



A Steadier Hand than Mine *By Ted Sadler*

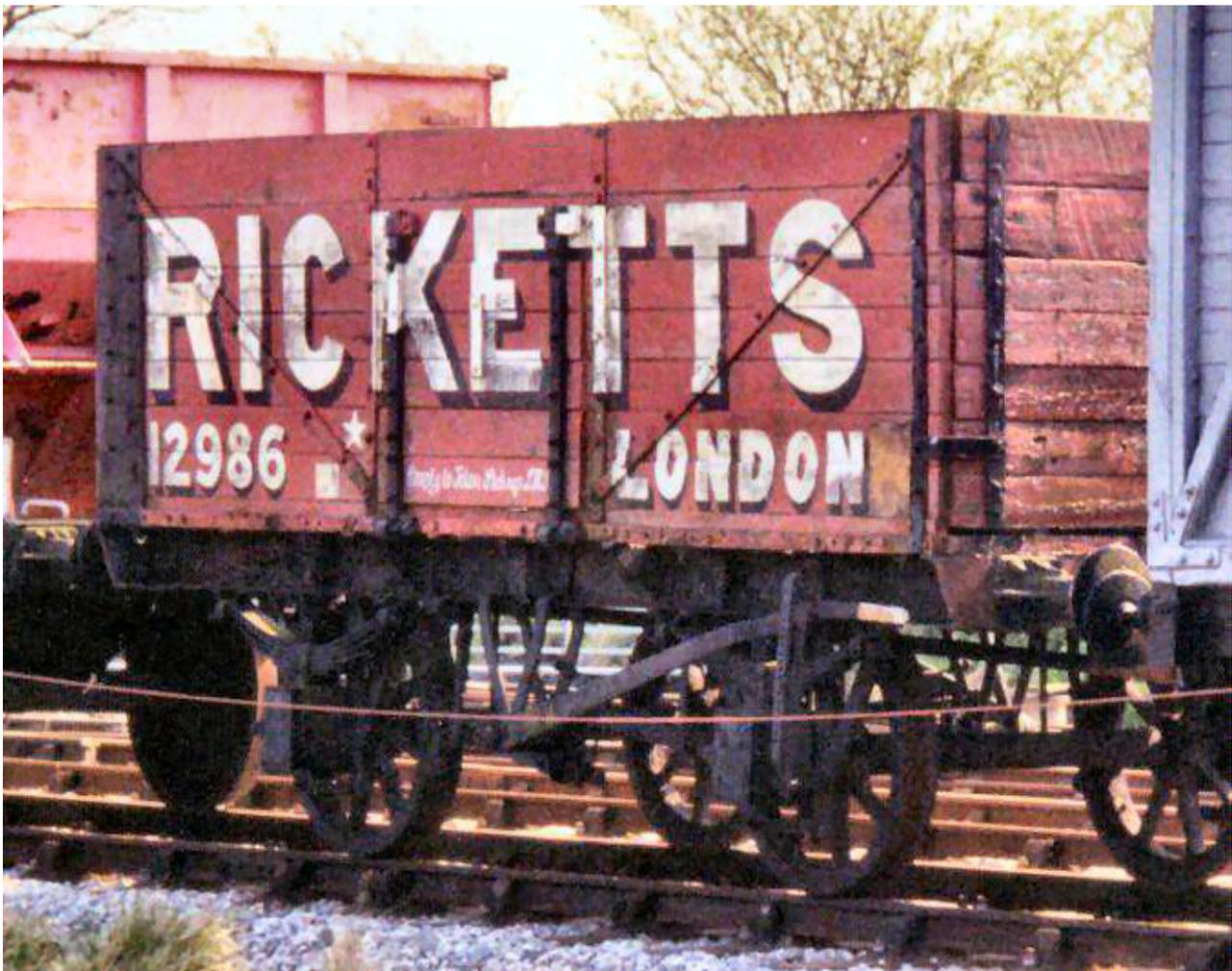
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Suggestions on Finishing Private Owner Wagons in Gauge 3

I recently discovered that I no longer have the steady hand, nor indeed the patience, required to accurately paint lettering details on the sides of private owner wagon models. I used to do it in Gauge '0' but it came as something of a shock to realise that some 15-20 years had passed since those days. I recently started on the construction of some Garden Railway Specialists' (GRS) Gauge 3 open wagon kits, and it soon became apparent that the larger scale represents an even greater artistic challenge, as the 'canvas' of the wagon sides on a garden layout attracts the eye both close-up and at a distance. How was I going to approach the standards of Society members' existing wagons?

Kit Construction

I selected a reasonably simple design for my first attempt – a 'Rickett' coal merchant's wagon, for which both good photos and drawings exist. I had also photographed a wagon repainted in this livery at Quainton Road a few years ago.



Measurements revealed that the GRS 7-plank private owner wagon kit is a pretty accurate representation of the 1923-specification RCH wagon design produced by several companies (e.g.

Charles Roberts, Gloucester RC&W, Derbyshire Wagon Co etc.) until the late 1930's. The main visual variations that existed include:

- Strapping on the wagon sides adjacent to the side doors – this could be either straight or a 'hockey stick' shape. My chosen wagon had the latter type, which I cut from Plastikard and riveted using dressmaker's pins as described by Ian Driver at last year's Basingstoke show.
- Reduced top plank height above the side doors: I filed down the plastic to suit.
- Placement of the hinge on the end door – the GRS kit represents the type where a notch was cut away from the top corner and the side strapping had a dog-leg that fitted over this to hold the hinge rod. My chosen wagon had a hinge rod mounted inside the end door, supported through the wagon sides, so I used the straight strapping supplied with the kit.
- Stanchions on the fixed end of the wagon – these were wooden and tapered on the prototype, which I cut from scrap wood and glued on. The GRS stanchions are parallel-faced.
- Buffers – many wagon buffers on 1923-specification RCH wagons had L-shaped reinforcement flanges (ribs) on the shanks at the door end of the wagon, differing from the 'standard' shanks at the fixed end. Some quick filing and addition of Plastikard ribs soon corrected the door end. Note that the ribs were shorter on the upper sides of the buffer shanks in order to give shunters and coal men a better foothold. Despite knowing this, I still cemented one upside down and it took a major physical effort to remove it without damaging the white metal castings! (Good stuff, that Hafix S adhesive).

Coupling hook stay plate – the small mouldings on the kit's buffer beams were filed off and larger ones cut from Plastikard were applied. Despite having no instructions in the supplied kit, it all went together fairly easily. The only comments I would make concern the mountings for the brake hangers which, as supplied, are minimalist in concept and inadequate for the kind of handling that garden railway items can receive. I added wooden cross-members to the floor underside and attached the hangers to these, embedding them in epoxy resin.

Finishing

As a rule, I paint as many components as possible before fixing them in place. It's just so much easier to touch up any defects after assembly than trying to manoeuvre paintbrushes around tight corners.

For the running and brake gear, if you want a showroom finish that in reality lasted only for half the wagon's first trip from the maker's works, use black paint. If you are going for something more realistic, I have discovered that Precision Paints 'Frame Dirt' colour looks about right for everything below the solebars. You can still use pure black for the ironwork on the wagon body – on fact, the contrast with the dirty underframe colour is quite good.

Now, the crunch! How to finish the body? There are several methods, including:

Hand Painting and Lettering

I prefer using a paint brush for the general body colour on wagons, as the fine brushmarks appear to better represent wood grain than a spray finish. As an aside, I seem to be able to get the same results with cheap artists' brushes (79p each in Hobbycraft stores) as with more expensive ones, but that could just be a revelation of my lack of skills!

In the past, I found it easier to paint and hand-letter the sides with fine brushes and a mapping pen before they were attached to the wagon, and before the strapping was attached to the sides.

This meant a lot of filling-in when the strapping was overlaid, but I could work more accurately on a flat surface than trying to decorate the top of a wagon lying on its side.



But here my current problem surfaced: even with simpler, straight-sided letters, I could no longer easily achieve the crispness of style, nor the correct proportionality that I was trying to attain. After several attempts, it was clear that I was never going to match the skill levels of people like Shaun

Underhill and others, whose private owner wagons have created such a good impression at recent get-togethers (see pictures).

Transfers

Transfers are of course much sharper and have more solid colour than hand-applied letters. However, the styles of lettering ('fonts', in modern parlance) and the exact size that I needed were not available. It's also quite difficult to get transfers to follow the contours on a wagon side (e.g. over diagonal strapping) without losing the correct overall shape of the letters, and just like hand lettering, I think it's best to apply transfers to the sides before application of overlaid details, with subsequent paint touch-ups. Incidentally, transfer fixing fluids are available from model shops and traders at shows, and I have found them to greatly enhance the adhesion and durability of applied decals. Good examples of transfer lettering on Alan Marsden's line are shown below.



I tried making up some stick-on transfers for the larger letters from computer-printed paper. I applied them to painted surfaces using the above-mentioned transfer fixing fluid, and surprisingly, the results were quite good. You can also purchase special decal paper for ink-jet printers, but this technique doesn't apply to large white lettering (no white inks). However, despite the large number of fonts available on my PC, none exactly matched the style I was trying to reproduce.

Computer Imaging

One useful item in computer graphics programs is a perspective correction tool. With this, you can transform an oblique photographic view into a square, side-on view. It works particularly well with relatively flat surfaces like wagon sides and building facades, but projections (e.g. duckets on brake vans) remain distorted.

Taking a photographic projection and a drawing of a PO wagon side, I used a photo painting program to colour the squared-up images and sharpen fuzzy lines. Be warned – this method is by no means a shortcut: you can spend many hours getting the details right to your satisfaction. I have seen 4mm scale wagons and buildings on layouts produced using these methods, and they immediately lend an air of realism and individuality.

After much experimentation with the shade of red to be used, I printed it onto good quality pearl finish photographic paper and checked that application of matt varnish over the dry ink would not cause smearing or discolouration. I then printed the images at full size and attached them to the sides of the wagon using a Bostik aerosol contact adhesive designed for mounting photographs.

Having previously mixed red paint to match the printed sides, I touched up the white edges and protected the whole with a first coat of matt varnish. Strapping and other details were then added, and the final paint touch-ups applied. Another coat of matt varnish and all that was left was to weather the body according to taste. Simple!



Ted Sadler's 'Rickett' wagon (before the external strapping detail was added) is very reminiscent of much older 'paper lithography' wagon models.

Oh, and in case anyone has noticed, Messrs. Rickett had several styles of writing on PO wagons. The mid-1930's saw new wagons both with and without the 'S' at the end of the owner's name.

Conclusions

I make no claims concerning the originality of the computer technique: it worked well for me, producing a better result than I could obtain by other means. It remains to be seen whether the red ink will fade at a different rate to the red paint over the years (although they use similar organic red pigments) – if it does, I'll only bring the wagon out at dusk – or apply another layer of coal dust and rust!

I see that there's a relatively cheap, computer-controlled machine called a Craft Robo on the market that will cut highly-accurate designs on various thicknesses of card and vinyl from computer drawings and images. If anyone has experience, please let me know – it could be another route to producing realistic and durable transfers or masks to order, for example.

All photos by Ted Sadler



The wagon with strapping detail added and 'touched up'. A great result !