quite at home on Heyside. It's due for a rebuild at some point to add the inside valve gear, probably at the same time as I build a further (long bunker) example.



Top: The signal gantry. The middle doll signals a route that assumes a crossover beyond the bridge. Only one person has expressed confusion so far! Above: The inspiration for the gantry, that on the left of the picture, at Manchester Victoria East Junction. Tom Wray LYRS Collection 9553 Below: The radial tank, weathered but in good running order.



Opposite page top: Radial tank No.50757 drifts past the warehouses on the all stations stopping train out of Manchester as it approaches Heyside. Middle: Up main and goods loop signals on the lattice footbridge. Bottom left: Lattice footbridge and signals at Werneth on 20 November 1956, the inspiration for the model. British Railways (LMR) photograph Bottom right: Close up of the signal painted and weathered.

Aspinall Saddle Tank

This is a much detailed Chowbent kit, still available from Just Like the Real Thing. The chassis had most of the components replaced with those from Laurie Griffin, the ash pan was scratchbuilt, and the Stephenson Link inside valve gear came from Sanspareil. The body was more of a straightforward kit build, but various extra brackets were fabricated around the tank/smokebox and sandbox/footplate areas and Archer Surface Details rivet transfers were used on the tank to add the horizontal panelling shown by some members of the class. There is not much room for the electrical gubbins with inside valve gear, but the DCC chip is in the bunker, the small speaker is between the front frames, and the capacitor between the rear frames. The Maxon motor is vertical in the firebox and the ABC gearbox drives the rear axle. It is Dingham fitted to enable automatic coupling as we shunt the yard.

Aspinall A Class

Another Chowbent kit now with JLRT; this one is unfortunately unavailable, which is a pity, as it is a lovely kit. The specification is much the same as that for the saddle tank, except that I used Warren Shephard driving wheel springs for preference, and the inside valve gear is Joy's this time, again from Sanspareil. The tender is fitted with split-axle pick-up using Slater's components, with a two-pin plug and socket to link to the engine. Again both engine and tender underframes have much added detail, as has the backhead which is very visible. I found Barry Lane's book *Lancashire and Yorkshire Railway Locomotives* most helpful, as well as inspirational in working on these two locomotives.

The future

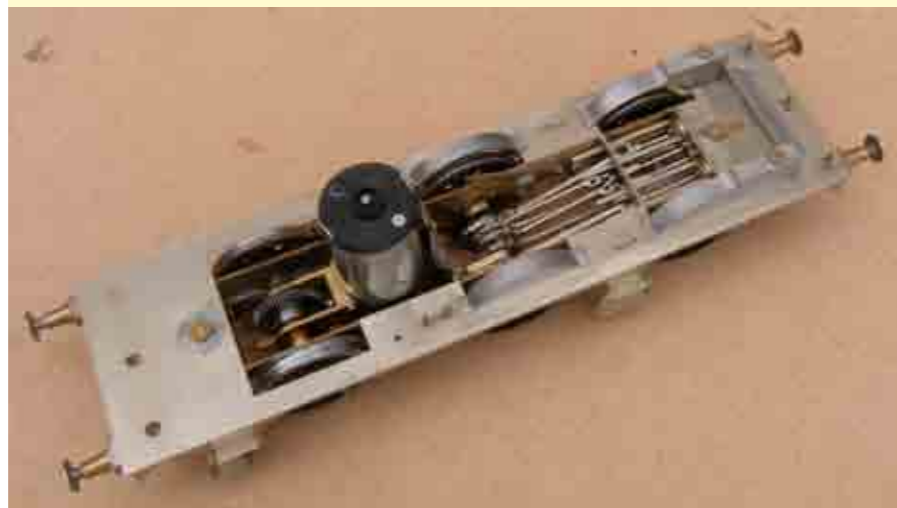
I still have the Crab and a second saddle tank to finish, and with a Barton-Wright 0-6-0 tender loco, and another Radial tank in my 'to do' pile, I shall be busy for a while yet on the motive power front in addition to the development plans on the layout itself.

Top: Archetypal L&YR locomotive. Barton Wright saddle tank No.51381 is a bit careworn by the late 1950s, awaiting its shunting duties in the yard.

Upper middle: The chassis and footplate of the saddle tank showing the Stephenson Link valve gear.

Lower middle: Another 'must have' locomotive for Heyside, the Aspinall 'A' Class has a final clearance test before painting.

Bottom: The Aspinall 'A' Class chassis with Joy inside valve gear. There is a tiny speaker under the front frame spacer.



Details of exhibitions at which the Society stand will be present plus an up to date list of model kit and component suppliers in both 4 and 7mm can be found on our website. Go to www.lyrs.org.uk and follow the links. If you have information or news for the website contact the Assistant Website Editor on mike.fitton@lyrs.org.uk Our attendance at exhibitions is managed by Graham Smith. His contact details are: t: 0115 938 4371 e: exhibitions@lyrs.org.uk

The variations and the choices

BARRY C. LANE reviews the new 4mm scale Bachmann 2-4-2T and explains his part in its development...



It was nearly two years ago that Bachmann approached me to assist with the design of a new locomotive for their 4mm range. The Aspinall 2-4-2 'radial' tank engine was the project, influenced by the National Railway Museum who wanted a model of L&YR No.1008, as exhibited at York, to include in their own 'Exclusive Range' of models. Bachmann would produce the LMS and BR versions for the mass market.

Scale drawings and many photographs were supplied to the studio at Bachmann PLC and the project got off to a good start. All had to be kept under wraps at that stage in case other makers competed. Although many producers are scratching to identify a new prototype that has not yet been covered, the L&YR has not been well represented in the ready to run market... just the Dapol 'Pug' being available in 4mm scale.

It soon became apparent that there was a host of detail variations applied to the class of 330 locomotives. It was the 'original' design of No.1008 (as exhibited in the museum) that was wanted and that cut it down to those engines built at Horwich before October 1898. Later versions with long bunker, Belpaire superheated boilers, etc. fell outside the remit. Notwithstanding, another side of the Bachmann team innocently put out publicity photos to the trade at the Warley exhibition to the effect that the superheated Belpaire engines were the chosen product to be manufactured! That was never the case.

For the LMS and BR models to be marketed by Bachmann, the rivet detail was the ruling factor. Between 1929 and the '50s some acquired rivet heads around the face of the smokebox when renewal became necessary. Others had rivets on the sides of the smokebox. Some had rivets on both faces! Many had the bunker renewed after 1920 with the prominent snap-head rivets on the side but some had them on the rear too. We went for the lesser riveted examples as the others presented more complications. All had the Hoy 'heavy duty' buffers by the 1930s and most had the smokebox door fastened by 'dog' clamps so that choice was simple. Much research

went into finding prototypes that could give an appropriate running number for the plain black LMS version and two BR versions with a common rivet arrangement. We settled for the examples that had the rivets on the face of the smokebox only and 'pop' safety valves. The LMS model would be No.10695, the pristine BR one No. 50636 and a lightly weathered version would be No.50795.

I suggested that one in the early LMS livery of crimson with large gold numbers on the side tanks and the LMS company crest on the bunker might make a popular product, but economics forbade yet another variation.

The example made especially for the NRM is an excellent representation of the preserved No.1008. There will be a limited run of them at a premium 'collectors' price in line with previous products in the NRM range. It differs from the standard Bachmann models in having the correct Aspinall period buffers, a smokebox door fastened by a dart, Ramsbottom safety valves, twin whistles, a handrail on the back of the bunker and an accurate representation of the 1889 livery.

The prototype at the NRM should have the hexagonal boiler washout plug covers (polished gun metal) and the shallow 'dished' smokebox door for the 'original' period but as it does not, the model doesn't have them either. In several ways, No.1008 is inaccurate for the 1889 condition and I have always felt that it would only be absolutely accurate if the wooden, slightly tapered chimney was changed for the standard parallel 'Horwich' chimney introduced in 1891 with the side tanks lettered. That is the way the class spent just about all their Pre-Grouping years. No doubt, most modellers will be quick to apply transfers to the tank sides.

DAVID CARTER, our Modelling Co-ordinator for 4mm scale, adds...

The eagerly awaited package turned up and initial inspection impressed me. The next job was to check it out alongside the drawing by Tom Derbyshire to compare dimensions and it's pretty good. A table of dimensions is available from me (modelling4mm@lyrs.org.uk) on request.

The body comprises a heavy metal casting forming the footplate, to which the side tanks, bunker, cab and boiler are fitted. The footplate is solid between the frames, although there are representations of the Joy valve gear and valve rods. The detail on the leading sandboxes and operating gear is very good as is the rerailing jack, cab and roof details, etc. The L&YR model is supplied as built, which is the condition in which it is preserved at the NRM. It has two whistles, communication cord crank, bunker hand rail, etc. which were removed in the twentieth century.

So there it is, very good for a proprietary model. Obviously there has to be liberties with the wheels to run on OO trackwork; John Dilnot tells me that it will not run through scale OO point work as the back-to-back dimension is too tight!

TRADE & EXHIBITION NEWS

4mm L&YR Break Vans

Dan Pinnock, of D&S Kits, produced 4mm kits for the 4-wheeled 20 ton Diagram 61 and the 6-wheel Diagram 61 revised break vans. These both had the door to the left hand side. The Diagram 61 revised was only built between 1919 and 1922, 150 being built, at the very end of the L&YR period.

The 6-wheeled 20 ton Diagram 43 break van was in production from 1901 to 1904, 83 being built. This van had three main differences from the D&S kit:

- Footsteps are not full length, but stop by the inside of outer wheel.
- The door into the cabin was set on the centre line, not to the left hand side.
- The roof line is horizontal between the end posts, not curved with the roof.

David Burton, one of the Brassmasters team, has produced an etched brass fret to enable modellers to produce the Diagram 43 version. It consists of new cabin ends, a template to produce the styrene segment to fill in the roof, offset vee hangers, brake linkage and lamp irons. Full instructions are also supplied.

The frets are available from Brassmasters for £2.00 plus postage. The brake van kit is now available from London Road Models.

