# History of Manchester, Sheffield & Lincolnshire Railway (MS&LR)

# 3<sup>rd</sup> class, 6 wheeled, five compartment carriage No.946 (Rev5 Mar2020)

Acknowledgements: Author Clyde E. Pennington, Verifier and contributor John Quick.

#### **Description of Vehicle.**

This is a rare survivor of a classic late Victorian period railway carriage, built in 1888 at the Manchester, Sheffield and Lincolnshire Railway's (MS&LR) Gorton Works, Manchester (the Company name later changed to Great Central Railway), in answer to the need for greater passenger capacity over the earlier 4 wheelers. In its early life it would have been used for local passenger train services. Originally designed by Charles Sacre, the company's locomotive, and rolling stock engineer. By the time No.946 was built minor changes had been made and Thomas Parker, the company's Locomotive, Carriage and Wagon Superintendent, continued with these. - The thirds were built between 1878 and 1901, with many later converted for main line use with vacuum braking.

Mounted on a wooden frame with side reinforcement of steel plate, the body is mainly mahogany on ash frames, using traditional coach building methods.

The body is carried on three axles with six Mansell\* wheels that are leaf sprung. (\*Patented by Richard Mansell, the Carriage and Wagon superintendent of the South Eastern Railway, the design was created in the 1840s and was eventually widely used on passenger railway stock in the UK. The teak centre eliminated the ringing noise that emanated from early railway wheels. It was also arguably safer as it needed regular inspection and metal casting of the time were often flawed.)

The early 'Historic Railway Carriage Survey' indicated that this carriage was built in the late 1870's and was believed to be numbered 766. Later this was thought to be No.466. However, after much research by John Quick, GCR-RST Vehicle Advisor, 466 was found to be one of five similar carriages destroyed in Britain's worst railway disaster resulting in 400 casualties, mainly from the Leith based Royal Scots Regiment bound for Gallipoli, at Quintinshill Bridge, near Gretna Green on 22<sup>nd</sup> May 1915.

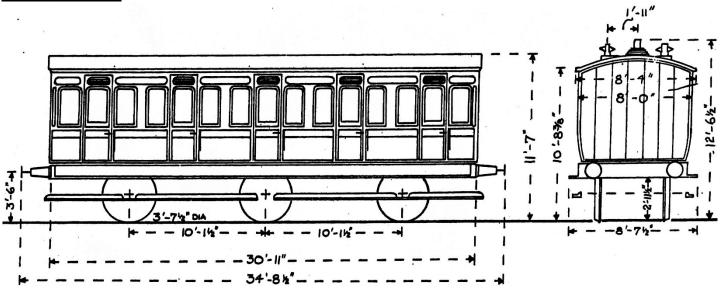
Note: Recent evidence indicates it could also be sister carriage No.947. Until positive material evidence has been found to substantiate this, GCR-RST will continue to use the number 946 that it now carries, so that we, RST, our members and all other readers, have no confusion.

GCR Diagram No.2B8, General Drg.1596-c (18 listed on this drawing as built in 1888)

LNER code: 5033. Camping coach No.CC15

BR numbers - Possibly E5946 or E5946E, then DE320256 as a locomotive boiler tube store / Tool Van.

### Main Dimensions.



Wheel arrangement: 6 wheeled – Mansell type, 3'- 7½" dia., conventional springs and axle guards.

Gauge 4'- 8½"

Tare Weight 12ton 1cwt 0q

Seating capacity 50 max. in 5 x 6'- 0" wide compartments.

When new no.946 was lit using high pressure compressed oil gas\*. The very early ones would have been lit with oil lamps.

\*This has been replicated in restoration using a single LED 12volt bulb.

When built it would have been fitted with a non-automatic vacuum brake system known as the 'Smith non-auto'. This was the favoured brake on the MS&LR at that time, but after only a few years, it had the standard vacuum arrangement fitted.

#### The Early Years under GCR and LNER.

Although little is known of its early working life, it may have been used on local trains when new, but it is more likely to have been in express and semi-fast trains.

No.946 was removed from normal traffic sometime before March 1934, probably 1933, by the London & North Eastern Railway, (LNER).

It was altered to become a camping coach, was repainted green and cream and renumbered C.C. 15.



Picture of CC15 taken from British Railway Journal of Camping Coaches.

#### Under British Railways (BR).

It survived into British Rail ownership as a locomotive boiler tube store at Stratford Works, London with the interior stripped out – hence early photographs show missing panels at one end.

Buffering gear damaged by Temple Mills retarders.

It was finally condemned by BR in 1967.

Fortunately, it was not broken up, but was used in the late 1960's in a Civil Defence exercise at Takeley, Hertfordshire, on the defunct Bishops Stortford to Braintree line, in a mock train crash, where it suffered considerable damage to its bodywork.

Afterwards, it languished in the 'Up-side yard' siding at Manningtree station until purchased for preservation in 1971 for the sum of £50, provided it was removed promptly. A hint was dropped to a local Royal Engineers squadron that they might like to transport it to its new site as a training exercise, to which they enthusiastically agreed.



(Photo & description by G. Maslin)

Photo shows No.946 at Manningtree in March 1969 before its move to Drage's farm. The livery is black and is lettered DE320256, TOOL VAN, E.e STRATFORD, NOT TO BE HUMP SHUNTED in white. The lettering E.e suggests Electrical engineers. As can be seen it carries a 'Cond' daub and a wagon label. It was located on the downside of the main London to Norwich main line to the west of the station. As this was not accessible by road it had to be shunted into the goods yard on the upside.

It arrived late one June 1971 afternoon at its new home, New Buildings Farm, Great Chishill in Cambridgeshire, after blocking the main road at Halstead, fouling overhead wires at its new location and falling through the floor of the trailer.

After arrival the missing body panels were replaced with marine ply and the roof waterproofed. The intention was to use the early GCR French Grey/Brown livery.

Unfortunately, enthusiasm began to wane, and it stood unattended for many years until being adapted to a shooters meeting hut.

A 1999 inspection report by A Keeble advises that apart from the brake pipe missing at the end where the damaged buffers were located, the vacuum brake gear was complete.

One of the two coach gas tanks for the interior lighting was still in situ, together with the gas control valve at one end, also a gas pressure gauge.

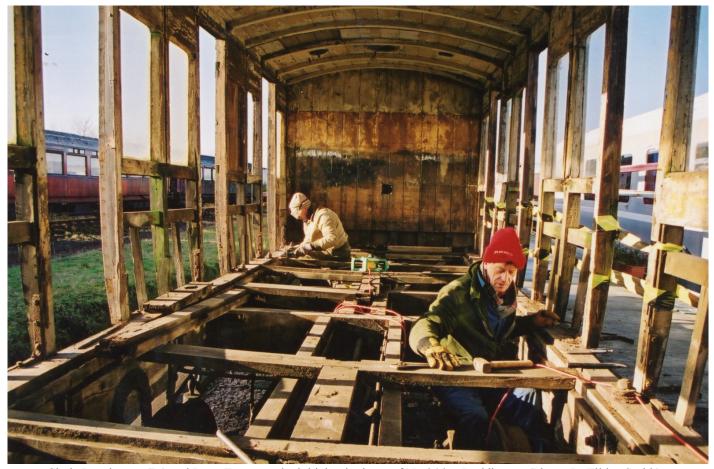
Door frames - some nailed up, droplights and door vents were complete.



1999c - MS&LR No.946 (Photo: A. Keeble)

## Restoration at the Nottingham Transport Heritage Centre, Mere Way, Ruddington, Nottinghamshire.

9<sup>th</sup> September 2002 – No.946 was donated by Bob Drage and A. (Tony) Keeble the then owners, by deed of gift, to the GCR Rolling Stock Trust based at Ruddington.



Clyde Pennington (Lt) and Dave Epson on the initial strip down of No.946 at Ruddington (Photo: R. Tilden Smith)

All but one of the roof gas-vents had survived. Part of the missing one remained in situ – the other bit was removed by the previous local game shooters occupants, to install a coke stove (see 1999 photo on page 3). regulators and some pipework.

Unfortunately, none of the 'Pintsch Patent' gas lights had survived, nor had any of the door furniture. Most of the underframe was, however, intact.

It had Mansell wheels – The oldest axle being dated 24/5/1899 and was tested to 70 tons tyre pressure.

Sometime during its existence, it had been 'Hump shunted' and had passed through 'Retarders' to slow it down. This severely mangled the tyre retaining bolts on all wheels. These have been extracted and replaced with great difficulty. (Note the comment on page 3 photo 'Not to be Hump Shunted' A bit late under the circumstances.)

On arrival at Ruddington the body was stripped of all the panelling. The framework was then repaired. A new end fabricated and fitted and five new compartment walls also made and fitted.

Originally the outer panelling was thin teak, but this is difficult to preserve and tends to warp and split, so it has been replaced with marine ply.

New buffer beams were fitted due to damage sustained in the civil defence exercise, together with two new cast iron buffer housings.

Part of the 'Flitch Plate' (The wood/steel beams which form the outer beams of the chassis). was rotten and has been replaced.

Brake gear has been renovated and defective parts replaced.

All ten doors have been painstakingly rebuilt by volunteer Doug Atkins and re-glazed.

New buttoned seating has been replicated, led by Trustee Roger Penson, but with modern materials to comply with current safety legislation. using traditional Victorian/Edwardian techniques and tools, thanks in part to on an early railway buff, who counted the number of buttons on the early LNER seating,

The gas lighting has been replicated using a combination of original and new materials. The flame being simulated using a 1.5w LED bulb fed, via the gas pipework, from two 12volt DC storage batteries in an end compartment.

After 13 long years, with restoration nearing completion, an estimated ten thousand hours of skilled volunteer labour, and some £25,000 expenditure on paint and materials, No.946 was at last unveiled in its museum quality finish on 11<sup>th</sup> November 2015, to the media and the wider world, in a ceremony dedicated, firstly, to thank the many who have contributed their time, financial support and materials towards restoration of this beautiful carriage and secondly in a special dedication service, to the memory of all who were injured or died so tragically in the railway accident at Quintinshill, 100 years previously.



Feb 2018 - Finished interior of No.946 (Photo: A. Coalwood)

### The future for MS&LR No.946

There is still much to finish off before No.946 is passed fit to traverse once again on GCR metals during filming, special charters, or photo shoot occasions.

The hope is to form a rake of genuine restored MS&LR/GCR carriages, all from around 1900, pulled by an original or replica GCR engine of that era, running on the saved section of their original route known as 'the London extension'.

Meanwhile, in 2017 the race was on to provide secure and environmentally clean storage on site, in which she could be displayed to the public, along with other GCR memorabilia currently stored on site.

In the interim a marquee was purchased and No.946 was cocooned inside within No.1 'workshop' building at the Heritage Centre. Unfortunately, this prevented its display to the public on a regular basis and did very little to protect it from dust and corrosive fumes, as the building was also being used as a running shed and for repairs.







Memorial to WW1 GCR Fallen

New Builders Plate

Quintinshill Disaster Victims Memorial

For a variety of reasons, outside GCR-RST's control, it proved impossible to extract No.946 for final set up, and 'certification to run', and the proposed on-site display building at Ruddington was also put on hold indefinitely by the site operators – GCR(N).

On 15<sup>th</sup> September 2017, No.946 was finally extracted to become the centre piece of a GCR-RST sponsored Great Central Railway Gala and 'Dedication Service' to be held on the site car park, with newly purchased plaques attached in 'Commemoration of those GCR employees who gave their lives in WW1'.



GCR Gala - 16<sup>th</sup> September 2017 MS&LR No.946's second outing hauled by Hunslet 0-6-0ST NCB Works No 3694 Whiston from the Tanfield Railway (Photo: A. Coalwood)

Arrangements had been made to transport No.946 after the event by road to the Nunckley Hill Museum, on the recently opened Mountsorrel branch line, where it would be displayed in a safe, clean environment and become accessible to the public on a daily basis.

The gala took place on the 17<sup>th</sup> September 2017 and on the morning of the 18<sup>th</sup>, No.946 was transported to its new home by Allelys Heavy Haulage, specialists in the movement of all types of oversize loads.

In 2017, it was anticipated that the carriage would transfer in approximately 3 years to another new home, to become a part of the static display in the new satellite National Railway Museum planned for the southern section at 'Leicester North', Birstall, Leicestershire.

Unfortunately, this project had to be abandoned when the agreed Heritage Lottery Fund grant was suddenly withdrawn.

Thus, No.946 will remain on public display within the Railway Museum building at The Mountsorrel and Rothley Heritage Centre, Nunckley Hill, Swithland Lane, Rothley, Leicestershire, for the foreseeable future, lovingly cared for by their volunteers.

At some stage, it is hoped that No.946 will return again to the Ruddington site, to be stabled within its own dedicated display museum, as a part of the reunified GC heritage railway.