Background.
In 1910 the GWR built two vans for the Fishguard route to carry newspapers; they were built to Lot 1178 Nos: 876/7, according to Harris but Russell has them as Lot 1062. Their origins clearly can be seen in the Dreadnoughts and Concertinas of the period with their recessed doors, in this case, sliding.

Build date 20/8/2013. The kit arrives in a sturdy box large enough to hold the completed vehicle for those who do not consider a wooden box better protection. It contains a body etch of combined sides and floor with the sides already formed to a right angle in relation to the floor, a section of brass for the roof, roughly shaped, and a good many small etched sheets for various parts. Many of them are duplicated and it is important to identify the correct parts to use. The ends, for instance come in two different forms, one that fits in the body accurately, and one that does not. There is glazing material, plastic sheet and rod, various white metal castings that have been made with badly worn melds, etchings for the bogie frames, and a sheet of etch for the solebars and associated fittings and lost wax buffers in brass and nickel silver.

The instructions are, as is usual for Blacksmith kits, somewhat minimal, particularly as the detailed instructions enclosed are for a restaurant car, which is a quite different beast from a newspaper van, having straight sides from the waist downward and different 6 wheel bogies. However, careful reading of what there is, a thorough examination of the parts and a trawl through various reference books, indicates largely how it should go together.

The kit clearly has its origins in 4mm and appears to have been simply been blown up to 7mm, evidenced by the enormous slots for the tabs and holes for the grab handles for instance and Ultrascale wheels being recommended. Would that Ultrascale produced wheels in 7mm, it would have made the bogies easier to build. I find Blacksmith kits vary a great deal some, like the D15 Brake 3rd go together well, indeed the one waiting in my 'to do' cupboard now sports internally sprung buffers, seating and what looks like improved etching.
Others like this one are in need of upgrading. Let us hope the new owners continue to upgrade the range and, sort out their website too.

However, the standard of etching appears good for the panelling and the design of the body looks as though it may not be too difficult to construct.

**The Bogies**

I began with the bogies. Aside from the bolsters, these are the only parts provided so the prominent steps will have to be scratch built. The bogies require careful attention while bending them to shape. The first is made by bending the axlebox supports with the etched line on the outside as shewn here. The Hold and Fold proved essential for this.

Care is need when soldering this up that stray solder does get near the central supports. The ears on the axlebox supports, which I have circled, act as supports for the tensioning rods between the axlebox supports.

The next bend to form is the frame side to bring the axleboxes down to 90° to the horizontal plane.
Once the remainder of the bending up is completed, all the joints were strengthened with a good fillet of solder. At this point I decided to see if a bogie kit was available elsewhere. The only GWR 6 wheel bogie I could find is by Wayoh but is of a different type that is fine for restaurant cars but not for this vehicle; no choice then but to soldier on; in fact, it turned out rather well.

The centre wheel set is designed to run in inner, knife edge, bearings that provide vertical movement, unfortunately, one of the bogies has no fold-over tabs to hold the wheel set in place. The tensioning rods are simply 0.9mm wire cut to length and the ends bent to match that of the fixing lugs. There really ought to be bolts on the keeper plates and were I ever to do another (most unlikely) I would punch some out before folding up the parts or, even fit the plastic bolt heads one can buy today, which gave me an idea. The plastic type can be fitted retrospectively so I investigated and used some Grandt Line bolt heads.

The hole for the bearing is far too large, as shewn by the blue circle in this picture. Part of the frame, in the red circle in this picture, needs filing away or it fouls the wheel treads. I sweated eight pieces of 0.3x10x10mm brass together (the centre axle does not need one), measured up and drilled them all 2.5mm to take the bearings as a tight fit. Once separated and cleaned they were soldered in place inside the bogie frame along a common centre line, thus.
The bearings were then fitted followed by the wheel set. Then, using an aluminium (hairgrip) clamp to ensure the plate stayed in place and act as a heat sink, the bearings were soldered in so that the axles had minimum lateral movement. Once the centre wheels were dropped in with four washers each side to limit side play, I had a bogie that would sit level and ran very easily. Altering the side play in the centre wheels is simply a matter of taking the out the wheel set and removing washers. Exactly how one is supposed to fit the fixing bolt through the bolster with an axle in way proved to be an interesting question, dealt with later.

The bogie steps were scratched up by milling one edge off some U shaped brass channel, cutting them to size and filing all the corners round. The supports were based upon those in Slater's Dean bogie kit. With a little careful measurement it is possible to get all the supports pretty much the same; it just takes time and patience to cut all the pieces exactly the same length. They were soldered flat on to the back of the step and the top bend was measured and put in. The rest is done by eye.

I alluded earlier to investigating Grandt Line bolt heads and purchased some at the Kettering show (2013). Here is the completed bogie with the bolt heads super glued in place. They look the part and I shall be making more use of them.
in the future. The castings for the spring/axle boxes were very poor and took considerable cleaning up before they were fit to fit. The bogie pins, 6BA bolts, were glued into the bolster at the same time as the bolster was glued to the frame. It will be held in place by a nut from inside the body but the pin will need shortening first. When the bogies were offered up to the body, it did not sit straight. Investigation shewed this to be due to the holes in the bolsters not being at right angles to the base. Some work with a broach soon opened it out and the body now sits square.

The Body

The spacers for the body need carefully to be cleaned up, ensuring that all their profiles are identical. The ends also need some extra scrap soldered to their bases or there is not much to solder to the floor. The other set of ends, which do not fit, have sufficient to fit the floor properly. The standard of etching of the panelling is very good but the
slots, as you can see, are huge.

The doors, now ready for fitting with their drop lights in place. The bars that go over the windows need carefully to be relieved of their cusps so that, when painted, they do not look too thick. Something of a fiddle but, worth the effort and less hassle than making new ones with wire. The battery boxes have also been made up.

Once the body sides have had the curve rolled in under the waist (difficult) - I used some brass rod the full length of the body - the spacers can be fitted. Starting from the middle, each one was first soldered at the top on both sides. Then, using a piece of wood to protect the fingers, the base end was soldered while bending in the side to fit the curve. Though all the spacers were exactly the same size, when it came time to fit the roof, a few stood proud of the ends and prevented the roof from seating properly and so needed some cutting
back. This is due to the large slots making it difficult to maintain a constant height for them all.

The body is now fairly rigid but to ensure it stays square the next job was to fit the solebars. Because I had deliberately spaced the internal partitions relatively evenly along the body, some of them fouled the slots for the solebars so the tabs affected were modified to fit. I think the spacers are supposed to fit either side of the doors but, since they cannot easily be seen once completed anyway I chose the equidistant option.

The next picture shews the solebars in place and the steps and one end have been fitted. The other end, with the alarm gear from CPL fitted is still to be fixed.
The Alarm Gear

The alarm gear goes together well but, I am not convinced that they ever carried it. I can find no pictures shewing the guard’s end so fitted. On the other hand I cannot see why they would not have been so fitted.

Back to Top

The Doors

Here is where the kit’s 4mm roots really create a problem. The door blank is intended to be removed and the ‘ears’ bent at right angles and soldered to the body side in the turn-under. The gap is far too large, as are the holes for handrails and there is no provision for the handrails that were below the waist.

I used a method similar to that which I used for the Dreadnought. I cut 16 pieces of brass strip 3mm by 1mm to fit the door aperture. These were sweated together in blocks of 8 and formed to the shape of the body side. A pair of these will be soldered to each door and then the whole unit soldered into the body. First though the original has been cut out, as here.

That was not at all easy and took considerable time with a piercing saw and files. I had thought originally to cut the sides from the floor and build it as for the Dreadnought but dismissed the idea. On reflection, that may have made this part of the construction much easier and would certainly have made bending the turn-under less fraught.
Here are the blocks of door frames ready to be filed to shape, for which I used a spare body spacer as a master. Then each block was measured up for the handrails and carefully set up in the milling machine with a 0.7mm stub drill held in a collett and drilled through. Here are one set of eight separated and cleaned up ready for fitting. The other set will stay as a block until the doors on one side have been completed since there are bound to slight differences between the two blocks I do not want to mix them.

To test the theory properly, I decided to set up one door and fit it to the carriage.
Here the parts are set up in a jig for soldering. The door rests on four pieces of scrap, which are soldered to the back of the door and the frames. Here is the view from the rear. Crude, but effective. Next, the handrails were fitted using 0.6mm wire. Lastly, the finished unit ready to be cleaned up and fitted which was then relatively easy to do and proved that the method works.

Finally, here is the door fitted from the front and the back. For the remaining doors I fitted the handrails before fitting the frames to the door and tidied up the rear fittings somewhat too, it made soldering the unit in place in the body easier.
And finally, all the doors fitted.

The buffers come as, quite soft, lost wax castings, the body in brass and the head and shaft in nickel silver with an 8BA thread cast in. To spring them, white metal stops are provided, crude but effective but it was a fiddle to get them lined up and level needing extra floor pieces soldering in at one end. The problem with cast threads is that sometimes the metal is too thin and the nut will not work. One of the head/shafts was like this and I had to re-thread it 12BA, hence the steel nut on one buffer. Cleaning up the parts means that, effectively, each head/shaft is mated to one body so it is important to keep them together.

The Underframing

The queen posts that come with the kit are white metal, too thin, fragile and were broken anyway. The instructions indicate that there should be an etched unit to fix them to and slots in the floor to fit the etch, but not in this kit. The truss rods have holes etched into them for the queen posts to go into so by measuring their centre and then finding the centre of the floor it was relatively easy to mark up where the posts should go. I soldered some brass strengthening pieces against the underframe on which to seat the lost wax cast queen posts from Sanspariel then cleaned up the trusses, opened out the holes and bent them to shape. The posts needed their threads cleaning up with a 12BA die and providing with nuts. One set of posts was
soldered in and then a couple of the trusses used to space the next set accurately. Once all trusses were fitted the nuts were screwed on and the excess thread cut off and filed flat.

Here is the completed underframe with the brake rodding and dynamo fitted too.

Rooting in the box I found a long etch that had got buried under the sheet of plasticard. It turned out to be pieces to make the lip of the underframe girder. On looking at the instructions again, it refers clearly to this alternative method; the parts also have provision for sighting the queen posts. I had already fitted the Queen posts so modified the pieces to fit in three parts. Finally, it was time to set it up temporarily on its bogies to see how it is progressing. Steam, vacuum pipes and coupling are also fitted.

**Corridor Connectors**

Corridor connectors are provided in the kit but, compared with the CPL version, they are rather crude and much more difficult to make operational; so CPL units were substituted. They consist of a small sheet of etch, instructions (somewhat minimal) and two methods for simulating the bellows, one of which would useful for connectors with no outer door where one can see through into the vestibule.
Construction is straightforward however; care is required as many parts are small and delicate. I began by assembling the major components.

The latch that holds the connectors together when coaches are coupled works, as do the scissors. Easily done by chemically blackening the parts so that the joint does become soldered solid when the washers are fixed. The bellows need careful cutting out and folding; each one is made up from two pieces of paper that slot together vertically.

**The Roof**

The roof arrives only partially formed in thin brass. My rolling bars are too short to cope with this so, to correct the shape I decided to use a number of formers soldered into the roof to hold the correct curves.

Ten pieces of brass were sweated together, marked up and shaped, as shewn above using a spare partition as a master. Now separated and cleaned up, they are ready to be fitted along the length of the roof.
It is clear from this picture that the roof profile is a long way from matching the required shape but I am confident that with annealing (for which I intend to use the kitchen gas hob) and suitable rolling and the formers will correct it.

Well my confidence was misplaced and it did not work as the annealing was not even enough. I considered using an aluminium roof section I have but, though the curve was right, it was too deep to fit and I was not prepared to try to remove the cantrails. Fortunately I had a spare brass roof section and, by cold rolling it was possible to get the roof into shape. However, like the first brass roof, it did not fit and needed some 2.5-3mm removing from each edge. Due to the curvature and the fitted shaping pieces there was no space for cutters or the nibbler to work in. I could think of no way to hold it on the milling bed and mill off the offending extra so had to scribe lines and, by carefully holding the roof section in the vice between the aluminium roof section and a block of wood, was able to remove the extra using a course sanding disk in the Proxxon drill. It took a while but was successful in the end.

There is no provision for cant rails in the kit or for rain strips. Both needed very long sections and I started by offering some brass strip to solder in the corner made by the upper bend in the body side.

Once soldered in this provided a place for the roof to bed into and has the advantage that it will hide the odd roughness on the edge.
Roof fixings were fabricated up from scrap, drilled and tapped 10BA and then some rod was also threaded 10BA and one end soldered into the roof fixing mount. The bolts go through the floor and are bolted down underneath it.

Here is the end view, now with it's the handrails and lamp brackets.

Not an easy build by any means and a number of parts have to be fabricated because the kit makes no provision for them. A challenging build that I am happy is, at last, finished. It will be going to my client at Telford and passed to Ian Rathbone, along with a W1 van for painting. Hopefully there will be some pictures in due course of them in service. Once painted, the corridor connectors will needs some black tape fixing on top to simulate the canvas cover.