PLATFORM FOUR



THE JOURNAL

OF THE

Lancashire & Yorkshire Railway Society





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COVER: 1908 saw the rebuilding of the first of four of the standard 7'-3" 4-4-0s by Hughes. The locos received Schmidt superheaters and Walschaerts valve gear and became modern efficient machines in spite of lubrication troubles. They were the first L.Y.R. locos to be fitted with Ross 'pop' safety valves and for the first two or three years carried a handsome tapered chimney. Thus we can date the view of No.1098 between 1908 and 1910. The train is a Liverpool—Manchester—Leeds/Bradford express on Walkden troughs and the standard formation of 'LBL' sets can clearly be seen. It is of interest that the first set has been converted (or built) with electric lighting while new stock being built was still fitted with gas lighting. The train would shortly be replaced with new elliptical roof carriages.



Published on behalf of the Lancashire & Yorkshire Railway Society by the Hon. Editor, B. C. LANE, 26, The Hawthorns, Sutton-in-Craven, Keighley, Yorks.

The 1008 class—and all that.

The Late ERIC MASON

Continued from page 25 of Platform Three. Reprinted from the S.L.S. Journal, October 1955.

The town of Horwich, at the time of my residence there was always regarded with mixed feelings by those whose steps led them in that direction late on Sunday evenings, but once the week's work commenced at 6.0 a.m. on Monday there was precious little time available to dwell upon the shortcomings of the place as a whole, as four evenings a week had to be given up to classes at the Mechanics Institute, and the fifth was usually spent outside the precincts of the gaol so to speak. In the works at that time the system of engine repairing was totally different to that which obtains today; the belt system was quite unknown in loco. practice.

The engines were called into the shops on a waybill, made out by the running shed staff, and they were usually parked for a while on some sidings near the smithy to the east of the erecting shops, and there they awaited a vacant place on one of the stripping pits of which there were two-one in No. 5 shop dealing with larger engines and the other in No. 3 shop which seldom tackled anything larger than the 2-4-2 tanks and 6-coupled goods engines. All apprentices had to do at least three months on one of the stripping pits and he who was allocated his turn on the No.3 shop pit was considered lucky. Strings could be pulled of course if one was fairly well in with the shops office staff. The writer put in his time on the smaller engine pit, much to his great content after about nine months in No.4 shop, wrestling with the larger ashboxes and other fittings of the 0-8-0 coal engines, Hughes 4-cylinder 4-6-0's and sundry other locomotive types of elephantine proportions. But there was a darker side even to stripping smaller engines as most of these, having round top fireboxes, required the removal of the roofing bars, by the crude, if effective, method of getting into the firebox, along with a fitter, and holding up a short square holed knocking spanner on the roof bar bolt heads on the firebox crown, while the fitter slogged at it with a big hammer in an endeavour to loosen the bolts. This was tiring work and fraught with perpetual anxiety lest the big hammer missed the spanner and scored a bull on some part of the apprentice's upper anatomy. However, we are still here to reflect on these former glories.

Several rather interesting engines came and went while I was in the erecting shops, amongst which was the last of the old West Lancashire stock, No. 1365, a 2-4-2 side tank with a radial at one end and a pair of fixed wheels at the other.

The writer's first experience with a 2-4-2 tank in the shops was at 6.15 a.m. on the first morning he was transferred there from the machine shop, and it was necessary to go outside to the weighing table to adjust the weights on engine No.46. It was raining at the time, and the weighing machine in those days was not covered in. The adjustment of the coupled wheel springs on this engine (as on many others) which had a pair of laminated springs in a buckle, was done by putting a long handled open jaw spanner on to the very thin-headed set screw at the bottom of the spring buckle, the spanner having to be insinuated between the spokes of the wheel. Having succeeded in getting the spanner on the screwhead, the next job was to hold it there while one's mate went to find a length of tubing—known as a persuader—and slipped it over the end of the

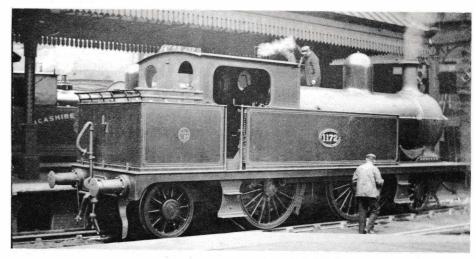
spanner handle to take the weight. Then the apprentice and the fitter together tugged at the combination to either tighten up or loosen the adjusting screw in a series of short jerks made necessary by the limited moving space between the wheel spokes. If the spring required a lot of adjusting, the repeated process of resetting the spanner on the screw head and then dashing to the fitter's assistance could become monotonous and there was little chance of an easy spell on this job as the yard foreman—an energetic man of objectionably insistent habits—was perpetually around binding about the length of time the operation was taking. Sometimes the spanner would slip off the set screw head with uncomfortable results to those pulling it.

I think the trickiest job I was ever involved in was the renewal of a set of footblock bolts on engine 722 in the paint shop, the job having been overlooked while the engine was on the shop pit with the wheels out. The footblock was a steel casting which acted as a frame stay under the footplate and also as a vacuum reservoir, and was never intended to have attention with the wheels in position, the securing bolts having been a driving fit through the main frame from the outside, and there was only just enough room inside to put the nuts on when all the pipes were disconnected and the wheels out. However, the job was done—more or less—and as there was no reaction later it is assumed that the sight of new bolt heads, etc., satisfied the mechanical inspector that the booked workhad had attention.

Generally speaking the 2-4-2 tanks were fairly easy to deal with, and had the advantage, common to most side tank engines, that should any work have to be done to the dome or safety valve joints when the engine was outside, the fitter had the extra foundation of the side tank tops to stand on instead of tight-rope walking along the handrails. An experience once on a 0-6-0 goods engine when a repair outside the shops necessitated the removal of the dome cover is one which I am never likely to forget. The only way to get the dome clothing cover off the dome proper unless a crane was handy was for two men to stand on the opposite handrails on either side of the dome and carefully lift it up from the bottom, the cover being more bulky than heavy, and place it on the boiler barrel just ahead of the dome. We had got the shell nicely balanced and almost in its temporary position when it seemed to move my way a little. I naturally pushed it back a bit, but my mate, feeling it coming his way, gave it another lurch which threw me off my balance, so I let go of the thing and acting with what I considered to be commendable presence of mind, I jumped backwards and landed, terrified but only slightly shaken on the lower portion of my back in a large and muddy pool of water. As if this was not enough, further moral injury was added by the disgusted look on my mate's face as he peered over the top of the boiler and demanded to know in no polite tone of voice why I had left the job and how long it would be before I proposed to return. Life at times could be very trying.

Some of the tank engines were very free runners, in particular those with the back to back valves, and it was a treat, when one of them had had a wheel repair or a newly-fitted set of valve motion, to go on a trial run light engine say from Pendleton to Hindley, then bunker first to Dicconson Lane and so complete the triangle by a sharp run along the fast line to Pendlebury and so to the shed. If all bearings were cold after a trip like that the engine would do anything in the way of running that the traffic department required. Similar trips were made with the 1400 class after each 78 days' valve gear examination.

There were numerous major and minor variations of the original theme, such as the different types of slide valves used. Then, in earlier days came the six engines with



L. & G.R.P. courtesy David & Charles.

Druitt Halpin's thermal storage tanks mounted on the top of the boiler, completely obscuring the dome and giving the loco. a top-heavy camel-like appearance. This apparatus was devised to store and heat a quantity of feed water so that when the engine was working hard it was only necessary to open a valve and transfer the stored water into the boiler below, without using injectors and therefore saving steam when it was most required. The storage tank had been filled up in the ordinary way by injectors when the engine was standing or being worked lightly.

In 1898 Aspinall brought out the long bunker variation of which No. 5 was the first, and this gave the engines a less squashed up appearance longitudinally. Then Hughes followed in 1906 with No.816 the first one belpaire fitted and some interesting chimney and blastpipe experiments were made. The popularity of the belpaire firebox engines was proved by the rebuilding of so many older engines in this style. Engine No.18, the final effort, appeared early in 1911 followed by nineteen similar machines. These were very strong engines with their 20" x 26" cylinders and larger crank journals, and they simply took by storm many of the jobs hitherto worked by 1400's and 4-6-0's, but their "express" career was curbed after about eighteen months when No.276 came to grief with its train on the Charlestown Curve near HebdenBridge while working a fast Manchester to Bradford express. This mishap drew some scientific remarks from the Board of Trade Inspector on the subject of the reaction of heavy tank engines on sharp curves at high speeds. This however did not stop the rebuilding of further engines of the saturated type with superheaters, although the rebuilds with the original sized crank axle bearings were not so reliable all round.

Taking the good with the bad the Aspinall radial tank engines were a sound job, and the later developments never entirely eclipsed the original design, and so, within sight of the lamentable threat of the extinction of the steam engine, it is good to learn that future generations will be left with a fitting monument—No. 1008—to the great engineer who was not only responsible for the design but was also the architect and builder of what was probably in its day the best laid out and most up to date locomotive workshops in the country.

PAINTING

One has to read through endless pages of such items as the minutes of the Committee for Maintenance, the Committee for the Provisioning of Services, and the Maintenance Committee for Standing Fixtures, in order to find details of how, if ever, buildings etc. were painted.

Having done a lot of such reading the following results are offered:

PRIOR TO 1850

All standing structures were given-

a) If Wood

b) If Iron

3 coats of tar oil (creosote) on erection, were inspected every two years and given a further coat of tar oil.

1 coat of plumb red and 2 coats of black (mixed) paint and

inspected every 2 years, repainted 2 coats black every 4 years.

(Stations)

c) Public Buildings Doors- 1 coat plumb red

1 coat Teak

1 coat Shine (Varnish)

Windows- 2 coats plumb red 2 coats Teak

Inspected yearly-repaint as required.

1850-1875

The above specifications were continued for all new buildings but the repaint periods were extended to-Wood-5 years

Iron-5 years

Public Buildings-10 years.

1875 ONWARDS

a) Standing Ironwork Specified as bridges, water columns etc.,

On erection-3 coats flat lead paint, rub down between, and two coats finish (black).

b) Standing Woodwork Specified as footbridges, goods-sheds and other buildings, On erection-before assembly-2 coats tar paint (creosote), all sockets & joints to be assembled with tar. Roofs and gutters to be sealed with Pitch.

c) Signal Boxes, Signal Posts and Telegraph Posts

On erection-

- 1) Signal Boxes—exterior woodwork 2 coats Tar-Paint. interiors 2 coats whitewash, window sashes 2 coats zinc
- 2) Signal Posts, telegraph posts—3 coats tar paint—7 days between. Signal posts (to 3ft below arm) 4 coats Zinc White.

Bases & bottom 3 ft—tarred twice (one day between).

d) Public Buildings & Offices

On erection-1 coat filler, rub down, 1 coat flat lead paint, 3 coats finish, rub down between; doors 2 coats shine (varnish); Other-1 coat shine.



The exterior of Halifax station in 1912. Photo courtesy N.R.M. (Hor. F1320).

MAINTENANCE

a) Standing Ironwork Annual Inspection

Touch-up 2 years. Re-work 4 years.

b) Standing Woodwork Annual Inspection

Touch-up every 2 years

Re-work 6 years.

c) S & T Dept.

Annual Inspection

Interior-2 years

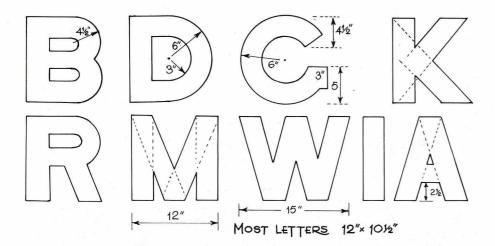
Exterior-Touch-up 2 years

-Rework 4 years.

d) Public Buildings

Annual Inspection Touch-up every 2 years

Re-work 10 years.



The Final Section (Public Buildings) was generally a bit of a mix-up. There were no maintenance staff allocated to the painting of stations—it being understood that station staff would be pressed into service. It appears that a chargehand painter would be put in charge of whoever was available to paint a station.

Colours were generally the carriage colours—nominally Tan and Purple Brown—being supplied from Newton Heath together with the other mixtures—putty etc.

Trends are noticeable in the styles, but variations are also seen.

The barge boards surrounding awnings seem generally to have been painted alternate colours, interiors of awnings and window frames were generally tan, whilst doors and frames were purple brown together with the bases of roof pillars, lamp standards (all), staircase handrails and seats etc.

Station Nameboards and noticeboards were generally black with white lettering; seats often did not carry the station name; whilst the lamps were generally maintained and painted (if at all) by the lighting department—a lampman being part of most station staffs, his colours being a black (exterior) and white (interior).

Interiors of offices, waiting rooms etc. were generally of varnished pine woodwork, wall distempered or whitewashed (third class). Skirting board and doors either tan or brown.

There are certain names that are not easily understood today because of their changing meanings:

Tar Oil was the old name for creosote and was thicker than today's.

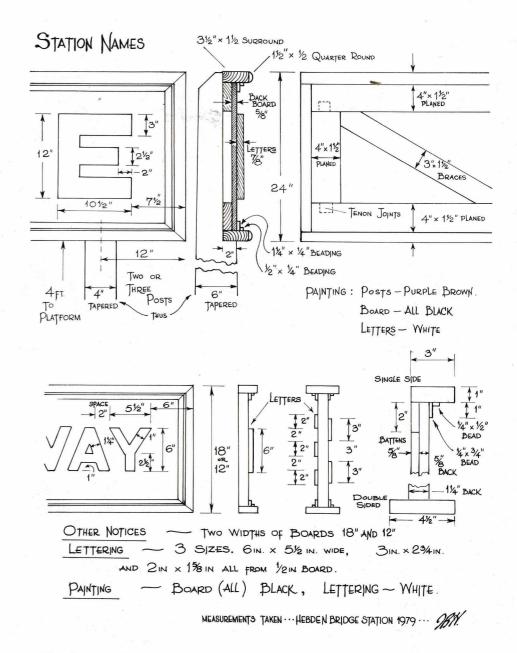
Plumb Red was what was later known as red lead paint—again a thick heavy sealer.

Black (Mixed) Paint was again a very heavy lead paint—often containing the residues of many pots of other colours, the black covering a multitude of shades!

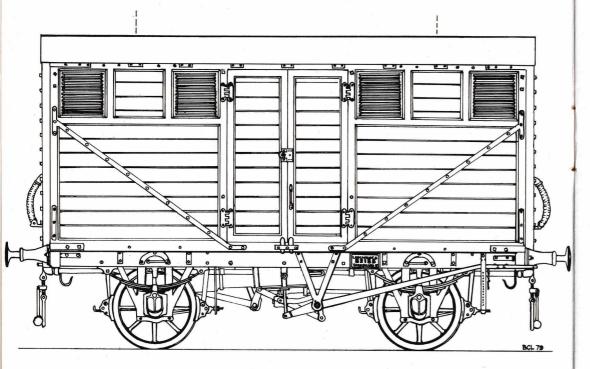
'Teak' was a medium brown-sometimes grained by brush or metal comb.

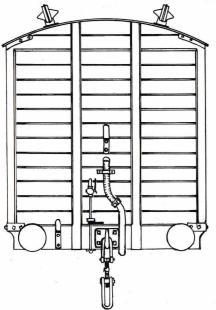
'Shine' was apparently the lanky name for varnish.

Tar and Pitch were both probably the same thing, although the use of both in one sentence gives doubt.



The above are the basic instructions up to the early 1900's. Aspinall introduced new ideas which together with the many wooden stations and new signal boxes, goodssheds etc. demanded a new style—but to date no formal details of this have been found.





L&Y.R

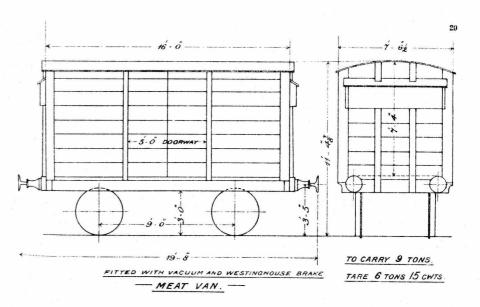


7mm scale for 'O' gauge

L & Y Meat Vans

by Arthur Butterworth & Noel Coates

THE PURPOSE of this article is to describe the known historical data and progression, the general arrangement and the traffic workings of the Meat Vans of the Lancashire and Yorkshire Railway. Before continuing it is necessary to define further that the article is about the vans built purely for carrying carcasses and only incidentally the Refrigerator Vans designated and fitted with hooks for carrying frozen meat. The two types of Meat Van described here had no ice carrying equipment and are thus akin to what the G & S.W.R. termed with simplistic subtlety "Dead Meat Vans".



The two types are shown in the Wagon Diagram Book on pages 20 and 49, being the early and later designs respectively. The various orders for these vehicles are given in the Table overleaf.

Some of the construction features on these vehicles which the diagrams do not show included on the earlier stock:— zinc sheet lining; louvres on the end vents which were filled with hay; lamp hooks of the patent curved type fitted to the brake vans. The production Dia. 20 vehicles also went onto the narrower planks and corner plates as the Dia. 3 Covered Goods did. The later Dia. 49 stock had few features in common with their predecessors, these 18' vehicles were lined with iron sheeting (even the floors), the vents were in the sides and featured sliding shutters behind the louvres, torpedo roof vents were fitted also (two to E32 and 4 to F43), standard lamp hooks were fitted just above the drawbar, surprisingly the doors on these were only 4'-7" wide. All vehicles had screw couplings and were painted brown as they were to run with passenger stock.

The vans were based mainly in Lancashire and their traffic was mainly Irish Meat. They radiated out from Windsor Bridge, Salford, which was a registered slaughterhouse. Cattle from Ireland arrived on the hoof at Liverpool and were entrained in Cattle Wagons for the journey to Salford. There they were slaughtered and the carcasses loaded into the Meat Vans for rapid transit mainly to the Lancashire mill towns (Yorkshire traffic was largely in the hands of the North Eastern Railway). Because of the pipework and braking equipment on these vehicles and the highly perishable state of the cargo they could be fixed to passenger trains and run to their destination more quickly. Return could be by ordinary goods train or passenger train if speed were essential (the Order Book lists the vehicles as being painted brown for passenger working although they did count as goods stock).

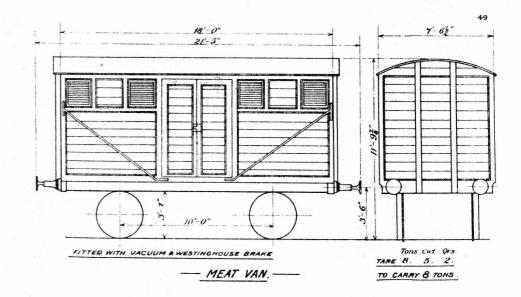
About 1903 Ireland had an epidemic of foot and mouth disease which caused the abolition of live meat imports to England so the traffic declined and the vans probably eked out a living from Liverpool with the smaller quantity of recently killed meat being landed there. A relaxation of the restrictions and an increase in stock numbers in Ireland brought about a resumption in the traffic and the necessity for more vans (hence F43). During the interval the domestic demand for meat was filled by refrigerated meat from the colonies for which a quantity of Refrigerator Cars D34 (20 in 1903), T35 (20 in 1904) and W35 (40 in 1904) was constructed to help release for better availability earlier 16' long stock designated for meat traffic, and painted passenger brown to suit, yet possibly tied up with shipping other traffics.

Historical evidence suggests that during the Hoy period meat vans were to be painted a pale pink very similar to the colour on the cover of this issue.

Our thanks go to John Hodgson for help in the preparation of this article.

Historical Data on L & Y Meat Vans

Diag. no.	Date Ordered	Order No.	Quantity	Drawing	Charge Account	Carrying Capacity	Cost
20	1880	?	1	747	?	56 single hooks	?
,,	1880	B1	2	,,	?	"	£116.10.1d.
,,	1894	S12	3	Prob.2918	?	,,	£166.13.7d.
,,	18.8.1899	D27	4	3937 & 3799	Capital	,,	£175.15.6d.
,,	2.10.1899	G27	6	3950	,,,	,,	£150.10.3d.
49	2.8.1901	E32	20	4377	**	63 double hooks	£165.3.10d.
,,	4.12.08	F43	10	6943	**	"	£140.0.6d.
	B1 and S12 possibly date built, not date ordered.		Dia. 20 total at 31.12.16 17		B1 and S12 probably Capital Account	Internal space for E32 & F43 about 800 cubic feet.	



Photographs of the two types of meat vans are very rare. Only one of each type is known of at the time of writing and neither are of suitable quality for reproduction here.

Tare	Additional Information	
6-15-0	Conversion of Dia. 3 Covered Goods No.18352. (There is the possibility of a second conversion)	
**	First production vehicles	
"	Vacuum & Westinghouse brakes fitted	
**	* * *	
"		
8-5-2	Rated for 8T Carrying	
,,	Rated for 10T Carrying	
Average tares	9	

NOTES:

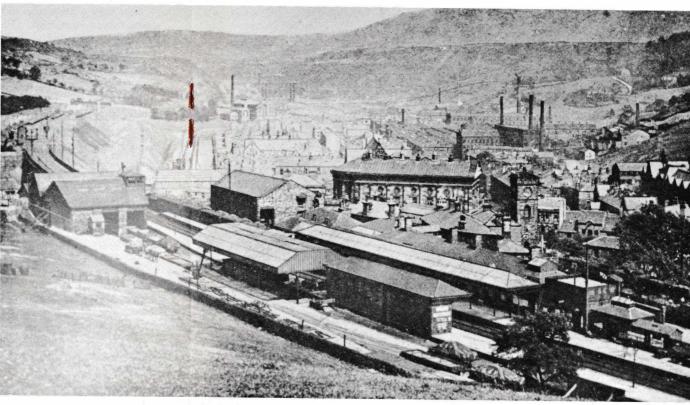
- The possibility of a second conversion to Dia. 20 comes about because of the financial statement of 17 vehicles in 1916.
 Known new construction amounts to 15 plus the known conversion. A note in the Diagram Book does say "x2", x could stand for conversions or just times, thus 2 original conversions are a possible answer.
- We have been unable to explain the £25 discrepancy between orders D27 and G27. G27 was fitted with vacuum and Westinghouse brakes so why D27 should be even more expensive we can't imagine. The drawings have not survived in either case and thus cannot help to explain the riddle.



Todmorden

Notes by J. B. Hodgson





This view was taken from the hillside looking down the valley and has most of the railway complex in the foreground. It was taken at 1.40 p.m. probably in June, about 1880.

To the left of the picture stands the former East Lancashire Railway goods shed. On its roof is a signal cabin—probably disused as such—at the time of the photograph.

In front of the shed stand several wagons, including a high-sided one. The horse dray has obviously just struggled up the steep approach road as the two trace horses stand in front of it.

Unfortunately the tranship shed adjoining the 'down' platform has made it too dark to identify the stock beneath it but in the right foreground is an empty six-wheel wagon and two more sheeted wagons.

Behind these wagons is the siding, running down the back of the down platform that was known as the 'Southport Bay'. An early morning (about 7-45 a.m.) train started from here, and running through Victoria, finally reached Southport, returning from there about 6.00 p.m. This train appears in the timetables from about 1888 to 1941 with various alterations to its timing and stops before it finally disappears.

Across the running lines can be seen the L & Y coal drops fed from the 'L & Y' yard which is off the picture to the right. On the 'UP' platform the small building to the right of the water tank was the water pump house with a small boiler and a steam driven pump. At the front of the water tank

stands a disused signal post which used to carry the starting repeaters and the distants for Todmorden West Box before the resignalling of 1878-9.

At the left hand end of the 'UP' platform, in the 'East Lancashire Bay' stands a passenger train for Blackburn & Burnley. Unfortunately the engine cannot be seen but the tender carries a weatherboard. Next to it is a six-wheel brake third, three assorted four wheelers, another six-wheeler and finally a four-wheel birdcage vehicle. Behind this train stands a row of sheeted wagons waiting to be put into the 'piece shed' as the railway owned warehouse was known. These two lines were reduced to one, circa 1890 when the 'up' platform was declared to be too narrow on the bay portion. Hidden behind the E.L.R. goods shed are their set of coal drops approached from the viaduct.

Across the viaduct which spans the main road through the town (seen above the E.L.R. goods shed) can be seen Todmorden Junction Box, the splitting signal for the junction to Portsmouth and Burnley and a 'parachute' water column—newly painted. Beyond this can be seen several goods trains standing at Hall Royd Junction waiting to proceed down the Calder valley.

Returning to the centre of the picture at the left hand end of the awning over the 'up' platform can be seen the roof of the refreshment room and just visible between two of the chimneys
on the station building is part of the bridge joining this refreshment room to the Kings Hotel
where passengers on the Newcastle-Liverpool expresses were served a three-course meal during the
twenty minute stop! This practise ceased with the introduction of dining cars after the turn of the
century but the bridge lasted until 1952.



Manchester Victoria Station

Part Two

Tom Wray

AT a special general meeting of the Manchester and Leeds Railway Company held on December 28th, 1843, one of the proprietors submitted to the Chairman a resolution. He suggested that the designation of the new station in Manchester should be "The Victoria Station" as "The Hunts Bank Station" did not appear, to him, appropriate. The resolution, subject to the approval of the Liverpool and Manchester Railway Company, was passed unanimously. And so, following an inspection, on behalf of the Board of Trade, by General Pasley on December 29th, Victoria Station was opened to the public on January 1st, 1844.

A half-hourly service from 8.00 a.m. to 8.00 p.m. between Victoria and a new station at Miles Platting supplemented the existing timetable which had been operated from the Oldham Road terminus.

Work on the Leeds company extension, contracted in two unequal parts, was in active construction in September 1842 by which time contracts had also been advertised for ancillary plant and machinery involved in operating the incline except for the stationary engine houses at Collyhurst (announced in December) and the station buildings at Hunts Bank. The Liverpool company were much slower off the mark; the company had held a special meeting on July 5th, 1842 to consider the draft of the bill for extending their railway and though the new Act was granted on July 30th, it was not until January 1843 that it was reported that the contracts had been completed, with the exception of that part of their extension which was adjacent to the Bolton railway terminus and was to be built by that company.

From a point just west of the present Miles Platting station the Leeds company's extension divided from the original railway to the Oldham Road terminus and ran parallel and to the north of it for a few hundred yards before passing to the north of the engine shed and descending at about 1 in 49 to pass beneath Rochdale Road (formerly Saint George's Road), the roadway having been raised five feet to accommodate the railway. Now on a falling gradient of 1 in 60 the line, first on the hillside with a retaining wall then, from Lower Tebbutt Street bridge, on a viaduct, reached Cheetham Hill Road bridge (formerly York Street and alternatively called Ducie Bridge). From beneath this bridge the inclination was reversed to rise at 1 in 132 into the station. This inclination, it was stated at the time, was intended to retard the trains arriving in the station to such an extent as to obviate the use of the brakes. In spite of such optimism strong buffer stops were provided at the end of the arrival platform. The method of dealing with arriving trains was to stop them at the foot of the incline where the locomotive was detached and the train was then allowed to run by gravity into the station. The inclination allowed departing trains to descend without assistance until beneath the bridge where they were attached to the endless wire rope and drawn up the incline.

A 240 horse power double stationary engine at Collyhurst provided the necessary power to operate the wire rope, which had been patented by its inventor, Mr. Newall. It was reported that, at the opening, the rope was not in operation and that trains of twelve carriages, each hauled by two locomotives, ascended the incline with ease. Each train included a loaded wagon with a brake powerful enough to prevent a runaway in the event of an accident.

Communication between the station and Miles Platting was by means of the Cooke and Wheatstone patent electric telegraph. There were four zinc coated iron wires along the parapet of the viaduct wall and four copper wires underground from Cheetham Hill Road bridge to the station house. There were three uses initially, first for when the wire rope was required to assist a train up or down the incline, secondly, to communicate between the station and engine shed when locomotives were required and thirdly for general communications between the station and the main line.

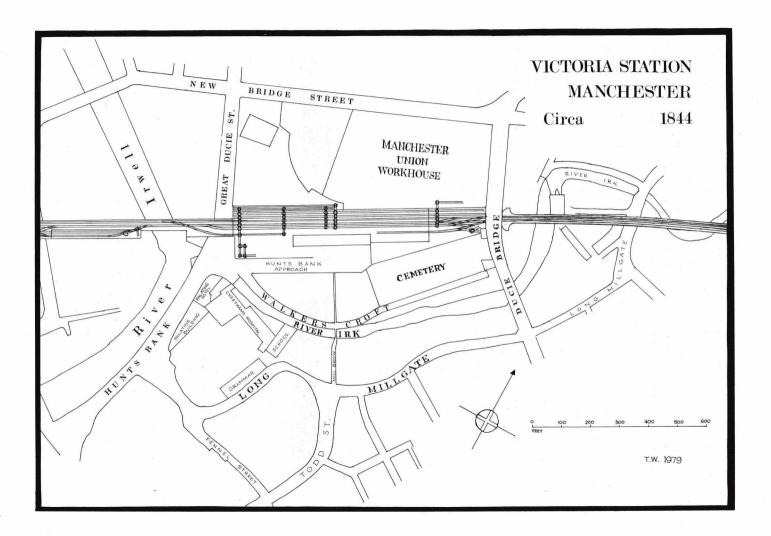
The amended line of the Liverpool company was, for the majority of its length, on a viaduct. The junction with the Liverpool line was made at Ordsall Lane from where an 'S' curve in a northerly and easterly direction brought it alongside the Bolton railway terminus at Irwell Street. Between Irwell Street and New Bailey Street the railway was carried on a colonnade designed and its erection supervised by John Hawkshaw, engineer to the Bolton company. The colonnade, 730 feet long and 24 feet wide was, and is, supported by 52 cast iron columns standing in pairs at intervals of 28 feet along the centre of Booth Street. On the side of the viaduct nearest to the New Bailey Prison a screen was erected to ensure the privacy of the inmates and to stifle the curiosity of the rail passengers. The bridge at the east end of the colonnade over New Bailey Street was the subject of some concern to the ratepayers of Salford when they discovered that, contrary to the Act of Parliament, the Liverpool company planned to reduce the span across the street by erecting a row of pillars on each side of the carriageway which would effectively reduce the width of the street. With the exception of four bridges the rest of the extension was carried on a brick viaduct. Three of the bridges, over Chapel Street and Gravel Lane in Salford and Great Ducie Street in Manchester, were iron arches of 83 feet span, the rail level being 23 feet about the carriageway. The fourth bridge also an iron arch carried the railway 43 feet above the river Irwell with

a span of 120 feet. To enable Bolton railway trains to have access to the Manchester station a double junction was provided at the western end of the New Bailey Street station.

On Friday, May 3rd, 1844, General Pasley inspected the railway and on Saturday May 4th the line was opened to the public. The Liverpool company adopted a slightly different procedure to the Leeds company when dealing with arriving trains at Victoria Station. The trains were stopped by the Irwell bridge and the engines were run round the train which was then given a push of sufficient force to enable it to reach the arrival platform.

The site at Hunts Bank chosen for the central station of the extension railway covered an area of almost five acres. It was bound to the north by Harrisons buildings, a group of cottages in a hollow, later utilised as the low level entrance to the main line platforms of the 1884 extension; to the north east by the Manchester Union workhouse, which was supported by a high retaining wall; to the east by Cheetham Hill Road, about 16 feet above the railway; to the south east by the Workhouse Burial Ground; to the south by Walkers Croft and the River Irk and to the west by Victoria Street (formerly Hunts Bank) alongside the River Irwell and Great Ducie Street. The station was approached from Victoria Street, a thoroughfare which had been raised four feet by the Manchester Police Commissioners. At this point the river Irk flows beneath Victoria Street into the river Irwell and so it had to be arched over for a distance of about 30 yards to enable the Hunts Bank Approach to be made. The roadway, ascending at an inclination of 1 in 20 was 50 feet wide including two 8-feet wide footways, the top being opposite the centre of the station house, the retaining walls on either side were surmounted by ornamental iron railings. The station house, erected on the south side of the running lines, was originally a single storey building in the Roman Doric style 266 feet long by 36 feet wide divided equally between the two participating companies. The central portion of the building of about 60 feet frontage housed the first and second class dining room and the ladies' waiting rooms. On either side with entrances recessed beneath covered ways were the booking offices of the two companies and at either end of the building were the offices and residences of the station masters. From the dining room to the platform were two doors, one for Liverpool passengers and one for Leeds passengers. On the basement floor, approached from the platform by stone steps, and for the use of third class passengers, was a coffee room and chop house fitted upon the London plan (?) with bells to indicate which trains were about to leave. Also in the basement were the kitchens, stores and porters' rooms.

The single platform which, in front of the station house was 24 feet wide, extended beyond the end of the building for 184 feet by 12 feet wide westwards and 120 feet by 12 feet wide eastwards with a track to the south of each platform used as an arrival road by each company. In addition to the platform road which was in fact a loop line there were two through lines and two sidings, the latter connected to the former by turntables only. The line of demarcation between the two companies was marked clearly by two rows of turntables connecting the five lines and two further sidings outside the train shed to the north. The Liverpool company had two more rows of turntables in their part of the station and the Leeds company one additional row in their part. From Great Ducie Street at the west end and for a distance of 700 feet all five lines were covered by an iron roof of three longitudinal sections, the south span being 26 feet 3 inches, the central span 59 feet 6 inches and the north span 28 feet. The



roof was slated and the underside was lined with boards and with roof lights along the apex of each span. It was supported by iron columns, the station buildings and the retaining wall of the workhouse. The track adjacent to this wall is on the line of the siding where, in later years, locomotives waited to assist trains up the incline and which Eric Mason records was "known locally as the 'wall side,' probably because it was situated about as far away from a wall as any siding could be" in the station. (see note).

The station was illuminated by gas, fifteen burners in the train shed, several along the approach and others in the station house, all connected to a central control enabling maximum illumination when trains arrived or departed and minimum illumination between times enabling a considerable saving.

At each end of the station were facilities for the transport of horses and carriages, there was also a private siding into the Manchester Union Workhouse.

Not physically connected with Victoria station but built as a speculation by the Leeds company general manager, Mr. Robert Gill, was the Palatine Hotel at the foot of the station approach. In fact when tenders were advertised in May 1843 plans and specifications for the building were open for inspection at the Leeds company engineer's office. The hotel manager, Mr. David Maurigy, combined the position with that of the station refreshment room manager. A curiosity about the Palatine Hotel was a livery stable on one of the upper floors!

NOTE: The Lancashire and Yorkshire Railway in the Twentieth Centure. Eric Mason 1954 p.163. SOURCES: Manchester Guardian 1842-1845.

Manchester Streets and Manchester Men. T. Swindells 1908. Annals of Manchester. W. E. Axon, 1886.



ROCHDALE

-from 'Rochdale Reminisences' by Henry Brierley, 1903, contributed by Tom Wray.

'The only approach to the Rochdale station was from Milne Road by the Railway Hotel. There was an ascent up a few steps to the booking office at the top of the flight, and so far as I recollect there was no building or shelter of any sort on the Manchester departure platform. On the town side platform we all congregated until a man emerged from a hut on Milnrow Road bridge and rang a bell. Then we crossed the line if our route was from the Manchester departure platform. Luggage was carried on the tops of carriages, and I have even seen people riding on the top. Private carriages mounted on railway trucks often conveyed their owners. The station master was James Cross, and the foreman porter (the only porter) Ben Butterworth, a man of forcible language. James Cross, a very distinguished looking man, was succeeded by my wife's father, John Wrigley.'

Note: James Cross resigned in May 1888 after 47 years with the Lancashire & Yorkshire Railway.

Yorkshire Branch Sets

J. B. Hodgson

FURTHER to Mr. H. V. Armitage's article on the Yorkshire Branch Sets, it is considered worthwhile to put down what is known about this series of carriages.

They were originally built as replacements for the six (and four) wheeled stock used on most of the 'all-stations' or 'parliamentary' trains used to cover the network of lines to the east of Todmorden.

Surprisingly the Rishworth and Stainland branches were excluded from the allocation, both retaining their six-wheeled stock until the introduction of the railmotors in March 1907.

The first batch of carriages—5 compt./brakes to Diagram 29A were built at Newton Heath to Lot No. V7 dated 1891 and numbered 32 vehicles.

Apparently the reports on these were satisfactory because in the budget for 1894 the following batches were authorised.

LOT No.	TYPE	DIAG. No.	QUANTITY
G9	Composite	26	14
H9	Composite	26	9
K9	Third	29C	9
L9	Brake/Third	29A	20
M9	Brake/Third	29B	20
N9	Composite	26	21
W9	Composite	28	15
D10	Composite	28	15

Additional details are as follows:-

DIAG. 26

Lot G9	14 built	$3 \times 1 \text{st}/4 \times 2 \text{nd}$
Running		5, 247, 249, 252, 262, 271, 278,
	280, 28	1, 286, 287, 288, 290.
Lot H9	9 built comprising	$1 3 \times 1 \text{st} / 4 \times 2 \text{nd}$
		$2 3 \times 1 \text{st} / 4 \times 3 \text{rd}$
		1 $3 \times 1 \text{st} / 1 \times 2 \text{nd} / 3 \times 3 \text{rd}$
		5 $3 \times 1 \text{st} / 2 \times 2 \text{nd} / 2 \times 3 \text{rd}$

Running numbers: 321, 322, 323, 326, 327, 328, 333, 336(?), 340. N.B. The number 336 is doubtful and may possibly be one of the carriages destroyed in the Low Moor fire.

Lot N9 21 built comprising 5 3 x 1st/2 x 2nd/2 x 3rd 16 3 x 1st/2 lav./3 x 3rd Running Numbers:— 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320.

DIAG. 28

Lot W9 15 buil	$4 \times 1 \text{st}/2 \text{ lav.}/2 \times 2 \text{nd}$
Running Numbers:-	264, 347, 354, 355, 356, 358, 516, 517,
	518, 519, 520, 521, 522, 523, 524.
Lot V7 32 buil	lt 5 x 3rd/van
Running Numbers:	2171, 2172, 2173, 2174, 2175, 2176, 2177
	2178, 2179, 2180, 2181, 2182, 2183, 2184
	2185, 2186, 2187, 2188, 2189, 2190, 2191
	2192, 2193, 2194, 2195, 2196, 2197, 2198
	2199, 2200, 2201, 2202.

Lot L9 20 built 5 x 3rd/Van

Running Numbers:— 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231

DIAG. 29(B)

Lot M9 20 built 4 x 3rd/Van

Running Numbers:— 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251

DIAG. 29(C)

Lot K9 9 built 7 x 3rd Running Numbers:— 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211.

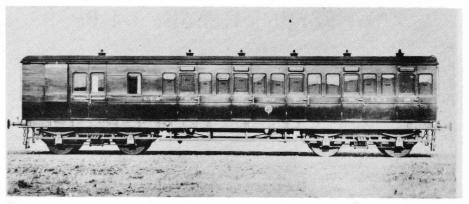
All the carriages were completed and were assembled into sets as detailed below. No record of the actual 'set' numbers has come to light but it is known that sets were allocated to the main carriage servicing areas as follows:—

	ALLOCATION	USE
2 Sets	LOW MOOR	Sowerby Bridge - Bradford
3 Sets	MIRFIELD	Bradford - Wakefield &
		Dewsbury - Bradford
3 Sets	LEEDS	Leeds - Harrogate
		Leeds - Wakefield
		Leeds - Halifax
4 Sets	MIRFIELD	Goole Services
5 Sets	LOW MOOR	Manchester Services
10 Sets	MIRFIELD	Penistone Services and Branches
7 Sets	LOW MOOR	Manchester Services
2 Sets	WAKEFIELD	Barnsley Services

The three additional 'Thirds' were allocated to Sowerby Bridge for strengthening purposes on Manchester trains.

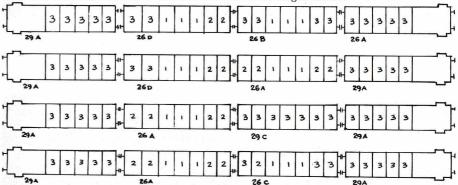
The diagrams show the mix of these trains and it is interesting to note the differences in the amount of class accommodation.

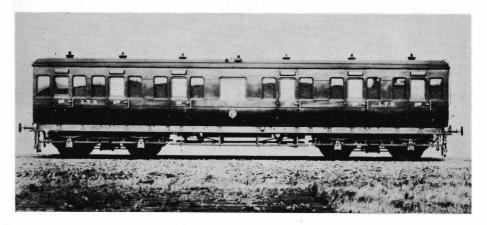
Obviously there had been a study of each areas returns and the carriages built had been tailored to provide an adequate mix.



Most sets would include a First Class 'Ladies Only' and if required a similar second, although these could be 'labelled' as required.

The layout of these sets tend to emphasize the small amount of 'long distance' third class travel; most third class traffic tended to travel only one or two stations, whereas First and Seconds tended to travel to and from the larger towns.





The Hughes Rebuilt 4-4-0s

B. C. Lane

Hughes rebuilt four of Aspinall's 4-40s in 1908/9 in an experiment that although successful was passed over by the chief mechanical engineer in later years. The use of walschaerts valve gear made the locos extremely free and fast runners. The Schmidt superheaters and other refinements also played their part but while development proceeded to solve problems associated with superheating, the valve events were not appreciated. No. 1098 appears on the cover while the others feature here.

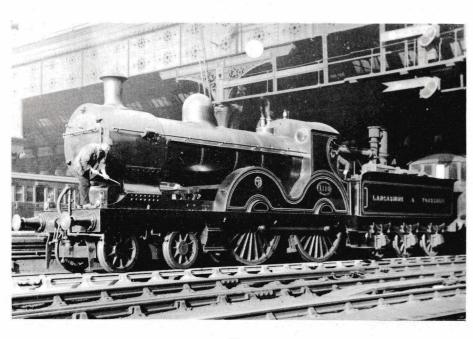
Below: No.1110 in its first year at Manchester Victoria. The tapered chimney will be noted and the tender without coalrails which it kept throughout its life.

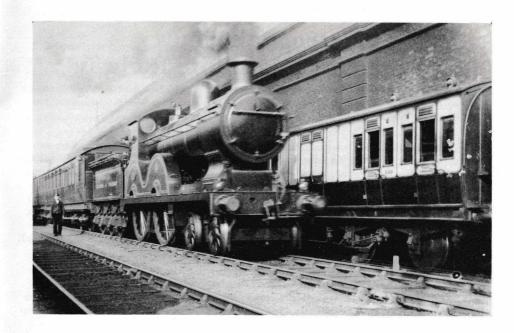
Opposite page

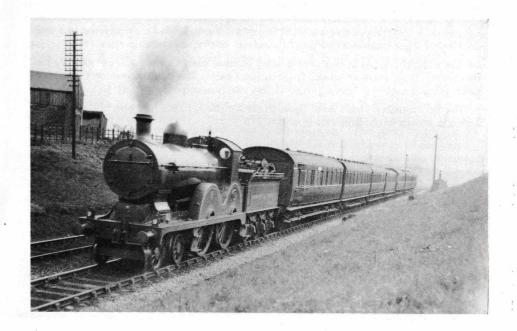
Upper: No. 1104 leaving Victoria and passing Exchange. This loco carried a low tapered chimney until rebuilding with belpaire firebox and Joy valve gear in 1914. This chimney was part of experiments in draughting carried out on many classes around 1909.

Lower: No.1105 after its taper chimney was replaced with the standard parallel chimney. This loco was involved in the Warton accident in 1924 after which the loco was cut up.

Photos by the late G. W. Smith.







Passenger Engines of the East Lancashire Railway

This article is reprinted from the first volume of the short lived magazine 'Locomotives & Railways Illustrated' published in 1900. It is the source of much of today's historians' information and is reprinted in full for the benefit of all members as any copies of the original are very rare.

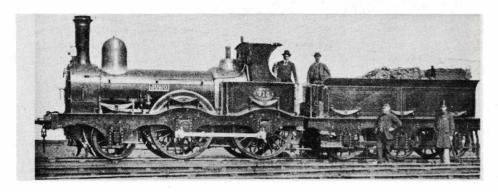
THE East Lancashire Railway, now an integral part of the part of the Lancashire & Yorkshire Railway, extended from a junction with the latter line at Clifton near Salford, through Bury to Accrington, from whence it branched into two portions. The eastern spur ran from Accrington through Burnley to a junction with the L. & Y. line at Todmorden, and the western portion passed through Blackburn on its way to join the North Union at Preston. The Burnley and Colne line also formed part of the old East Lancashire Railway. The offices and works were at Bury. The works remained open for the repair of all L. & Y. engines numbered above 600 until 1889, when the Horwich works superseded both these and the old L. & Y. shops at Miles Platting, Manchester.

For many years after the amalgamation of the L. & Y. and E.L. Railways, the locomotives were numbered separately but in the early seventies the E. L. engines were numbered with the L. & Y. stock by having 600 added to their original numbers. Thus No.1 of the E.L.R. became No.601 of the L. & Y., and the numbers continued thus up to 746.

There are several interesting details which may be mentioned. The passenger engines of the E.L.R. were all built or rebuilt at the Bury works of the company, whereas the goods engines from 1860 onwards were all supplied either from the Miles Platting shops of the L. & Y. or from engines built for the latter company. Moreover, all the E.L. engines had names; the few so favoured on the L. & Y. were restricted to some dozen passenger engines which bore the names of the directors.

The L. & Y. engines at this time had no number plates on the sides of the engines; there was a brass number on the front buffer beam and a painted one on the back of the tender.

The first number plates were those made for the E.L. engines 601 to 746, one of which is shown in the illustration of No.713.



The early E.L. passenger engines were mostly of the Sharp single type, having 5ft 6in. wheels and 15in. by 20in. cylinders. Some of these were converted to 4-wheel coupled engines at Bury works, and other similar coupled engines were built there; but all the engines, down to the year 1871, retained the above dimensions as regards cylinders and wheels.

They were extremely pretty little engines. The chimneys were furnished with copper tops; the engines also had polished brass domes close to the chimneys and artistic safety valves; columns, also of polished brass, surmounting the raised fireboxes, completed the principal external boiler mountings.

The numbers and names of the early class of coupled engines were as follows: 615 Aeolus, 616 Pegasus, 618 Titan, 621 Prometheus, 626 Lightning, 627 Camilla, 628 Lucifer, 629 Ariel, 630 Phaeton, 631 Orion, 633 Mazeppa, 634 Tamerlane, 636 Milo, 640 Fire King, 641 Thunderer, 642 Vampire, 649 Gazelle, 653 Vivid.

Of the above, 615 and 616 were built in 1847 by Messrs R. and W. Hawthorn; 626 to 630 were mostly by Sharp Bros., 1848-49; 631 was a Fairbairn's; 633, 634, 640 and 641 by Messrs Walker Bros., of Bury, 1849; and 649 to 653 by Sharp Bros., 1850. With the exception of some not mentioned above, the engines were rebuilt at Bury between 1864 and 1871 and presented an appearance very similar to that of *Juno* No. 713. Two additional engines, Nos. 673 *Blacklock* and 680 *Craven* were built by the E.L.R. in 1862. Of these, No.673 was rebuilt in 1873, but the brass dome on this engine was placed over the raised firebox and had a spring-balance safety valve upon it.

Three more engines of similar dimensions were built some years afterwards, all of which were constructed at Bury. These were 601 Odin, 603 Clio, in 1867 and 713 Juno in 1871. The frames were of more solid construction than those of the earlier engines, which had 'cut-out' sandwich frames of the old Sharp single pattern. The prettily shaped safety valve column disappeared in No.713 and Naylor's safety valves were substituted. No.601 Odin was, some years afterwards, fitted with the Westinghouse brake.

At the end of 1875 there appeared No. 746 Thor, followed in 1876 by 608 Jupiter, 638 Phantom and 651 Centaur. These four engines were slightly larger than their predecessors and had 16in. cylinders by 20in. stroke. The domes were placed on the middle ring of the boiler barrel, instead of close to the chimney. The latter had the same shape as that of No. 713 Juno, this being the standard L. & Y. chimney of the period. It should be mentioned that the older engines had a copper-topped chimney of a much neater pattern, one not unlike the G.W.R. engines had.

The last two engines built at Bury were turned out in 1877, but as saddle tanks and had the driving and trailing wheels coupled by the usual outside cranks. They were No. 662 and 680 but had no names. The wheels remained 5 ft. 6 in. in diameter, but the cylinders were 16 in. by 24 in. After a few months service they were converted into tender engines and disappeared in 1892.

All the East Lancashire passenger engines were painted medium green with brown under frames and their polished brass domes and safety valve columns gave them a very smart appearance. A few survivors were afterwards painted the standard black colour of the L. & Y. Railway. Nos. 631 *Orion* and 640 *Fire King* were, we believe, the last two to survive and were kept for working officials' saloons.

Sentinel Postscript

Bernard Fielding, LL.B.

WHEN I wrote the article in Platform Three about L.Y.R. Sentinel wagons, I was not aware of the Editor's footnote that 15 wagons were purchased in 1920. With the original three in 1918 and the final three in 1921, this makes a grand total of 21 such wagons.

This certainly ties up with the statement in Volume 3 of Marshall's *History of the L. & Y.R.* that in 1920 the L.Y.R. ordered from their Newton Heath carriage works 20 trailers for use with Sentinel wagons. (It will be remembered that No. 140 was a 6-wheel articulated wagon and so would not require a trailer).

I contacted the author of the original article (which had prompted me to write my own article), in an endeavour to trace the 'missing' ten engines, but unfortunately it has not proved possible to trace them. He is of the opinion that the 1920 engines were bought second hand and he points out that at this period the War Department and the R.A.F. were selling off hundreds of surplus Sentinel wagons. It should perhaps also be stated that when Sentinels were taken over by Rolls-Royce some years ago, all the records of Sentinel engines were destroyed, which certainly makes life difficult for the historian.

My article aroused the interest of the York Railway Museum, who kindly loaned several Sentinel wagon photos. From one of these it is apparent that the road registration number of No.1 was in fact AW 4454 (and not AW 4472 as I had stated). They sent a photo of a Super Sentinel wagon lettered 'LMS 2A' but I am advised that it must have been built some years after the L.Y.R. ceased to exist as it includes such refinements as a glass windscreen and electric headlamps. The photo is marked 'Wolverton 1934', and as the registration number has been painted out, I am inclined to believe that it performed some function inside the carriage works there and never saw the actual L. & Y.

A correspondent wrote about the 6-wheel articulated wagon No. 140. This had massive girders, running on solid steel rear wheels with traction engine type spokes. As it was based in Halifax (a town containing several engineering and machine tool firms), I think it must have been used for moving pieces of machinery to the station. This correspondent also remarks that some of the L.Y.R. Sentinels lasted well into the 1930's on pneumatic tyres.

CORRECTIONS TO PREVIOUS ISSUES OF THE JOURNAL

PLATFORM TWO:

P.12/13 The title of the photograph and notes should read 'NORTH DOCKS GOODS STATION' and not Great Howard Street.

PLATFORM THREE

- P.6 reference the photograph on P.9 as Walkden Troughs, should read LOSTOCK TROUGHS
- P.10 The station was not the original one of 1848 but a new one opened in 1881. The station buildings were of the typical wooden pattern whereas the wooden platform was not a common feature. The valance pattern, while being a usual one found on ex-E.L.R. stations, is to be found on other L.Y.R. stations which were built or rebuilt in the 1880-1884 period. The train on the far platform will be going to Blackpool and not coming from it. The steamer's name should read 'LA MARGUERITE.'

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