Furness Railway Wagon Co.

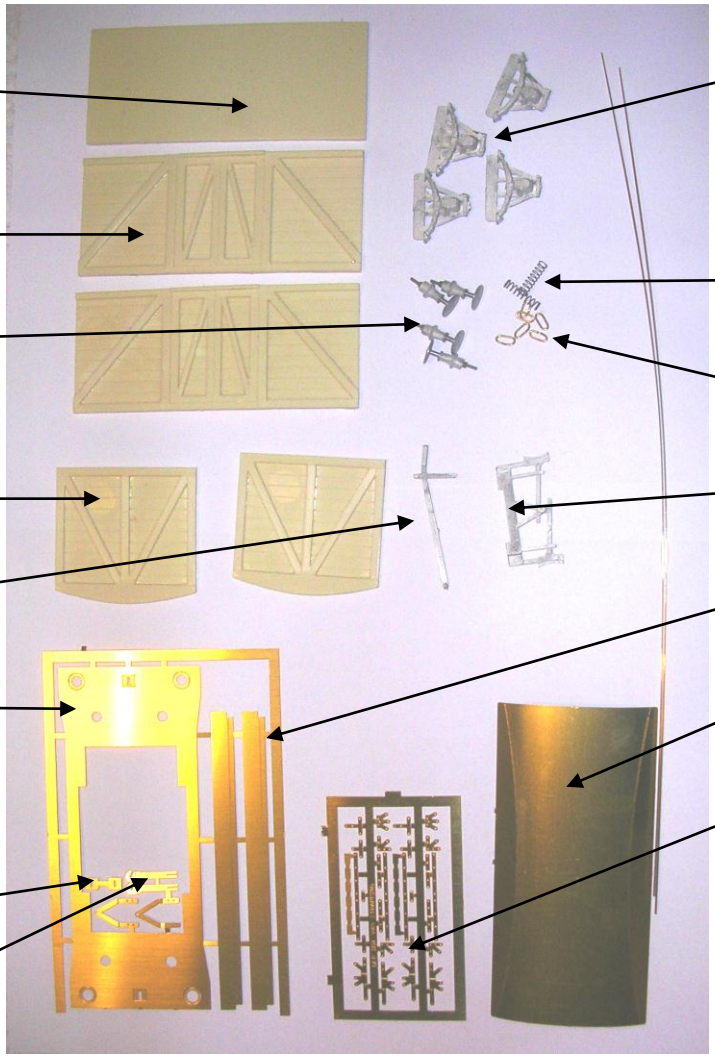
Great Western Railway

1885 Diagram 8ton Box Van Steel Under-Frame

Wheels, paint and transfers required to complete.

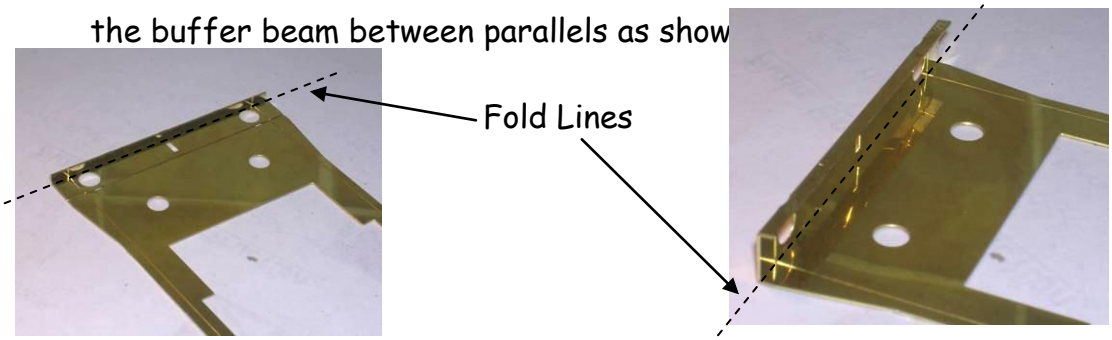
Please note that to aid the folding of the various parts score all the halfetched foldlines that are to be folded.

The Parts.

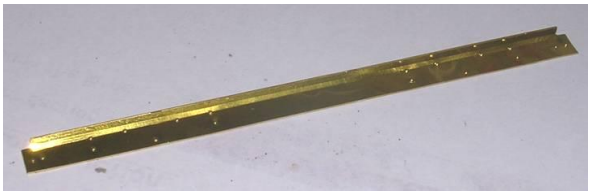


Chassis Construction.

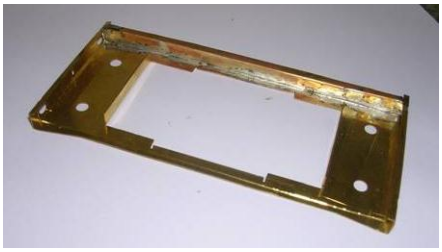
1. Remove chassis (part 1) from the etch and fold up the bottom of the buffer beam between parallels as show



2. Next fold up the buffer beam completely as shown. Make sure that the resulting U shape is square so as to fit the sole bars. Repeat for the other end of the chassis.
3. Remove the sole-bars (part 2) and punch out the rivets. Next fold up the bottom of the sole-bars between two parallels. Make sure that the resulting shape is square.



4. Click one of the sole-bars in to the half etch slot that runs between the two buffer beams. Solder into position using 188C solder. Make sure that the sole-bars are actually soldered inside the buffer beam. Repeat for the other sole-bar.

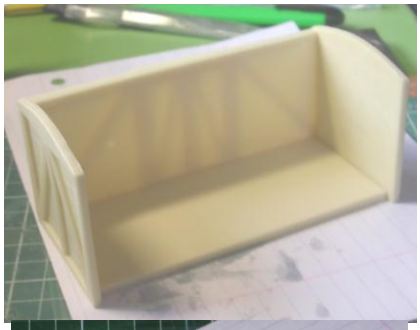


5. Next remove the buffer beam reinforcing plates (part 3) and punch out the half etched rivets and tin the back of each piece with 188C solder. Now sweat the plates onto the half etched square in the front of the buffer beam.

Buffer beam reinforcing plates

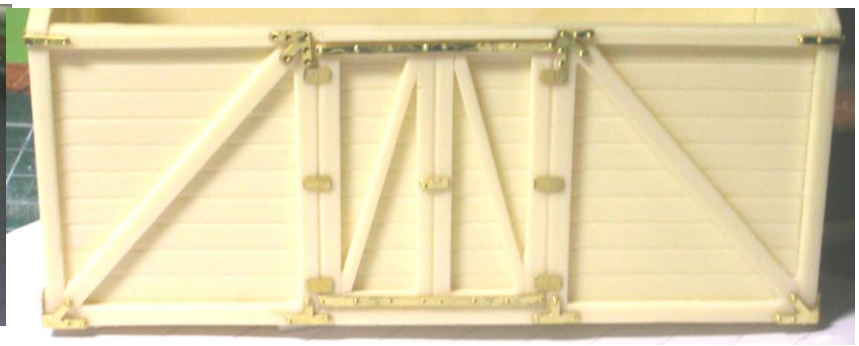
Final Assembly of van.

1. First solder wire in to the half etched slots in the roof (part 4).
2. Wash and Clean up the castings making sure that the casting fit together before gluing.



3. Fit one of sides (parts 5) to the floor (part 6), making sure that the ends of the sides line up with the floor and are square. Next fit the ends (Parts 7) of the to the sides and floor, as shown. Then fit the last side to complete the box.

4. Next punch out the half etched rivets on the strapping etch (Part 8) and fit as show.

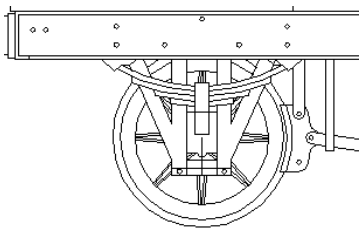


5. Next fit a piece of wire over the door as shown.

6. Position the top of the wagon in the middle of the chassis then glue the chassis to the top.

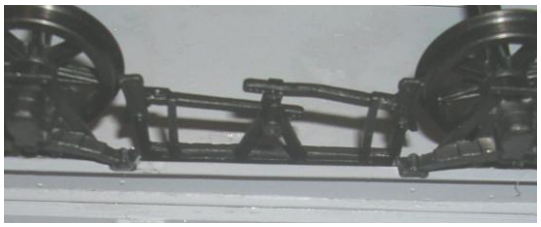
Next, assemble the links (part 9) on to the coupling hook (part 10) and push through the slot. Now push the spring (part 11) over the back of the back of the coupling hook and bend the tags over to secure the spring in place. Then fix the four buffers (part 12) into the holes in the buffer beam using two part epoxy.

7.Drill out the w-iron castings to suit the bearings of your chosen wheels. Assemble a wheel set, 2 x W-iron's (part 13), 2 x bearing's and 1 x wheel/axle unit, do not glue the bearings into the W-irons at this stage. Again using two part epoxy resin, glue the assembled wheel set onto the sole-bars so that they are square and line up with the rivets as shown in the drawing.



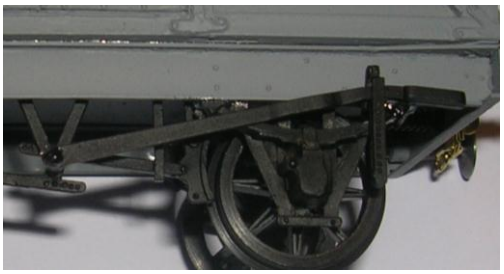
8. Repeat for the other wheel set. Use a straight edge across the back of the wheels to aid getting these parallel and square to the chassis.

9. Place the brake gear casting (part 14) against the inside of sole-bar and slide down into the chassis with the spigot pointing outward.



You may require to chamfer the casting so that it clears the solder filet between the chassis and the sole-bar. Glue the casting into position using two part epoxy resin; this will give you opportunity for adjustment. Position the casting with care centrally between the rivets on the sole-bar.

10. Next fix the brake lever and ratchet casting (part 15) to the sole-bar as shown below.



11. Finally fit the roof, making sure that it is square. Paint the model in the livery of your choice.

History of the Wagon

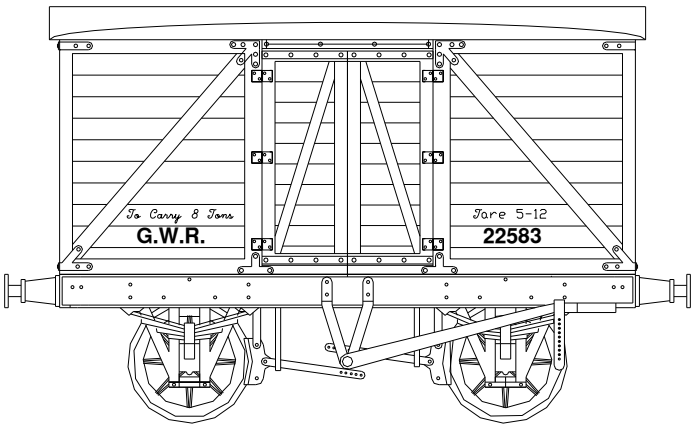
Between 1985 and 1889, the Great Western Railway Company ordered a number of 8ton general merchandise box vans from the company's own wagon works. The wagons were built with outside frames with cupboard style doors mounted on a steel under-frame.

The wagons were used to convey general merchandise around the west of England and Wales although some of the wagons where photographed as far away as northern Scotland and south east England.

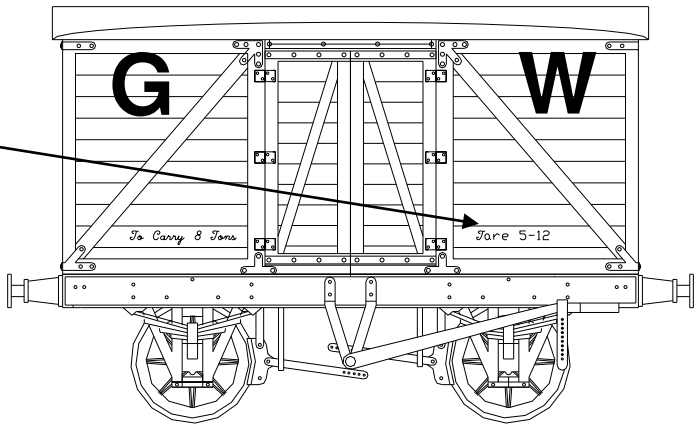
The wagons were issued the following running numbers by the Great Western Railway: 22332(6.4), 22415, 22599, 22583(5.12), 22609, 27655 and 37517. Before 1910 the vans would have been painted red oxide with small letters but after 1910 would have been repainted slate grey with the large GW. All had White/light grey roof and everything below the sole-bars in black. All of these vans would have been withdrawn from service by 1930.

Liveries

Great Western
Railway Livery
Circ 1885



Great Western
Railway Livery
Circ 1910-1935



Furness Railway Wagon Co.

Great Western Railway
1885 Diagram 13 10ton
Box Van Steel Under-Frame

1. Construction Manual,
2. One Brass chassis etch,
3. One rolled etched brass roof.
4. One Brass Strapping etch
5. One brake gear castings,
6. One brake lever castings,
7. Four W-iron/axle box castings,
8. Two wagon side casting (resin),
9. Two wagon end casting (resin),
10. One wagon floor Casting (resin),
11. Four buffer assemblies,
12. Two coupling hook springs,
13. Six coupling hook links.
14. Two lengths of 0.7mm brass wire.

We recommend Haywood Railway's 3'1" split spoke wheels.
Transfers are available from POWsides, HMRS, Slater's and Dragon Models.