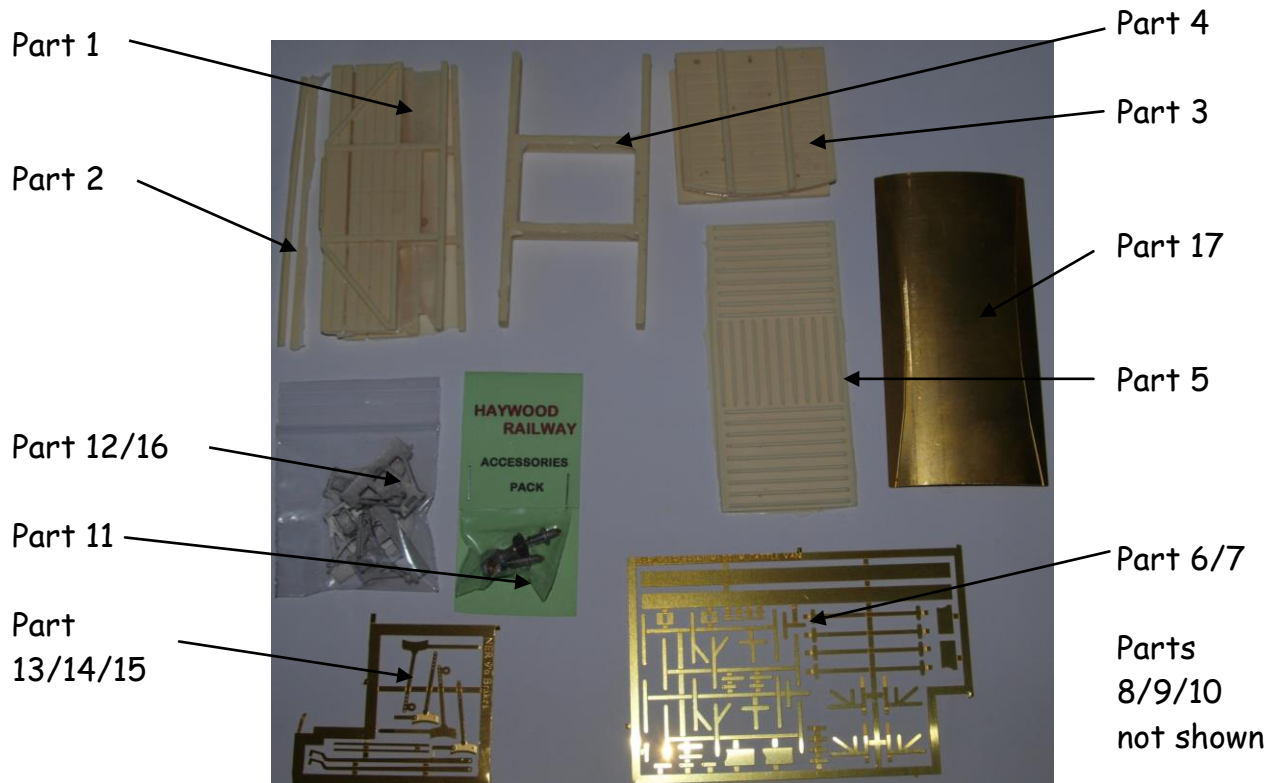


# *Furness Railway Wagon Co.*

## NER/LNER/BR Medium Cattle Van

Wheels, paint and transfers required to complete.

### The Parts.



### Assembly of van.

1. Wash and clean up the castings making sure that the castings fit together before gluing.

2. Take the outer side castings (Part 1) and remove all of the flash from the in-sides of the casting as shown. This is there to protect the casting in transit as parts of it are weak until the



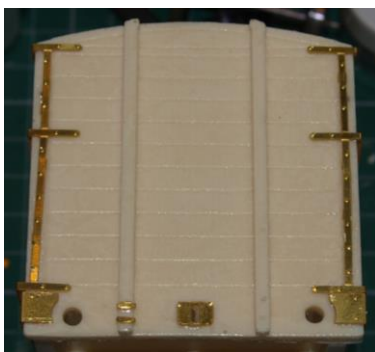
structure is complete. Then fit the bottom of the side (part2) to the bottom of the door. This should fit flush with the outside of the door.

3. Next drill the holes in the up-right beams and the ends (part3) to enable wire to be threaded in later. Next drill out the holes in the buffer beams for the coupling hooks and the buffers.

4. Now it is a good idea to dry fit the sides, ends, chassis (part 4) together. Make sure that the sides fit between the ends and flush with the chassis. Once you are happy with the fit, fix in to position with superglue.

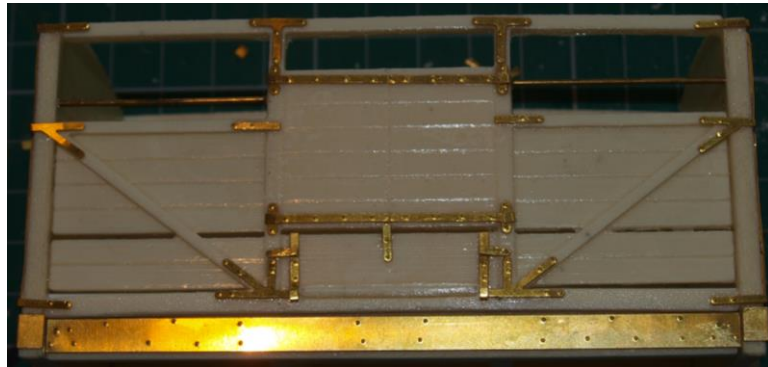


5. Then fit the floor (Parts 5) again make sure that it fits between the sides and ends. This is large and will need trimming to fit.



6. Next fit the etched strapping (part 6), as shown. Care is required not to get too much glue on the strapping as this could cover the strapping. Next, punch out the rivets on the sole bar etch (part 7) and

attach.

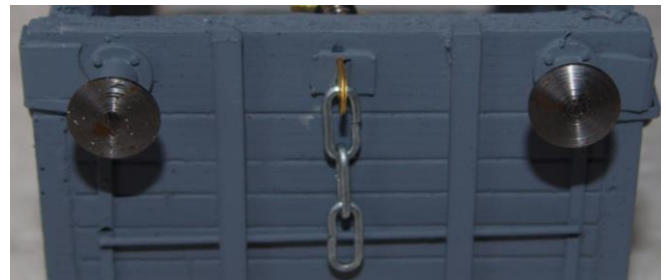


7. Next fit the wire into the hole that you previously drilled in the sides and ends

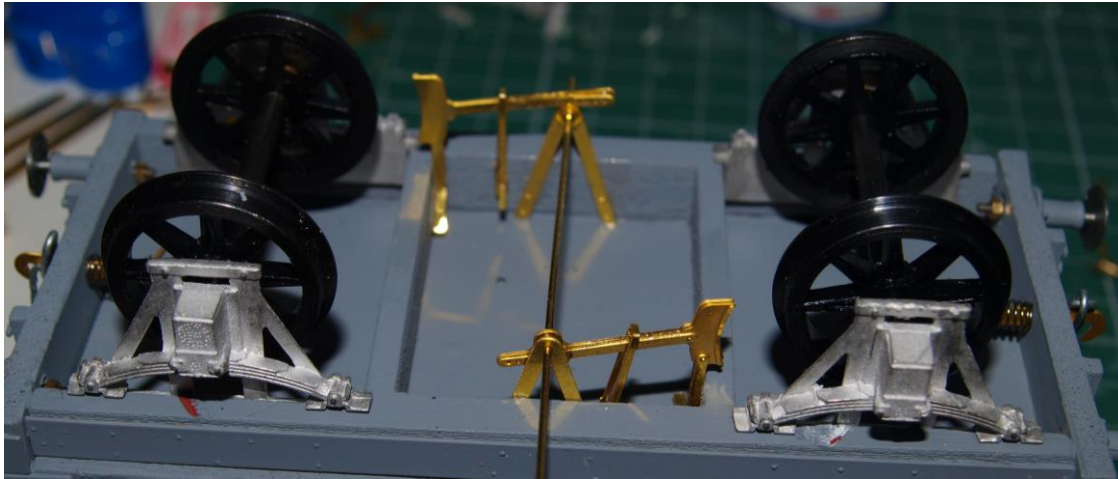
8. Next, assemble the links (part 8) on to the coupling hook (part 9) and push through the slot.

Now push the spring (part 10) 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 11) into the holes in the buffer beam using two part epoxy.



9. Now take the 'W' axel guards (part 12) and assemble a wheel set, 2 x bearing's and 1 x wheel/axle unit. Slide the assembly into position and make sure that the wheels are free running. There is no need to glue the bearings into the bearing extension castings. Repeat for the other wheel set.



10. Next take the etched brakes (part 13) punch out the rivets and solder together. These can then be mounted on to the chassis next the wheel as shown. Using the etched 'V' hangers (part 14) against the bottom of sole-bar and next to link arm of the etched brake assembly. Glue the casting into position using two part epoxy resin, this will give you opportunity for adjustment.

11. Next fix the brake lever (Part 15) and ratchet casting (part 16) to the sole-bar and to the outside of the 'V' hanger as shown.



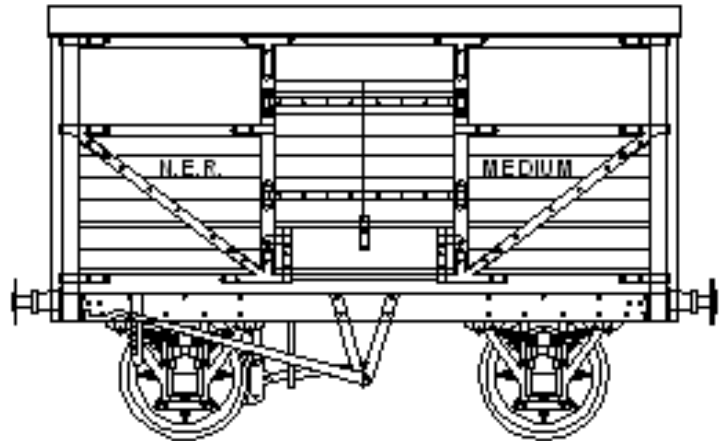


12. Finally fit the roof (part 17), making sure that the end line up and are square. Paint the model in the livery of your choice.

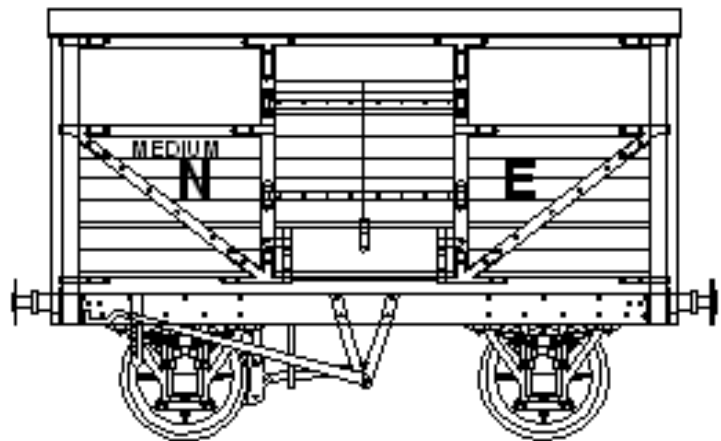


## Liveries

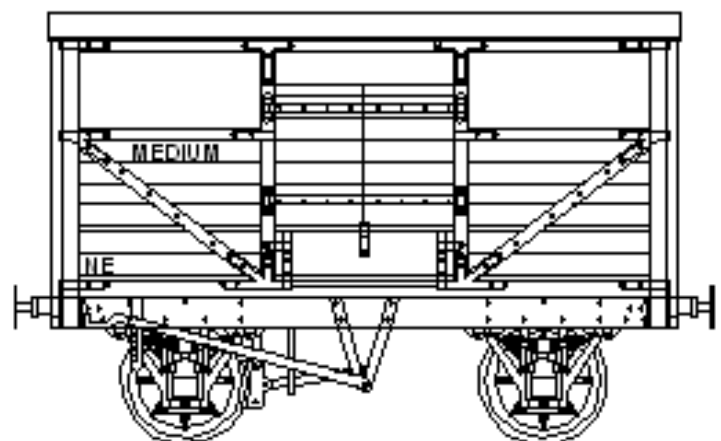
NER Livery Circ 1900



LNER Livery Circ 1923



LNER Livery Circ 1936



## History of the Wagon

This represents the Northern Eastern Railway's standard cattle van, unlike most of the English Companies the NER only built medium size wagon. 3,222 were built in batches between 1886 and 1919, at their Shilton and York works. 1,071 were taken into LNER ownership in 1923, all but 213 had been scrapped by 1947 and all would have been scrapped by 1959.

The only variation in the building of these vans was the braking systems. The standard vans were, originally, with a push rod brake, on one side only. This was later updated to a single brake block on each side, with a common cross shaft, with two brake levers pointing in the same direction. Some of the vans were also fitted with Westinghouse Airbrakes, while others were through piped for Automatic Vacuum Brakes and Westinghouse Airbrakes.

These vans would have been a common sight in goods trains from Scotland, Southern England. They would have been marshalled at the front of goods trains so that the shock to the cattle was less.

The NER's livery was Grey above the sole bars and black below. LNER livery copies the practice of the NER. However in 1936 the LNER repainted in red oxide. Those of the wagons that managed to survive past 1947 would have been eventually grey if they were lucky. No running numbers are known at this time.

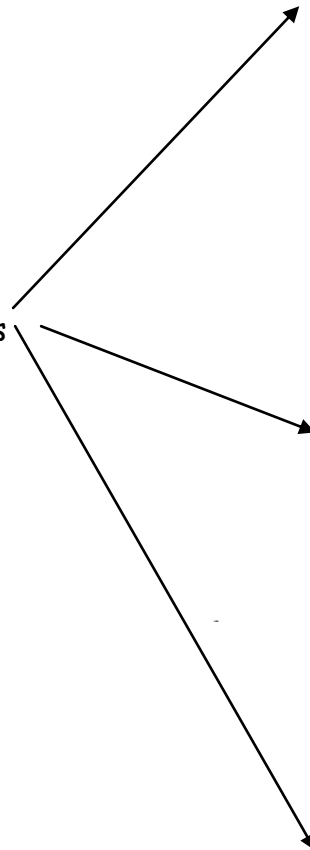
## Liveries

NER Livery  
Circ 1914

LNER Livery  
Circ 1923-1936

Numbers

LNER Livery  
Circ 1936-1955





# *Furness Railway Wagon Co.*

## NER/LNER/BR 6ton Medium Cattle Van

1. Construction Manual,
2. One rolled etched roof.
3. One Brass Strapping,
4. One brake etch,
5. One Brake ratchet Castings
6. One Brake pivot etches
7. Four outside axle box castings,
8. Four inside axle box castings,
9. Four spring castings,
10. Two wagon out side castings (resin),
11. Two wagon inside side castings (resin),
12. Two wagon end casting (resin),
13. One wagon floor Casting (resin),
14. One wagon chassis Casting (resin),
15. Four buffer assemblies,
16. One coupling hook etch,
17. Two coupling hook springs,
18. Six coupling hook links.
19. Two lengths of brass wire.

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

Transfers are available from POWsides.