Recently returned from Warren Haywood's paint shop and a fine job he has made of it with just enough weathering to make it look as though it is really earning its living.

I managed to buy this kit at an exhibition a year or two, or more, ago before Blacksmith disappeared from the scene completely.

It is to be part of a train of 4 and 6 wheelers with the addition of a D15 bogie brake third to make up a van train with some passenger accommodation.

Waiting in the wings is a 6-wheel Tri compo and another six wheel PLV from Dragon Models, a Connoisseur 6 wheel PLV and Colin Waite W13 van, two 4-wheel vans, a V2 and W1, are already completed.

It appears to have been upgraded compared to earlier offerings since most of the tabs and slots, in the main, are a reasonable fit and on first inspection, the kit seems well appointed but it still labelled 'Mallard Models'. Sprung buffers are provided and the compensated underframe suggested I did not need to use the Slater's 6-wheel underframe I bought at the same time, on the assumption that I would scrap what was in the kit. So what is in the box?

What looks, at first glance, like some nice etchings, moulded seats, buffers, castings for the springs and J hangers, wire, plastic rod and glazing and a preformed roof section that is the correct size and a reasonable match for the arc roof of the ends. The instructions however are as dire as in the past though there is an illustration of sorts of the T38 but no scale is shewn. It also shews the luggage doors with droplights. I did not find any reference to the T38 in Russell's index however; page 45 of Russell's Vol. 1 has an unindexed diagram for the T38. This shews the luggage doors without droplights.
There is nothing in the instructions or Russell about numbers, when built etc. In addition, a drawing came to light in an old magazine that suggests that the guard's duckets were opposite one another whereas the kit has them diagonally opposite in the Guard's compartment; which one is right is anyone's guess.

Fortunately, the GWR and Great Western Study Group's E-groups came to the rescue with useful information and a different source of diagram that also shewed the luggage doors without droplights. Over a hundred were built and, at least some of the early builds were built with oil lighting. Later many had the centre wheel set removed and were designated diagram T39. There is a good picture of an early version on the interesting Penrhos Junction site at http://penrhos.me.uk/Tdiags.shtml#T38. This shews the luggage door without droplights though the accompanying drawing shews them fitted. I decided to go with the picture and plate over the luggage doors, which you can see later.

The quality of the castings is very poor and some parts were simply scrapped out of hand, vacuum pipes for instance (normal for me anyway though), lamp tops and the J hangers, which have no plate with bolt heads to fix on the solebars and there are no etched representation of the bolt plates on the solebars. The spares box came to the rescue with a set that does have the plates, which came to me courtesy of Bill Parker of WEP.

I began using my normal procedure of preparing the parts and assembling as much as possible in the flat. Some care is needed since there are a number of errors in these etches. The holes for the Guard's swan neck handrail are in the wrong door, one of the pair of luggage doors, so need filling in and new holes drilling in the Guard's door on the other side of the lookout.
While I was at it I also added holes for the handrail that is usually fitted below the waistline too; a set of CPL guard's van handles and handrails was set aside for this vehicle in addition to grab and door handles. Etched grab handles are provided but they of course do not have the strength or realism of the three-dimensional look of cast handles.

Here are the parts cleaned up with the addition of compartment dividers, which are not provided for in the kit.
The top step fits in slots in the solebars but, I elected later to scrap them as there is no provision for the J hangers to fit behind them and, I think, the step is too high anyway, poor design.

The major components completed ready for assembly of the coach body. The duckets were soldered in before the sides were offered up to the ends but after the curve was shaped.

Here each end and side are soldered together to make one-half of the body and then offered up ready to make the body proper.

The guard's lookout duckets were relatively simple to produce once annealed and bent up using some suitably short lengths of tube of varying diameters; each one was soldered in after the side was shaped. Before that the droplights were fitted and the a set of window bars from CPL fitted over the luggage door windows, soon to be removed when the doors were plated over from the inside.
The end base folds up to provide a good mating point for the sides. Unfortunately, the ends were not fully etched, as the raised portion for the lamp irons to be fixed on was only present on one side of each end so I removed those that were there.

Once the individual side and end units are proved square, the body can be soldered together properly. The telltale on the end is from CPL as is the handrail; the extra step is from the spares box. Unfortunately the tell tale is fragile and it became necessary to replace the cross rod and indicators. I think that lost wax casting for such delicate rod work is inappropriate; wire is easier, stronger and straighter.

Here one can see how the end fits and support the sides, a well thought out piece of design, into which the buffer beam fits well. The base for the end is a fold up but the etched bend line has to go, unintuitively, to the outside as do other bends for various parts. No mention of this is made in the 'instructions'. The morale is to dry run and try to think ahead.

The bases for the wheel sets are here fitted in place, as are the 'step boards', which will soon be removed to be replaced by Slater's step board supports and scratched up step boards. The step boards supplied are too thin, lack the up stand on the inner side and have no indents for the J hangers on the top one or for the axle boxes on the lower
The wheel sets made up ready for fitting however, the brakes still need to be fitted and they presented yet more problems to be solved. The end units have provision for converting into rocking units however, they also tend to swivel on their mountings too. There is provision to fit a gas tank on the centre wheel support, which itself is designed to slide from side to side. Unfortunately, the tank is too long and there is no indication anywhere on what size it should be. I elected to fit a set of oil lamp tops I had in stock from the Broad Gauge Society and left the gas tank off on the premise that in 1900, it is quite likely that such a vehicle may not yet have been converted to gas lighting.

The brakes are the old, interesting, but fiddly, clasp pattern with outside pull rods that extend beyond the axles boxes. The operating rods for such brakes pass through the brake block but the blocks provided have no slots in them so it was necessary to cut slots in the back of each of the eight blocks (the centre wheels have no brakes) so that the operating rod can fit.

Parts being made ready include the spring/axle boxes, poor castings that took a lot cleaning up. The replacement J hangers are shewn against a couple of the supplied hangers and the parts for the brakes are in process of being made ready. The slots in the back of each brake block were put in with a coping saw, fiddly rather than difficult.
The roof is not perfectly formed and so to ensure that it was the correct arc and to keep it that way I made some formers taken from a profile of the end and soldered them in tight, taking care to see that they did not foul the partitions already fitted.

The top lip on each side of the body then needed slots cut to allow the roof to sit down properly, the deliberate policy of fitting them asymmetrically ensures that the roof can only go on one way.

Here is the almost completed roof with the lost wax cast oil lamps from the Broad-gauge Society soldered in place. The new steps, partially completed are shewn too.
The lower step is made up from L section and the upper step from I section with one leg milled away, they are the correct width without further modification.

The body was modified by removing the inferior top step, filling in the slots and fitting the Slater's step supports in readiness for the steps to be fitted. This will not happen until the underframe is completed and the J hangers have been fitted to the solebars. The door lock plates came from the remains of an IKB etch sheet of parts.

Seeing pictures reminded me that oil lamps need places for the bungs to reside. These were cut from some tube in the lathe, cleaned up and soldered in place on the centre line on the opposite side to the lid hinge.

The parts provided for the brake gear are inadequate and quite poorly etched too, the cleats to connect the brake rods across the axle boxes are not fit for purpose fortunately; I had some lying about in the spares box. The brake rod at the 'Vee' end of each unit has to be bent to produce a right angle joggle but there are no marks to indicate where the bends should be. Some careful measurement is required to get the brake anything like accurate. Colin Waite solved all these problems in the early 1980s so why are we still suffering such poor design?
After removing the bars and droplights on the luggage doors the window frames were filed out starting in the corners as in the first picture and then the straight sides as in the second. The third picture shews the plating soldered in from the rear. Well, it will be different from any other Blacksmith T38s running.

Having spent a lot of time working on the underframe I find that it is not, in my opinion, fit for purpose. All the wheels sets have a distinct tendency to skew from the centre line in their mountings quite markedly. The slots for the outer wheels sets are etched as sharp Vees from the centre line instead of an even width slot. In addition to that, the outside brake rodding fouls the lower steps. It is supposed to fit between the upper and lower steps but the heights just do not work.

I decided to do what I should have done at the beginning and use the Slater's 6 wheel underframe unit, which means that the brakes will have now be 'upgraded' to more modern brakes. This entailed removing all the existing underframe fittings for the wheels sets, their mountings plates and the J hangers and fitting a floor in which holes for the support bolts to fit the Slater's unit were drilled and 8BA nuts soldered on the inside face. On reflection, I think I'd have been better off scratch building a complete underframe.

Here is the new floor fitted with the wheel units bolted in place to ensure that they fit. The Slater's 6-wheel underframe unit was designed for a longer wheelbase than the T38 but I think it will suit the purpose.
Here the sprung units are set up to ensure that they will operate as designed

beside what will be the fixed W irons with axle boxes and springs fitted in place. It may be necessary to remove the outer suspension guides on the left hand wheel set to aid operation, we shall see in due course.

The wheel and W iron units fitted and the long brake rodding added. As usual, I have left out some of the detail that is invisible between the wheels and, by not connecting the long rodding to the braked wheels sets, all the wheels sets can be more easily removed by unscrewing the 8BA bolts that hold them in place and the three units will then separate from the floor.

Viewed from the side, all that remains to complete this stage is for the J hangers to be replaced and the steps to be added. All that then needs to be done is fit buffers and steam pipes and to come up with a way to fix the roof so that is it removable.
With a couple of springs in the roof set to grip between the Guard's partitions to hold it in position all the construction work is completed as can be seen in this picture of the parts having just come out of the ultrasonic cleaner. Whether such a vehicle ever ran with steam heating and oil lamps is debatable but the pipes
are easily removed if necessary. The Great Western were renowned for the eclectic nature of the make-up of their trains even into BR days, which means that one can get away with almost anything that is not totally outrageous.

Here are the views of completed model from each end and the side.

Not an impressive kit and it would be a nightmare for the beginner but, for anyone with a modicum of experience and determination, it can be made into an acceptable model.
Fitting the glazing and seats took much longer than expected but was worth the effort.

Bexhill on Sea January 2015