

# *Furness Railway Wagon Co.*

GER/LNER/BR 1900

Diagram 29 10ton Timber Wagon

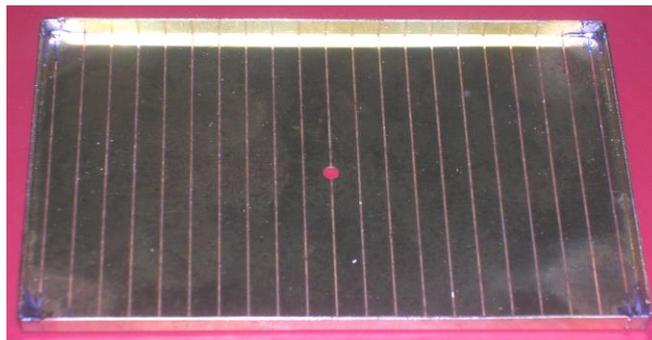
Wheels, paint and transfers required to complete.

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

The etch.

## Instructions for the construction of the Top.

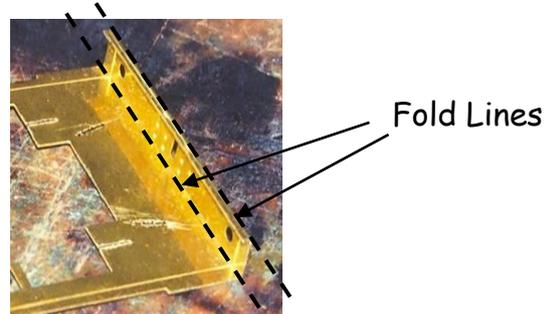
1. Remove (part 1) the body from the etch and punch out the half etched rivets. Then fold up and solder as shown.



## Chassis Construction.

1. Remove the chassis (Part 2) from the etch and fold up the bottom of the buffer beam between parallels as shown.

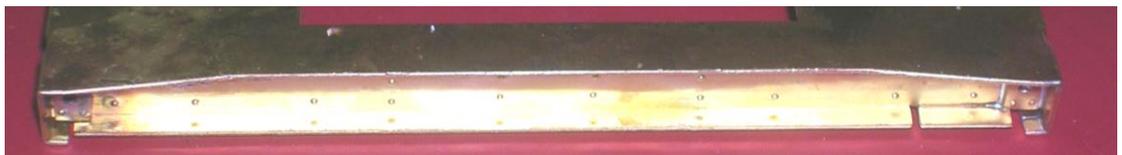
2. Next fold up the buffer beam completely as shown. Make sure that the resulting U shape is square so as to fit



the sole bars. Repeat for the other end of the chassis.

3. Remove the sole-bars (Part 3) 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. Position 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 solder the sole bar end plates (Part 4) onto each of the ends of the sole bars.



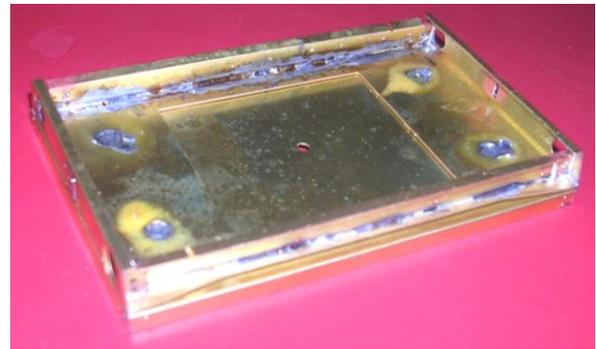
6. Next remove the buffer beam reinforcing plates (Part 5) and punch out the half etched rivets and tin the back of each piece with 188C solder. Now sweat the plates onto the half etched square in the front of the buffer beam.



Buffer beam reinforcing plates

### Final Assembly of soldered components.

1. Position the top in the middle of the chassis with both the bottom of the chassis. Make sure that the hopper is central and square with the chassis.

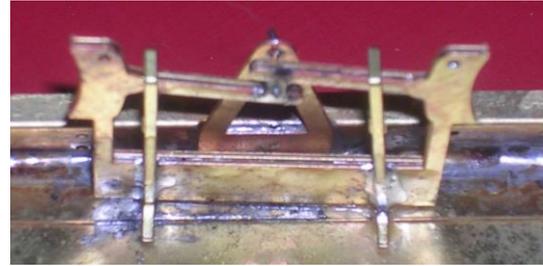


2. Next solder the 'V' hanger to the inside of the sole bar as shown. Make sure this part is central as it is key to positioning the brake gear later.

3. Next sweat the brake gear blank (Part 6) on to brake gear detail plate (Part 7) and fold up the tabs as shown.



4. Place the brake gear assembly against the inside of sole-bar and slide down the chassis until the hole in the 'V' hanger and the hole in the brakes line up. And solder in position as shown.



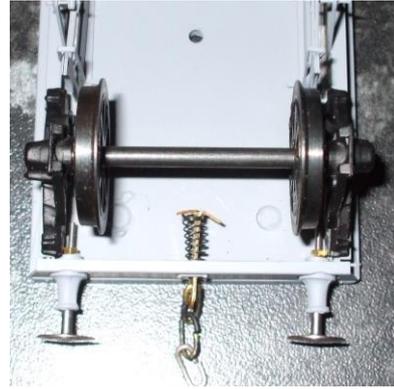
5. Next fold up the brake guards (Part 8) and solder into position as shown.
6. If you are building a wagon that ran in later years you will need to replete steps 2 to 5 as shown.



7. 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.
8. Next fix the four buffers (Part 12) into the holes in the buffer beam using two part epoxy.



9. 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 (Part 14) and 1 x wheel/axle unit, do not glue the bearings into the W-irons. 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 below. The ends of the buffers may require trimming to give better clearance and buffer movement.

10. 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.

11. Next fix the brake lever and ratchet casting to the sole-bar and to the V-hanger as shown below. This will need to be repeated if you are building a later wagon.



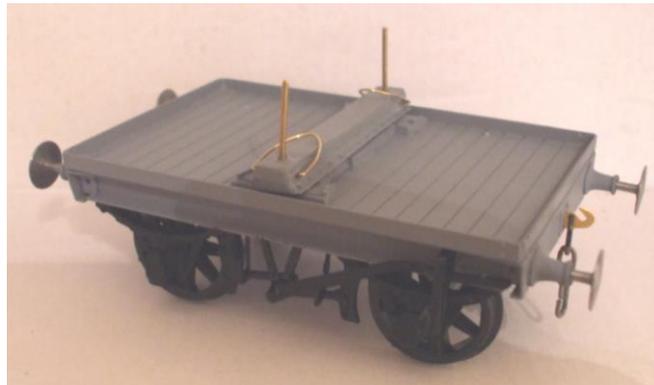
12. Glue the bolster support plate casting (Part 15) into position, it needs to line up with the fit into the holes situated in the top and halfway along the chassis.

13. Next take the bolster casting (Part 16) and drill out the holes on the top to fit 1mm wire and the holes on the side to fit 0.5mm wire.

Next cut two pieces of 1mm wire, approx 20mm long, and fit them into the holes on the top. Then fold up some of the 0.5mm wire and attach as shown.



14. Finally paint the model in the livery of your choice.



## History of the Wagon

Between 1898 and 1920, the Great Eastern Railway ordered 610 10 ton single bolster wagons from its own Temple Mills wagon works. The first 360 wagons were built with wooden bodies on steel under frames. The remaining 250 were of an all steel construction. This kit represents those wagons built between 1900 and 1908 although there are extra parts to make wagons built between 1914-20. The vans were originally fitted with oil axle boxes and brakes on one side only. However, wagons built after 1906 wagons were fitted with brakes on both sides and older wagons were retro fitted later in life.

The wagons were used to convey large pieces of timber or other long loads around the system but would have been seen all over the country.

These wagons would often be seen in twos. Known Great Eastern railway running numbers are:

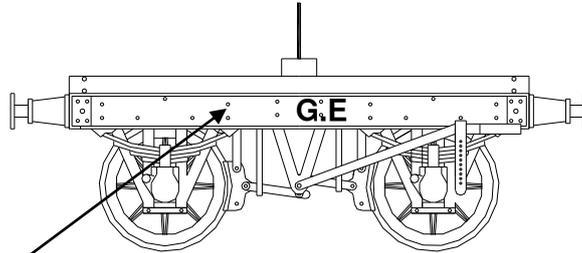
- (diag.29) 10724, 11048, 110511, 12208 and 12239.
- (diag.66) 2101, 2105, 9568-70, 9600, 9601 and 9603

All the wagons of these diagrams were absorbed into the LNER. These would have been renumbered by adding 600,000. 31 of diag.29 and 92 of diag.69 managed to last into early British Railways.

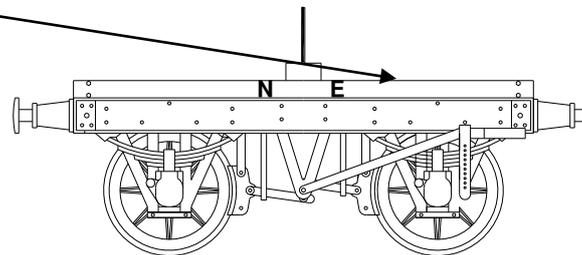
In Great Eastern Railway days the vans would have been painted black below the sole-bars and grey above. This was not changed by the LNER or British Railways.

Livery.

Great Eastern Railway  
1898-1923



Numbers



LNER 1923-47

# *Furness Railway Wagon Co.*

## **Check list for GER/LNER/BR 1900 Diagram 29 10ton Timber Wagon**

1. Construction Manual,
2. One etch,
3. Two brake ratchet castings,
4. Two brake lever castings,
5. Four W-iron/axle box castings,
6. Four buffer assemblies,
7. Two coupling hook springs,
8. Six coupling hook links.

We recommend Haywood Railway 3'1" split spoke wheels.

Transfers are available from POWSides