

MACAW B

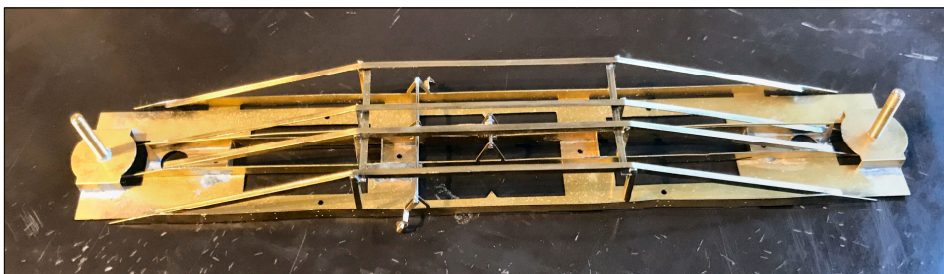
I obtained a Bachmann GWR Macaw B second hand recently and although it was reasonably converted to P4 with a load, I thought it could be improved with some additional items currently on the market.

Firstly, the items not required were removed from the wagon. The bogies were unclipped from the underframe. The wheels and bogie side frames were retained after snipping off the unwanted pieces and were put aside for later. The rest was binned. The underframe was screwed onto the wagon, so this was easy to unscrew and binned. The load, chains and supports were removed and again binned. The buffers were removed with snips roughly down level with the wagon ends and then finished off smoothly with miniature chisels. New holes were drilled in the buffer beam to take Lanarkshire GWR self-contained sprung buffers. The holes were drilled so that the buffer housings were a good tight fit. The coupling hook and links were removed and binned. The body (or what's left of it!), was lightly sanded to remove the transfers and a key for future painting to adhere. The bogie side frames were not painted (moulded colour), so can be left for now.



A new underframe kit was obtained from Rumney models. It was very detailed with pages of instructions, drawings and photos. All variations of the wagon type over its lifetime were included in the kit. My model was to be a GWR 1930s type with Churchward brake gear. The kit was made up following the instructions fully, so is not mentioned here.

The bogie is a Masokit's kit, which is compensated. They are a bit fiddly but make up well. Again, they were made as per instructions so are not mentioned here. The wheels were from the original purchase but will be changed for Exactoscale when they become



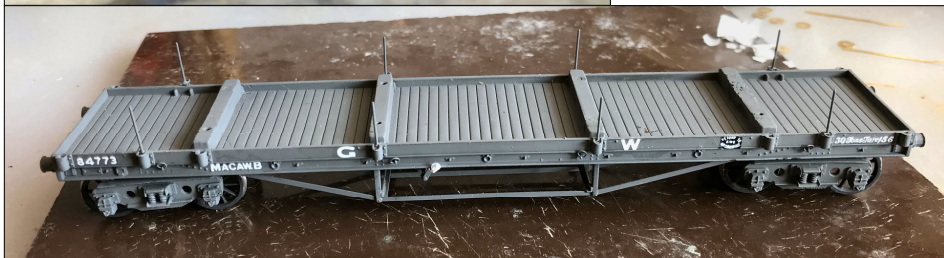
available again. The original plastic side frames were thinned a bit as they were too chunky. They were then glued to the etched sideframes using Araldite.

The cast buffer bodies were then superglued into the body. But first a length of 1mm nickel silver wire was passed through the buffer housing at one end and through the housing at the other end. 1mm is the size of the buffer shank with a spring around it. It ensures that the buffers will sit correctly and in alignment while the glue goes off. A small piece of plasticard was then glued behind the buffer beam to cover over the

buffer shank hole. This is to stop the buffer spring from escaping (see later).



A GWR drawhook was then fitted. A 0.4mm hole was drilled in each end where the drawhook was to go and elongated to form a slot for the drawhook to fit. They were then inserted and glued with Araldite, (the links were added later).



The load would need to be chained down so therefore the plastic moulded fixing loops along the side of the wagon were removed (only the ones that would be replaced with new loops for the chain to be attached). This was done with a small sharp chisel.

New loops were made with 0.25mm wire. The wire was wound around a 1.5mm drill shank tightly and then cut into single rings. To hold the loops, pieces of thin flat nickel silver, 1mm wide x 0.3mm thick and approx. 10mm long were used. A 0.35mm hole was drilled in one end (as close to the end as possible). The end was then radiused and just after the head, the 1mm width was reduced to approx. 0.5mm. This was then cut off the strip. It forms the bracket to which a ring of the wire was put in the hole. Then it was soldered in a vertical position so that a chain and shackle can be attached later. A 0.5mm hole was then drilled in the side of the wagon where the chain loops were to go and the nickel silver strip pushed into the hole with a little superglue. The loop just proud of the surface and upright.

It was planned to use the existing plastic stanchions until I found them to be glued in the wrong positions, so some new ones had to be made. The stanchion hole was 1mm diameter but the stanchion is about 0.5mm dia. Therefore, I made up the following: some tube with 1mm diameter OD and 0.5mm ID was used and a length of 0.5 wire was soldered in the tube with 10mm protruding. The tube was then cut 3mm in length. This then fitted into the hole (the tube not showing). The kit provides some D shackles and one was soldered to the top of each piece of tube. The protruding wire was then rounded at the end. The stanchion was then superglued into the hole with the D facing outwards.

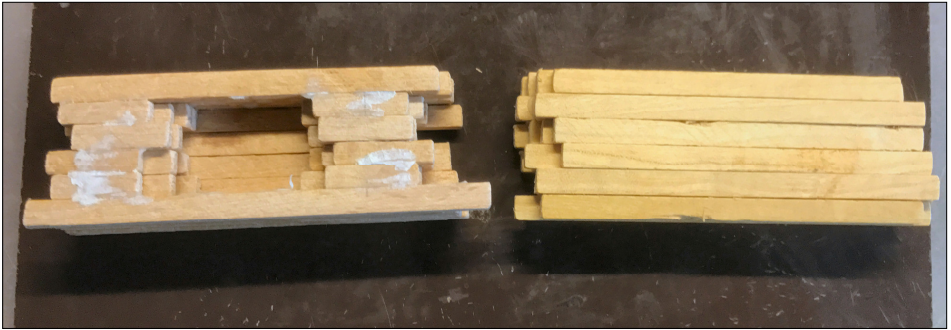
The underframe was then glued to the body. At this stage the body and dismantled bogies were then sprayed all over with Gods Wonderful Railway Grey (two coats). The wheels were hand painted with weathered black paint (again two coats). Lettering was now done with transfers from the HMRS as per prototype. To secure the transfers, they were lightly sprayed with a coat of Matt varnish. I use Ronseal clear available at any decorator shop.

The wood planking was now weathered. This is achieved using a mixture of Humbrol paints. I used no: 33, 148, 63, 110, 62 and 29, the idea is difficult to explain but easy to do. Just add a drop of colour (any) then add another and blend in. Keep going until fully covered by adding colours as you go until you are satisfied that it suits your perception of weathered planks. Everyone has a different opinion!! Remember that they would have got dirty and the wood would lighten in the sun.

The load was now fixed to the wagon by glue (Evostick in this case). In reality, the load would have been secured by chains and shackles. 4 sets would be required, 2 for each load. The chain used was 15 links per inch and the shackles (hooks and adjusters) were both from AMBIS Engineering.

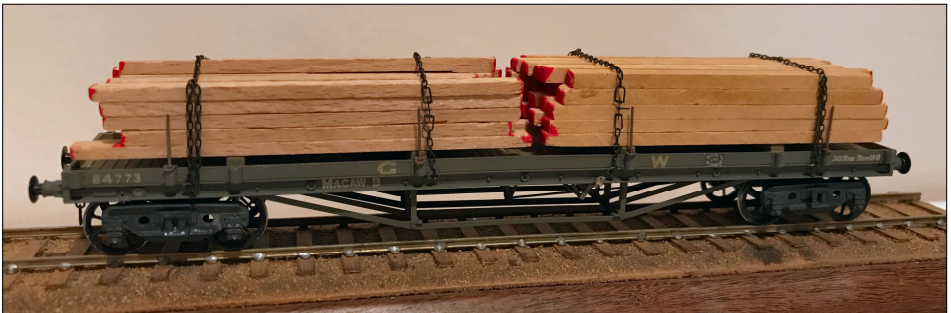
To make them was fiddly. First a 0.4mm hole was drilled in the hooks while still on the etch. The shackles were removed, and each end cut with a scalpel so that a piece of chain could be threaded on. The cut was then soldered back together afterwards. The chain in one direction would only be 4 links. The other way would be enough to go over the load, through the chain rings in the wagon and back up the load again. Single links of chain (0.3mm) were cut off (the links are brittle and some break up!). The link

was opened slightly and fed through the hook and over the end of the chain. The link was then soldered back together. The other end was dealt with in the same way. So, you end up with a hook, length of chain, shackle, length of chain and a hook. The 4 sets were then blackened.



The completed chain was now fitted. One hook (with the short piece of chain) was now attached to one of the body rings. The other end was fed through the ring on the opposite side and the chain pulled through until taught. The hook was then attached to the chain while ensuring that it's taught. A tiny drop of superglue was placed under the hooks and centre of the chain just to prevent it coming off later.

The buffer heads and springs were now fitted in this case from MJT (16"). A 0.5mm hole was now drilled through the hole in the buffer housing and into the plasticard fitted earlier. A spring was then put on the buffer shank and the pair were then gently fed into the buffer housing and through the hole in the plasticard. A check was now made that the sprung buffer worked ok and if necessary adjusted. In order to stop the buffer assembly coming out, a small piece of electrical cable sleeve with 0.5mm diameter hole was cut about 2mm long and fed onto the end of the shank and pushed against the headstock while the buffer was compressed. A small drop of superglue was then dabbed on to the shank and the buffer gently released until the spring was uncompressed. This takes the sleeve over the glue and when set, the buffers spring correctly. The buffer head was then weathered.



The completed wagon was then checked for running, any additional weathering made and added to the fleet.

Ray