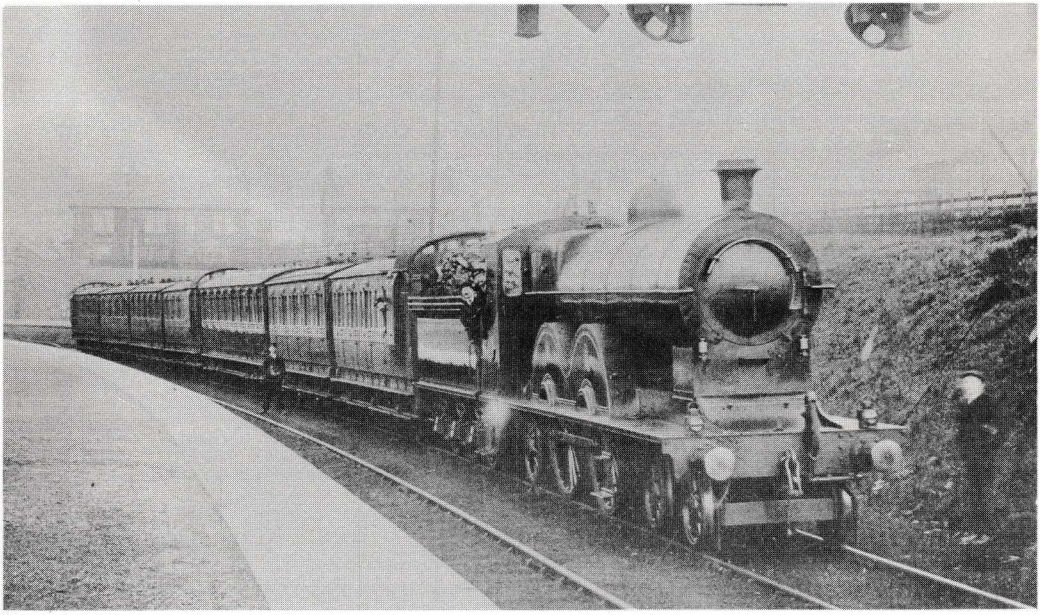
PLATFORM THREE



THE JOURNAL
OF THE
Lancashire & Yorkshire
Railway Society

'Platform' is the third magazine of the Lancashire and Yorkshire Railway Society and is published twice yearly, this issue being the Summer/Autumn edition, 1979. The society also issues several duplicated newsletters through the year and has available to members other historical material at small additional cost. Further details can be obtained from the Hon. Secretary: J. B. Hodgson, 31 Briarwood Drive, Wibsey, Bradford, BD6 1RT.

L&Y.R

Contents

COVER: *Just why No. 1419 is standing at Poulton with such an odd set of carriages, we may never know. That renowned photographer, J. M. Tomlinson has attracted plenty of interest from the staff as the train obviously poses for the photograph. Maybe the train is empty stock and the loco could well be running-in when new as the stock is a 'local' assortment and hardly 'express' stock which the head lamp code denotes. 1419 went to Fleetwood on building and became the prize possession of driver William Moister.*

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

Published on behalf of the Lancashire & Yorkshire Railway Society by the Hon. Editor: B. C. Lane, 26, The Hawthorns, Sutton-in-Craven, Keighley, West Yorkshire, BD20 8BP.

Manchester Victoria Station

PART I

Tom Wray

The opening, on January 1st, 1844, of Victoria Station by the Manchester and Leeds Railway Company marked the culmination of several years of frustration and negotiation, for, from the inception of the scheme to join three railways in Manchester, one of the parties repeatedly offered alternatives and objections. The scheme originated in 1838 when the Manchester and Leeds Railway Company realised the importance of direct communication between the railways that entered Manchester from east and west and, though their own railway was not yet complete, proposed a junction railway from Miles Platting to the Liverpool and Manchester Railway in Salford with a central station and a connection to the Manchester, Bolton and Bury Railway. In July 1838 the Liverpool directors reported favourably to their proprietors the "desirableness of a connecting railway" and that the proposition would receive the best consideration and attention of the directors. In August, Samuel Brooks, the Leeds railway vice-chairman and a prominent banker, purchased and presented to the company the Hunts Bank site which had an area of about five acres and included a mansion which was used as the company offices for a period. (see note).

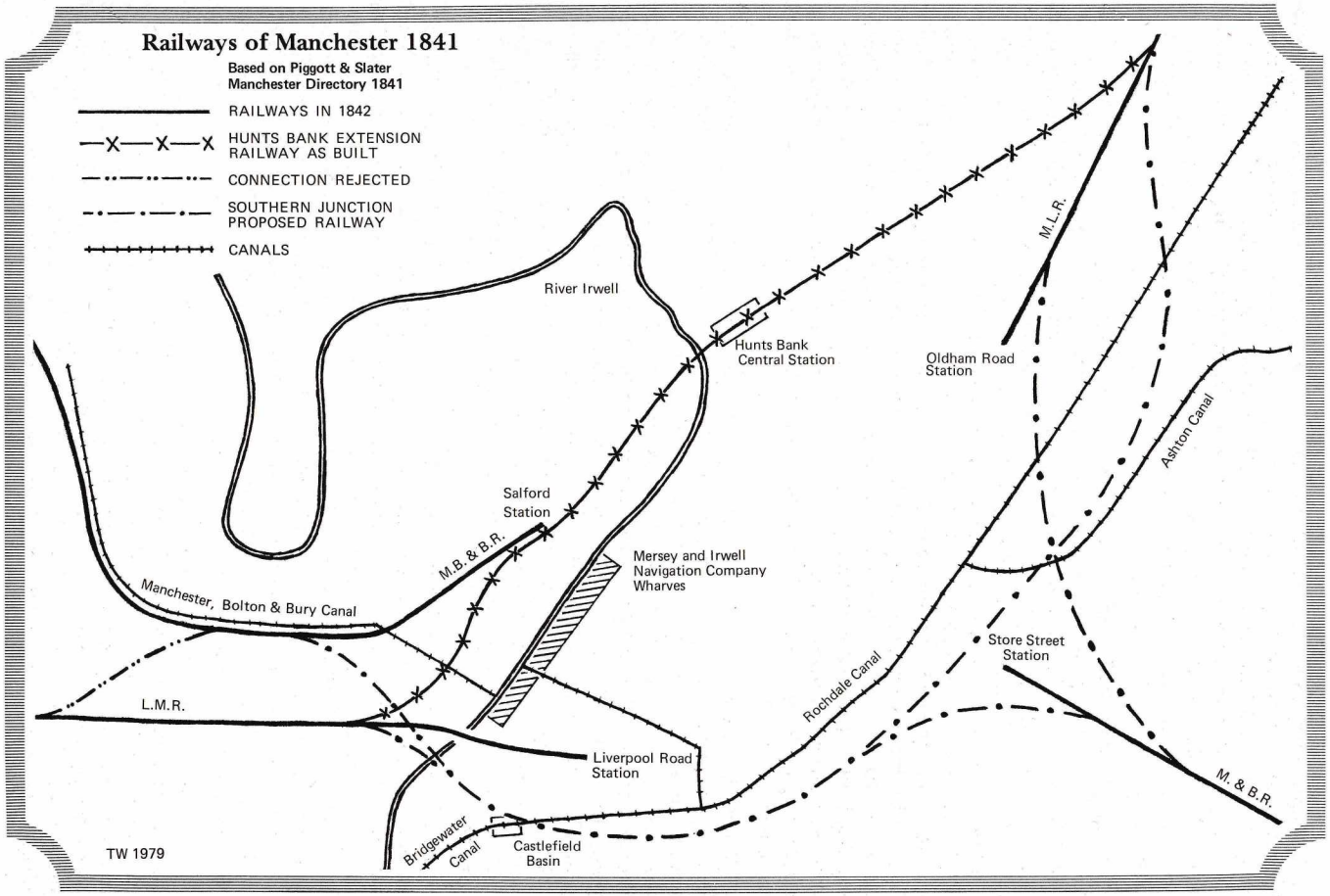
By the September of 1838 the Liverpool company, having completed preliminary negotiations with the Leeds company entered negotiations with the Manchester, Bolton and Bury Railway Company. As originally conceived the proposal envisaged the Liverpool company building a railway to the Bolton railway who would extend their railway to Hunts Bank there to join the Leeds railway extension from Miles Platting. The Liverpool company, however, objected to the involvement of the Bolton railway, preferring to build the western section themselves. It was agreed to use about half a mile of the Bolton railway and that that company would lay a third track, keeping two lines open day and night. For the use of this section of railway the Liverpool company would pay 1¾d. per passenger and 6d. per ton for goods, there being no toll for carriages, horses or parcels. In the event of the Liverpool company raising their fares the Bolton company would receive one penny per passenger for every 6d. of the increase. The Bolton company was prevented, by a clause in the agreement, from becoming part of a competing line to Liverpool.

At a special meeting of the Leeds railway, held on January 17th, 1839, it was resolved to apply to Parliament for powers to extend the railway to Hunts Bank and build a central station there. In March the Liverpool company stated that they could not enter an agreement suggested by the Leeds company that the junction be completed in two years, they also requested from the Leeds company estimates of traffic, a copy of which was sent to them on March 23rd. The Leeds company were subject to a distinct disadvantage when the question of estimates was raised because their railway had not yet been opened and therefore estimates had to be based on information gained by various means from the existing modes of transport. The problem manifested itself further when, later in March, Mr. Robert Gill, the Leeds railway managing director, received a request for more information since "two or three largely interested proprietors" in the Liverpool company had intimated that they would require more conclusive evidence that the remuneration likely to be derived from the junction line would justify the expense of construction.

It was early in April 1839 that the Leeds company received the first intimation that the progress of the railway scheme would not be straightforward. A letter was received from James Loch, superintendent of the Bridgewater Trustees, enclosing a communication to the Liverpool railway board drawing their attention to a junction railway to the south of Manchester from the Liverpool railway to the Manchester and Birmingham and the Manchester and Leeds Railways, with a central station close to the temporary station in Store Street of the Birmingham railway. Loch believed that such a railway would be cheaper than the Hunts Bank link and more beneficial to the public. The Bridgewater Trustees, who the Leeds company were later to believe responsible for many of the problems that were to beset the Hunts Bank scheme, were established on the death of the third Duke of Bridgewater, the Canal Duke, in 1803. In the complex will made by the Duke the Trust was formed for the benefit of his nephew, George Granville Leveson-Gower, Marquess of Stafford and later the first Duke of Sutherland, during his lifetime and then to his second son, Francis, on the condition that he adopted the name Egerton. By the time Lord Francis Egerton assumed control, in 1837, the Trust was a powerful and influential body employing about 3,000 people, selling 273,000 tons of coal annually and carrying just short of 1,000,000 tons of goods annually on the Bridgewater Canal. When, in 1822, the construction of a rail-road between Liverpool and Manchester was proposed the opposition of the Trustees was sufficient to delay its progress. The curious decision, in 1825, by the Marquess of Stafford to invest £100,000 in the Liverpool and Manchester Railway caused the opposition of the Trustees to the railway scheme to evaporate. The investment included the power to nominate three of the fifteen directors on the board of the railway. Until the death of the Marquess of Stafford in 1833 James Loch had been his principal agent since 1812, a position which he retained to the heir who inherited the interest in the Liverpool and Manchester Railway and to the second son who inherited the interest in the Bridgewater Trust, Loch also became superintendent of the Trust in 1837, and for a period was a director on the Liverpool and Manchester Railway board. The considerable community of interest in the relationship between the railway and the canal companies placed Loch in a curious and unenviable but powerful position. It was the powerful influence of the Bridgewater Trustees which the Manchester and Leeds Railway was convinced was directed against their plans and which would continue for some years.

In spite of the Bridgewater lobby the Liverpool company proceeded with their application to Parliament for an Act for the extension to Hunts Bank and granted on June 14th, 1839, the Leeds company Act was granted on July 1st, three days before that company opened the first section of their railway.

The hesitant attitude of the Liverpool company prompted the Leeds company to enquire, in February 1840, of the Mersey and Irwell Navigation company whether the river Irwell could be made navigable up to Hunts Bank. This company, known popularly as the Old Quay Company, had existed since 1721 when it was authorized to make the rivers Mersey and Irwell navigable as far as Hunts Bank, Manchester. In the event, the upper limit of the navigation was established at Quay Street, half a mile short of Hunts Bank. Over the years the navigation company became a thorn in the side of the Bridgewater Trustees because of its cursory attitude towards the maintenance of rates agreements and partition of traffic between Liverpool and Manchester. The opportunism of the Old Quay Company was exploited by the Leeds company as a means to persuade the Liverpool company from its lethargic approach to the Hunts Bank Junction scheme.


Railways of Manchester 1841
Based on Piggott & Slater
Manchester Directory 1841
RAILWAYS IN 1842
HUNTS BANK EXTENSION
RAILWAY AS BUILT
CONNECTION REJECTED
SOUTHERN JUNCTION
PROPOSED RAILWAY
CANALS
River Irwell
Hunts Bank
Central Station
M.L.R.
Oldham Road
Station
Ashton Canal
Salford
Station
M.B. & B.R.
Mersey and Irwell
Navigation Company
Wharves
Manchester, Bolton & Bury Canal
Store Street
Station
Rochdale Canal
L.M.R.
Liverpool Road
Station
M. & B.R.
Bridgewater
Canal
Castlefield
Basin
TW 1979

By September, 1840, the lack of progress on the junction railway was giving cause for much concern to the Leeds company. The proprietors were told that the directors were unable to explain the attitude of the Liverpool company but they felt that the powers granted to the company should not be allowed to lapse and that they should proceed with their part of the extension. In the following month the Leeds company noted that the river Irwell had been made navigable to Victoria Bridge just short of Hunts Bank.

A year later the half-yearly meeting of the Leeds company was told that the extension railway had been delayed not only by the inactivity of the Liverpool company but also because of the economic climate and the reluctance, by the directors, to commit the shareholders to any major capital expenditure during the period of the depression. They felt, however, that some positive decision was unavoidable because the parliamentary powers to purchase land for the junction line would expire in July, 1842. The meeting was also told that since the railway had been opened throughout on March 1st, the lack of positive traffic returns had been eliminated but even then the degree of certainty of success required by the Liverpool company could not be ascertained whilst the railways remained unconnected. The Leeds company, at this meeting, resolved to proceed with land purchase and, if the Liverpool company continued their opposition, to make a communication with the Mersey and Irwell Navigation, an arrangement with which the directors were not happy, feeling it to be inferior to direct rail communication.

When, in January, 1842, the Liverpool company reported that they had not proceeded with their part of the junction railway because it was unlikely to prove remunerative the Leeds company resolved to guarantee the Liverpool company an annual dividend of 10 per cent for a term of years on the total capital of that company and a similar rate upon the cost of the western section of the junction railway if it were completed forthwith. Predictably the Liverpool company rejected the proposal at the general meeting held on January 26th. It was significant that, at this meeting, though the directors recommended the abandonment of the Hunts Bank extension they stated that the ultimate decision should be delayed until a special meeting was called when further information regarding the southern junction line would be put before the proprietors.

Part of the report issued at meeting inflamed the anger of the Manchester, Bolton and Bury Railway Management Committee, for it was implied that one of the reasons why the Liverpool company had not proceeded with the Hunts Bank line was because the Bolton company had demanded extortionate terms from the Liverpool company for passing over the Bolton railway. The Bolton company strongly denied the accusation, stating that as far as they were concerned there had been no discussion before Parliament when the terms were included in the Act, they also expressed their annoyance that the Liverpool company had made no intimation of any dissatisfaction with the arrangement since that date.

Early in February, 1842, the Liverpool company gave notice of application to Parliament for a railway to the south side of Manchester making a connection with the Manchester and Birmingham Railway. A similar railway to this scheme had been promoted several years earlier by the Birmingham company but had been defeated mainly by the Bridgewater Trustees over whose land the railway would have passed. Ironically the scheme of 1842 was supported by the Bridgewater Trustees influence in the Liverpool company but the Birmingham company declined, for financial reasons, to

become involved, instead they decided to promote a scheme for a railway in a tunnel to connect their railway with the intended station at Hunts Bank. In spite of this setback a special meeting of the Liverpool company held on March 15th resolved that though the southern junction railway was the better of the two schemes the whole question of the best practicable route should be referrred to independent arbitration. Two days later at the Leeds company half-yearly meeting the suggestion of arbitration was rejected on the grounds that if a decision was favourable to the Hunts Bank line it could only be reached after the parliamentary powers had lapsed, and this was an eventuality that the Leeds company were not prepared to accept. It was reported that a communication had been received from the chairman of the Liverpool company requesting an amicable meeting with the chairman of the Leeds company. It was significant that the Liverpool chairman would have been accompanied by Mr. George Loch, one of the Duke of Sutherland's nominee directors and also the son of James Loch of the Bridgewater Trustees. Such a meeting was sanctioned by the Leeds proprietors on the condition that the parliamentary powers were not jeopardized. Also at this meeting of the Leeds company it was resolved to secure the best means of an alternative railway communication to Liverpool.

The Liverpool company suddenly found themselves alone, the Birmingham company had rejected their overtures for a southern junction, the Leeds company were actively projecting an alternative railway to Liverpool, were determined to proceed with the Hunts Bank line and were making arrangements to carry goods over the Mersey and Irwell Navigation. Faced with opposition from all corners the Liverpool company called a special meeting on April 22nd, 1842, when the situation was put before the shareholders. It was stated that it was still practicable to obtain from the Leeds and the Bolton companies terms for an amended route from Ordsall Lane, Salford, to the Bolton railway and thence by the parliamentary line to Hunts Bank. The whole of the junction line to Hunts Bank would become an integral part of the Liverpool and Manchester Railway, this being a more acceptable solution to the problem. It was resolved at this meeting that an extension of time for the purchase of land be obtained and that the necessary arrangements be made for the formation of the railway to Hunts Bank.

Eight days later, on April 30th, 1842, the Manchester and Leeds Railway company advertised the first two contracts for a railway from Miles Platting to the intended station at Hunts Bank, Manchester.

NOTE: This information is recorded in "The Engineer", October 12th, 1894, p.327 and used by J. Marshall, L.Y.R. 1969 Vol.1, p.55.
It is also recorded in T. Swindells, Manchester Streets and Manchester Men 1908, un-numbered volume concerned with the Long Millgate area of the town, p.148.
The Brooks papers deposited in Manchester Central Library contain no reference to the transaction.
The author has not found any contemporary reference to the transaction up to the present date.

SOURCES:

After the Canal Duke. F. C. Mather 1970.
Annals of Manchester. W. E. Axon 1886.
Canals of the North West. C. Hadfield & G. Biddles 1970, 2 vols.
Lancashire and Yorkshire Railway. J. Marshall 1969-1972, 3 vols.
Liverpool and Manchester Railway Operations, 1831-1845. T. J. Donaghy, 1972.
Manchester Guardian, 1838-1842.
Manchester and Leeds Railway Company Reports:
September 16th, December 23rd, 1841; March 17th, 1842.
Manchester and Leeds Railway Company—Reply to the report of the Liverpool and Manchester Railway Company, February 17th, 1842.

Aspinall 4-4-2 Portrait

B. C. Lane

Exactly eighty years ago, Aspinall's largest and most famous design of locomotive entered service on the L. & Y. R. Their impact on the railways of this country was profound and the following notes are taken from the monthly news items of the Locomotive Magazine of 1899 to recount their initial impact at that time. The 'ten-wheelers' (as they were originally known) were the first engines on the L. & Y. to be fitted with steam sanding gear and the last one of the 1899 batch of twenty, No. 737, was fitted with a low degree superheater, being the first British locomotive to be so fitted. The 1899 engines also had Richardson's balanced slide valves and steam jacketed cylinders. The 1902 batch of a further twenty introduced outside admission piston valves and the Adams sliding bogie which later became the standard for the railway. Clearly, the new locomotives were something very special for their time.

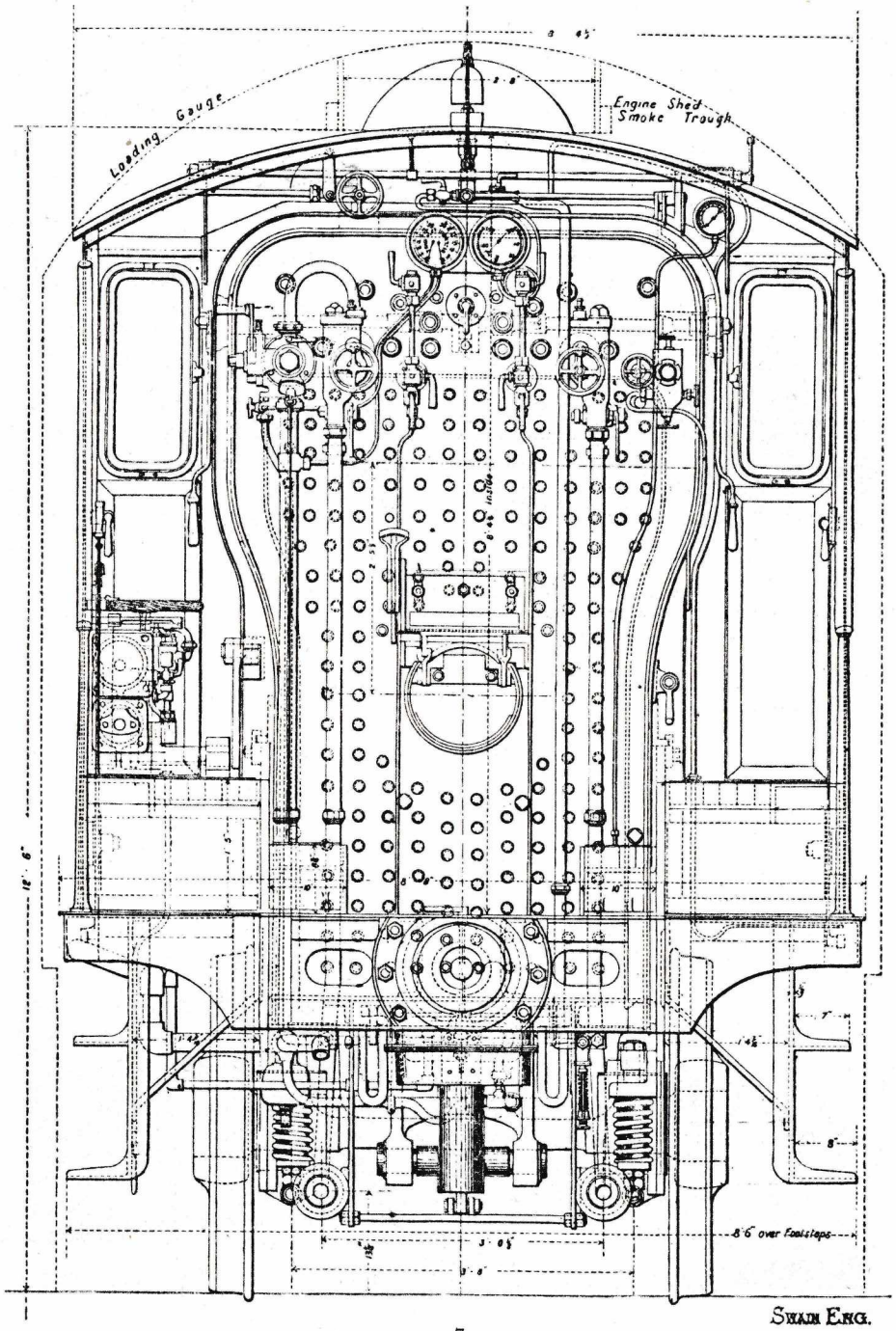
The February 1899 issue of the Locomotive Magazine includes details of the latest engines from Horwich works, the new 2-4-2T with larger bunkers and adds a note that "a new type of express locomotive is now being built". The March edition reports that the "new type of express locomotive is a ten-wheeler and is about to appear and will be numbered 700. The leading bogie has 3' wheels, the 4-coupled drivers are 7'-3" and the trailing wheels are 3'-8". The boiler is enormous, having a mean diameter of 4'-9½" and a length of 15'-0". It is pressed to 175 lbs per sq.ins. and its centre line is no less than 8'-11" above the rails. The valve motion is Joys and it is provided with steam reversing gear".

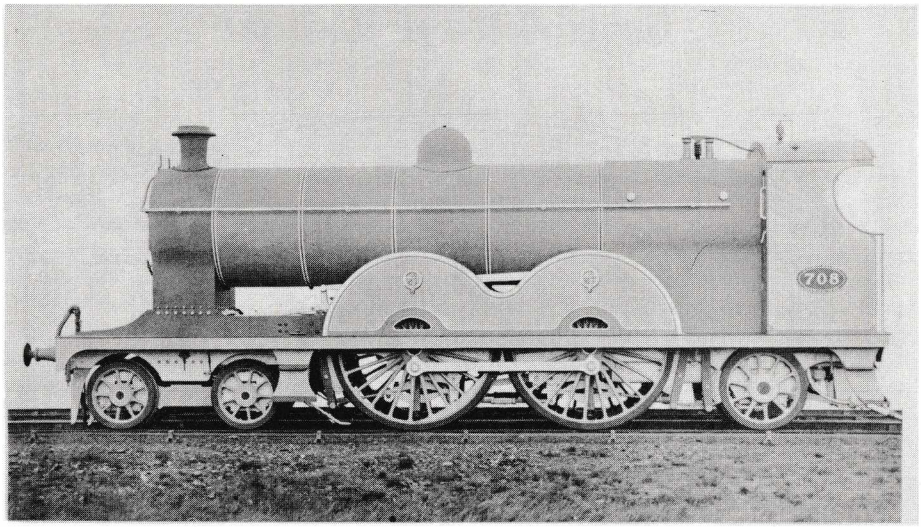
The April edition has a correction that the number of the first loco is 1400 and not as first announced. The July edition tells that "TEN of the huge engines have now been completed, their numbers running consecutively from 1392 to 1401. Nos. 1393, 1394, 1395 and 1400 are stationed at Newton Heath and 1392 at Southport; the others not yet being in regular service. These engines are having their tenders altered, the tanks being made the same width as the engine cab, and their capacity will be 2,290 gallons of water and 5½ tons of coal. No. 1400's tender has already been so altered". The September edition reports that two more 'had been put to work', Nos. 1402 and 1403 which were to be allocated to Liverpool.

The November edition reports that the order for twenty has now been completed and that 15 are actually in service. In addition to the above, Nos. 1396, 1398 and 1402 are at Newton Heath. The Southport allocation of 4 was made up of 1392/7/9 and 1401 while Liverpool had 1403/4, 700 and 702. The numbers of the remainder were 708, 711, 718, 735 and 737. All these were sent to Low Moor.

Readers had to wait until the December issue for the first picture of the engines, a fine view of an express on Walkden troughs by Doctor Budden and captioned *'The Blackpool Express L.Y.R.'* Two identical photographs are known of by Budden of the same express in the same spot which show that some of the oldest narrow tenders did actual service before being altered as the two views each have different width tenders.

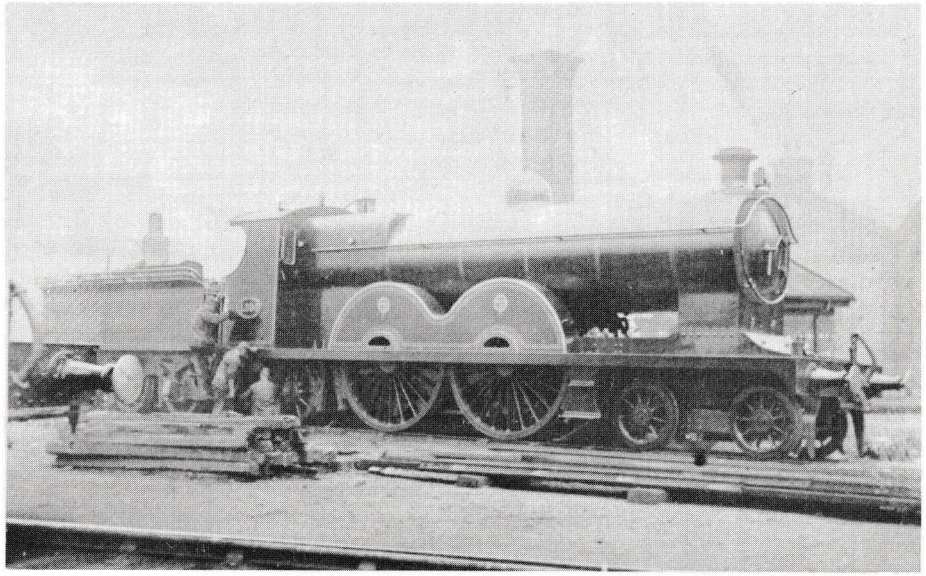
The cab layout of the first locos, featuring 'push/pull' dual control regulator and steam reversing gear under the driver's seat. It is interesting to note how close the engines were to the loading gauge of the railway.

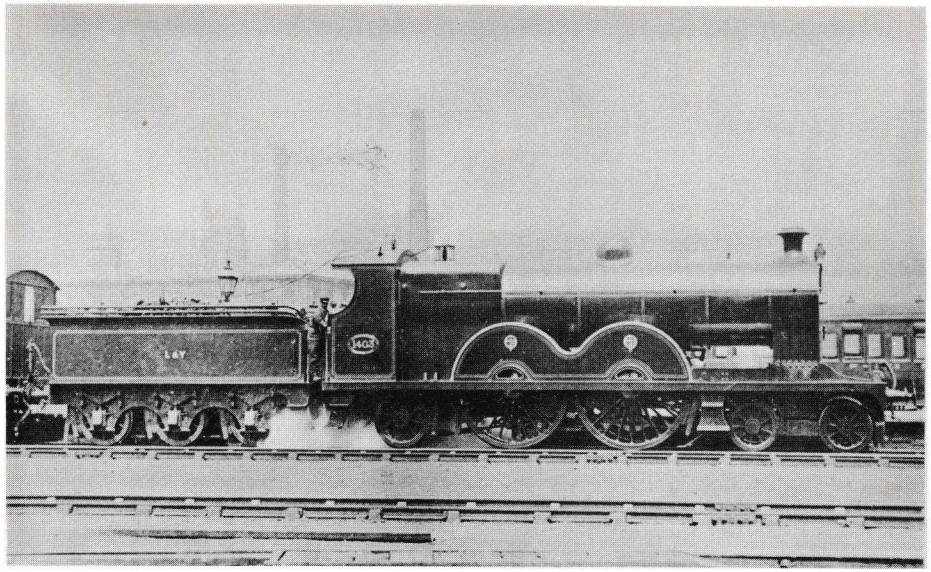




The official photograph of 708 in the 'photographic' grey livery. Unlike the better known such view of 1400, this loco has the modified higher cabside sheets. The bell cranks for compensating the driving wheel springs are clearly shown on this view.

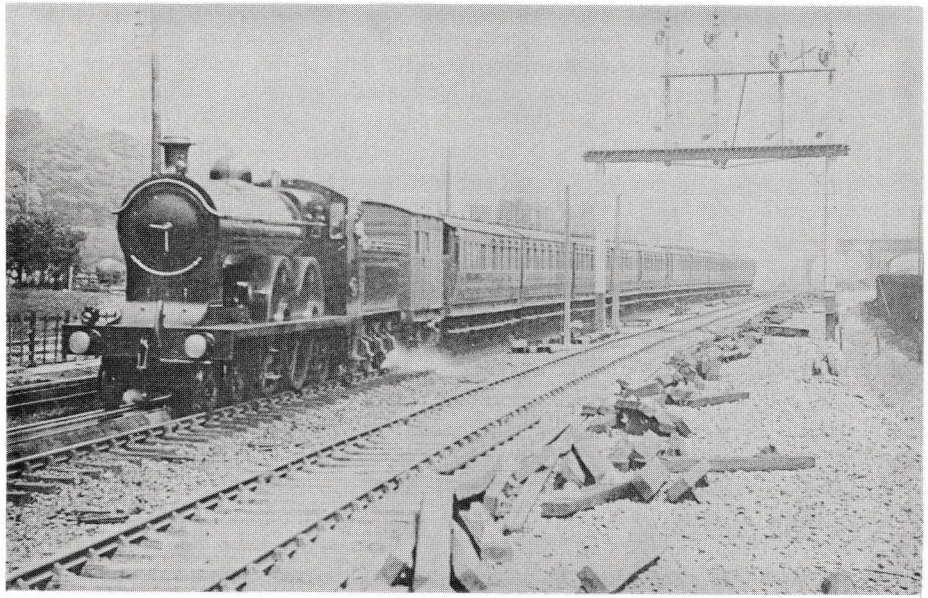
Brand new! No. 1398 with the old headlamp brackets which were still the standard when the locos entered service. The original batch all carried the simple L & Y letters on the tender.





1403 at Sowerby Bridge. The crank through the cab roof and its emergency cord connection is well shown on this rare view. The train is a Manchester to Bradford and Leeds express.

The December 1899 Locomotive Magazine illustration of the 'Blackpool Express'. Note the narrow tender before alteration and the low-cut sides of the cab.



Accrington Station 3rd June 1914

Photo: courtesy the National Railway Museum, York.

The station at Accrington was a splendid example of the Victorian timber-built pattern that was found all over the Lancashire & Yorkshire Railway system. The station here was built on a triangle which was not so common however, but the builders, the East Lancashire Railway in 1848, were very proud of the station and its associate fixtures.

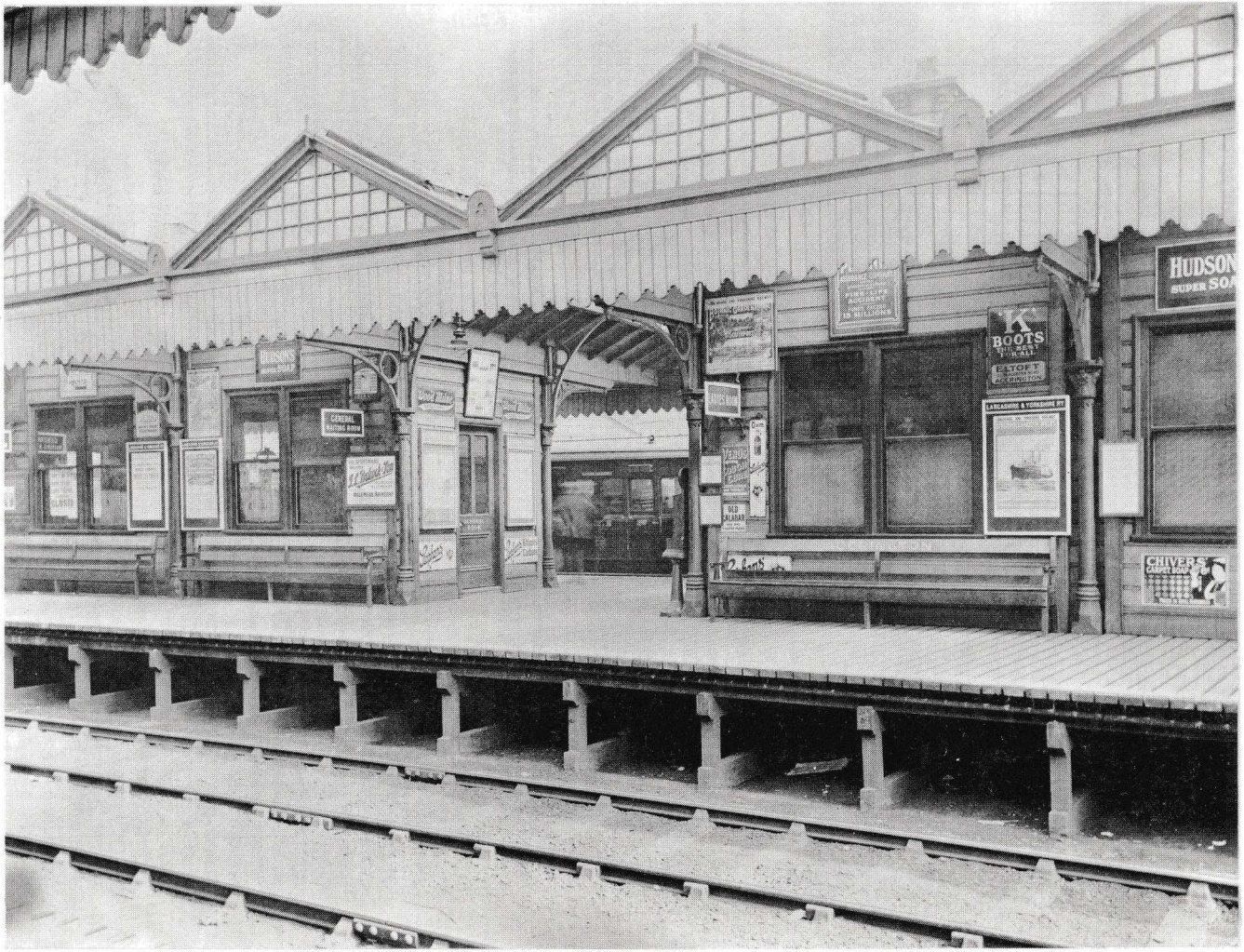
Just how much of the station is original (after over 60 years) is hard to tell but the appearance of the buildings and canopy will not have altered very much over the years. The valance on the canopy is of a pattern that was used on the E.L.R. and has not been noted on any other stations other than that railway. It was usual to paint the vertical boards in alternate colours, the longer being dark coloured and the shorter ones being tan, but this station has missed out somehow. The lighter and darker tones on the buildings can be taken as these two colours. The ash ballast of the track which was standard practice in those days will be noticed here for its much finer texture and higher level than of later years. On the other side of the platform, a train from Blackpool Central is standing.

The most interesting assortment of signs and adverts will be noticed and some of these we will examine more closely. The usual assortment of 'Hudsons Soap' and 'Stephens Inks' enamelled metal signs are dotted about along with a few of the rarer ones of Wood Milne shoe shines, Koh-i-noor Pencils and K-Boots. Amongst these are the standard poster boards of the railways. The first one on the left tells of the arrangements for *"conveyance of Horse Carriage and Motor Car Traffic by passenger trains, Easter & Whitsuntide"*. Its companion next to it deals with the L & YR New Fast Through Trains between Colne, Burnley, Accrington, Blackpool, Bolton, Manchester (Victoria) and London (Euston) via Crewe. Above it is a well-worn poster for the Winter Gardens Zoo at Southport.

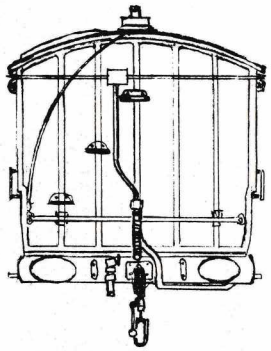
On the end of the waiting room, on either side of the door are boards headed *Caledonian Railway*. The far one is small print and quite illegible but the closer one has *'the Golfing Girl'* which was part of a series of well-illustrated posters put out at this time by the C.R. One wonders how many 'golfing girls' there were in 1914? Above the door is a framed poster for the Wigan Coal & Iron Co. Limited. Smaller headings are indistinct but seem to read *'Pits and appliances'* with ten illustrations. The private owner wagons of the company were familiar sights in Lancashire from the mid-Victorian period onwards.

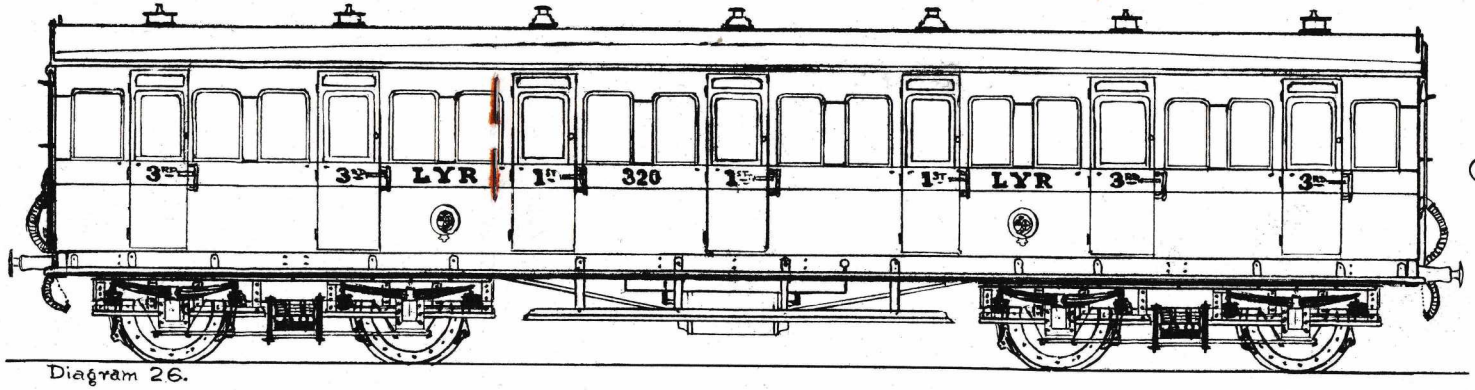
On the right hand building, the ladies room, there is another well illustrated poster for Southport, this time the Botanic Gardens. It tells us *'reduced charge for admission to excursionists on shewing return half of railway ticket'*. The last poster board displays details of 'Daily Sailings—Liverpool and North Wales on the *La-Marquerite'*.

Another photograph of the same platform but from a different angle was published on page 7 of *'The Lancashire & Yorkshire Railway in pictures'* by John Marshall in 1977, being an illustrated supplementary volume to his earlier three volume set..


BOOTS
ELTOFF
LANCASHIRE & YORKSHIRE RY
CHIVERS

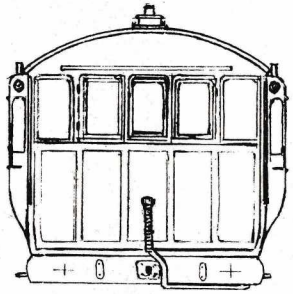
LANCASHIRE & YORKSHIRE RAILWAY – Yorkshire Branch Sets

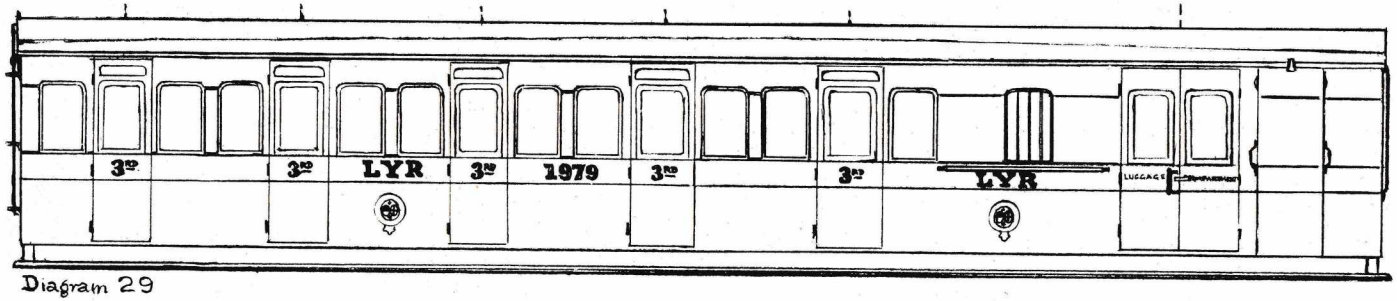




a.

Diagram 26.



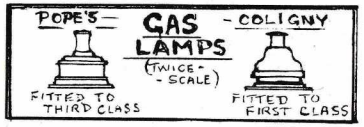


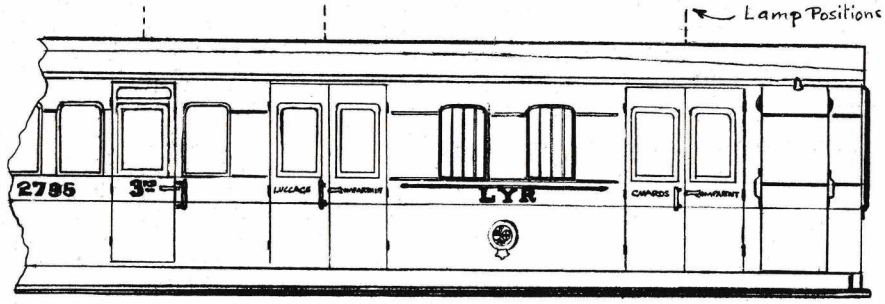
b.

Diagram 29

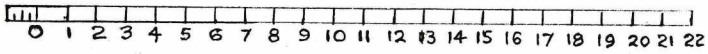
Insignia Hughes Period
Sets made up of 3 carriages,
b + a + b or c + a + c

All carriages built: 46' long, 8' wide.





c.



Prototype Notes:

These carriages were amongst the earliest bogie stock built at Newton Heath and were typical of the standard arc roof vehicles. Of example 'a':– 44 were built to the official diagram 26 from 1893 and over 30 more with detail differences. Of the example 'b', 50 were built from 1893 and 20 of 'c' in 1894. (see photo p.74 'LYR Album' 1971.) Standard 6'-6" bogies were also fitted to many at 31'-6" centres. With very little alteration these carriages lasted to the end of the LMS period. Some were however converted to mail vans after the Great War by the removal of all inner fixtures and another set of double doors added at the old passenger end. (Alteration order 6640, December 1920).

Editor.

LANCASHIRE & YORKSHIRE RAILWAY SOCIETY
DRAWING
H V Armitage
COPYRIGHT

Drawings to 4mm scale. Drawing No. A 26/79

LANCASHIRE & YORKSHIRE RAILWAY – COACHES

Yorkshire Branch Sets

DRAWINGS A.26/79

These notes are supplementary to the drawings of the three coach sets which formed the trains drawn by 2-4-2 T engines operating out of Huddersfield. The particular reason for producing these drawings is to make a record of the types of vehicles used circa 1917. (recollect that they continued well into L.M.S. days). They are 46ft x 8ft.

The sets were made up of three coaches, b + a + b or c + a + c.

DETAILS relating to each drawing are:

DRAWING 'a'— (diagram 26) — *7 compartments as follows:*
2 Thirds - Smoking. Notice on compartment window, "Smoking" (black/white)
2 Firsts - Smoking
1 First - non-Smoking.
1 Third - Ladies Only. Notice on window (Red/white).
1 Third - Non-Smoking.

DRAWING 'b'— (diagram 29) — *5 Third compartments and short brake end with double doors marked 'Luggage Compartment' (Usually 3 Smoking, 2 Non-Smoking compartments).*

DRAWING 'c'— (diagram 29) — *4 Third compartments (2 Smoking, 2 Non-Smoking) and the longer brake end with double doors marked 'Luggage' 'Compartment' and a door marked 'Guard'.*

N.B. Coach 'a' Ladies Only compartment and the compartment between the first and the end third class at the other end of the coach were originally second class until 1st January, 1912.

COACH ENDS— *Steps and hand rail on left hand side both ends of coach 'a' but steps and hand rails left hand and right hand sides of the inner ends of brakes— coaches 'b' and 'c'. Only at one end of each coach is there a lever for operating the gas valve, (lighting). On the brakes it is at the inner end. Coach 'a' communication cord re-set is at the end other than the gas valve.*

BRAKE END— *Middle rear window is opaque (white), is reversible and carries red rear light. Either side windows of clear glass which open. The outer windows of clear glass are fixed. In the panel just above left hand buffer in white letters 'Y B Set No. XX'.*

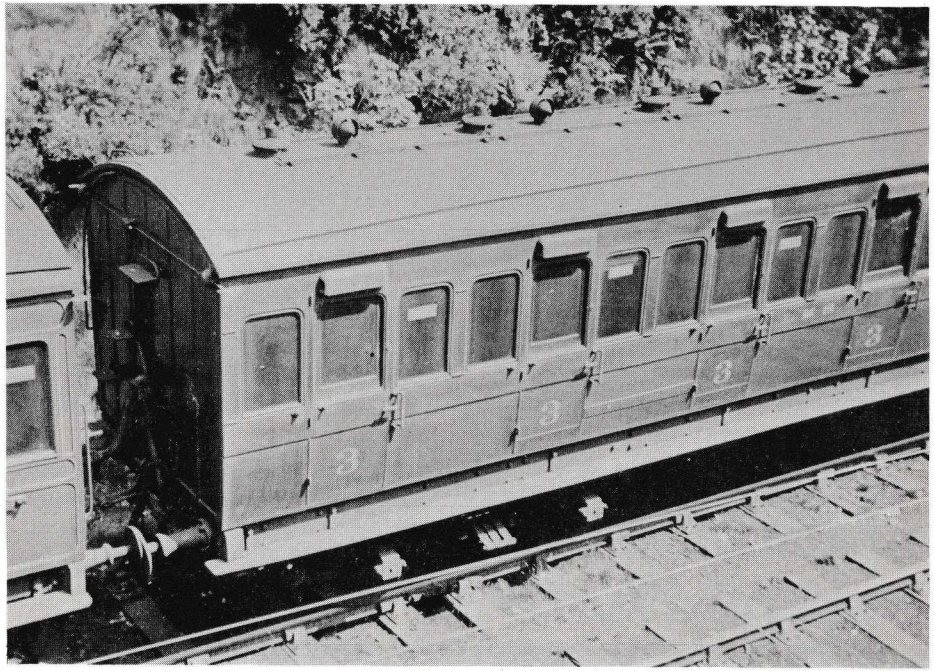
BOGIES— *Wheels 3'-6" Wheelbase 8' at 30' centres.*

GAS LIGHTING— *Pope's lamps for Thirds and Coligney for Firsts.*

VENTILATORS— *Above doors of compartments only. No recollection of any others such as roof ventilators.*

INSIGNIA— *Coach 'a'— Originally numbers and coat of arms between two of the First compartments - one only each side. Later, Hughes period, number in same place. Two coats of arms, one each below L Y R (as originally) between First and Third at each end.*

Coaches 'b' and 'c'— Originally one coat of arms and one number between third and fourth compartments and L Y R (twice) between first and second compartments and, in the case of coach 'b' midway between last compartment door and first of the double doors but in the case of coach 'c' between right hand door of double doors (as viewed in drawing) and Guard's doors. Hughes Period—number located as originally but two coat of arms below L Y R one now between compartments two and three. The other



Although the above carriage is not the same diagram as dealt with in the text, it is of the same general type. All bodywork features are of the same standard size although arc roof stock like this was built in various lengths from 46ft to 54ft. This example has patches on some of the doors and is painted in the later L.M.S. livery, otherwise it is substantially as built. The roof vents are a late L & Y addition and the "Smoking" signs on the windows are a 1920's alteration. The original LYR ones were "frosted" glass.

Photo courtesy: Bob Mills

********** CARRIAGE & WAGON DEPT. DRAWING OFFICE LYR LYR NEWTON HEATH. MCR. **********

continued from page 14

initials L Y R, now with the coat of arms below, remain in the original positions at the brake end.

The drawings intended to show circa 1917 show the Hughes Period locations.

NUMBERS— *Sample numbers: Coach 'a' 359-371*
" 'b' 1979, 2474, 2799
" 'c' 2232-51

It may be of interest to mention that at the period under review all the Third class seating was in horse hair, the First class seating was in a darkish blue cloth and the seat backs had antimacassars (three each side) but in coach 'a' the compartments either side of the Firsts being formerly Second class, the seating was in plain blue cloth - no antimacassars.

H. V. ARMITAGE

L. Y. R. Department Engines

Bernard Fielding, LL.B.

I have always been fascinated by departmental vehicles, and the following brief notes are an attempt to bring together the fragmental references to the locomotives in particular. I purposely have not gone into detail as to their prior history or dimensions as most of this information can be easily found elsewhere.

A.— **LOCOS USED WITH INSPECTION SALOONS:**

1. *E.L.R. 2-4-0 No. 640 'Fire King'*

This was an engine of considerable antiquity being built in 1849. There is a well known photograph of it attached to the former E.L.R. Directors' Saloon touring the unfinished Horwich works. The cab clearly carries a Newton Heath shed-plate (1).

Ahrons says it was transferred to Low Moor in 1879 for working the non-stop expresses between Bradford and Halifax.

Marshall gives it as replaced in September 1882 by Kitson 0-6-2T No. 640 but the land for Horwich works was not purchased until May 1884, thus dating the photograph in the 1885/6 period.

My opinion is that the loco was kept for a period after replacement, for working inspection saloons.

2. *Yates 2-4-0T Nos. 31 and 135*

When Aspinall came to Horwich in 1886, he asked for some means to enable him to get to all parts of the L & Y system quickly and was voted the sum of £250 to convert an old engine. The chosen engine was No. 31 from which the saddletank and bunker were removed; an old tender was attached having the rear end cut away and a small saloon was fitted running on a bogie and one rigid axle. This unit appears to have run until about 1903, (when presumably the engine could run no longer).

The precise functions performed by 2-4-0T No. 135 are not known, but it was listed as a 'departmental engine' from 1885 to 1900. The photograph printed shows it with the built-up Barton-Wright chimney, lengthened coal bunker and outside flanged cab, all acquired at this period. (Drawings of this were printed on page 8, Platform 1). I assume that it would work the directors' saloon and other saloons, perhaps taking over such duties from 'Fire King' in 1885 until itself being superseded by ex-LNWR 2-4-0 No. 461 in 1900.

3. *Ex-LNWR 2-4-0's Nos. 460, 461 and 731*

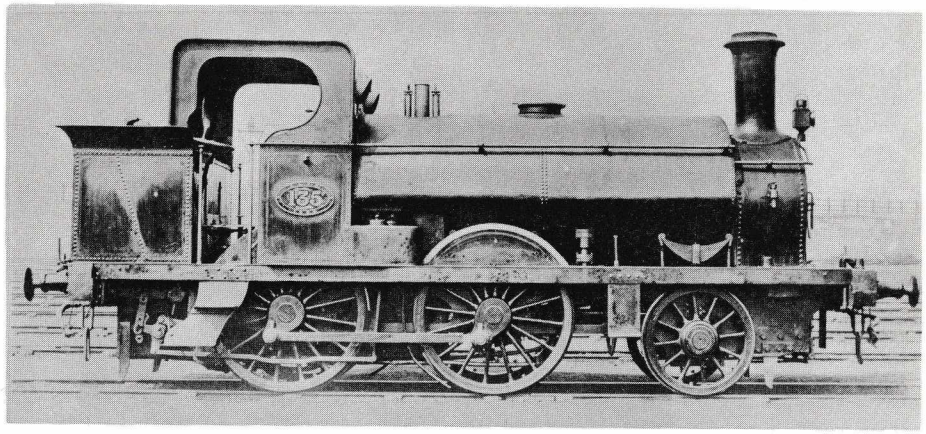
These three engines were given new boilers and transferred to departmental duties around the turn of the century.

No. 460—reboilered 1903. Photos show it in use with the first directors' saloon, and another unidentified saloon. Scrapped 10/1912.

No. 461—reboilered 1900. Photos show it attached to the Chief Civil Engineer's saloon. (The old E.L.R. saloon downgraded). Scrapped 10/1904.

No. 731—reboilered 1903 and 1914. The carriage portion from the Yates 2-4-0 was built onto an underframe carrying part of an old LNWR tender, the whole being carried on two bogies. This coupé as it was called was used by the CME until 7/1926.

By all accounts it rode rather roughly—any small articles placed on the seats soon ended up on the floor.



It is recorded that Hughes wanted to retain the Lancashire and Yorkshire livery when the LMS was formed, but was over-ruled. He insisted on it being given a 'prestige' LMS number so 10000 was allocated to it.

It was scrapped after his retirement, control passing then to Derby, who had their own saloons.

4. *6 ft. 4-4-0's Nos. 924 and 995*

I have seen photos of these two engines attached at different times to the L & Y Directors' Saloon, but whether they were regularly used on such duties I cannot say.

5. *7 ft. 3 in. 4-4-0 No. 430*

Eric Mason stated that Newton Heath shed kept this engine in spotless condition for working the saloon of the superintendent of the line (formerly the Directors' Saloon). After the 1922 merger with the LNWR it travelled as far as Carlisle, Holyhead and Hereford.

The LMS however, clamped down on the use of inspection saloons and their use was greatly restricted. The engine was scrapped 6/1927.

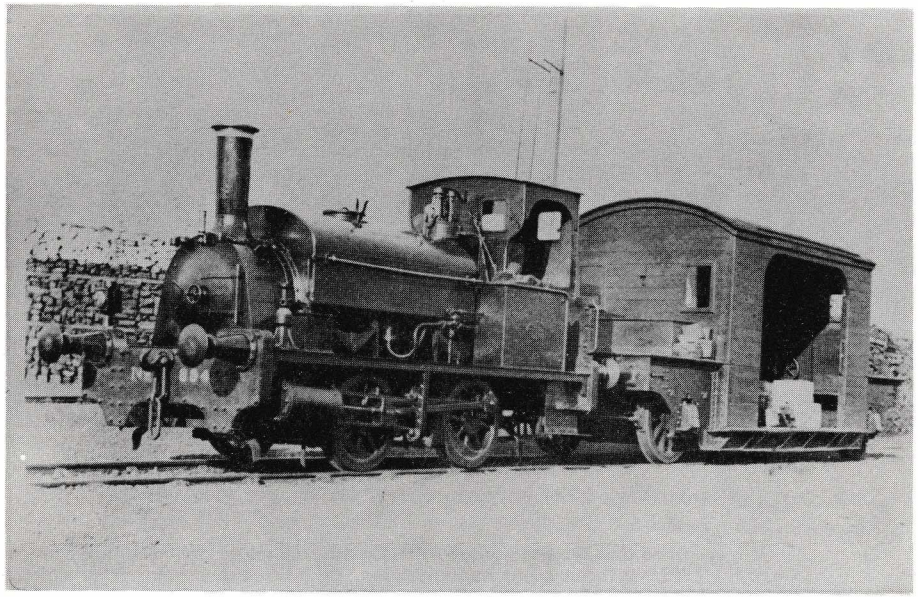
B.— **HORWICH WORKS ENGINES:**

1. Eight 18" gauge engines were in use for the transport of materials round Horwich Works. They were:— *Dot, Robin, Wren* (1887); *Wasp, Fly* (1891); *Mouse, Midget* (1899); *Bee* (1901).

Dot, Fly and *Bee* were scrapped in 1930, *Midget* in 1933; withdrawal dates for *Wasp, Robin* and *Mouse* are not known but *Wren* was still in use until 1961 and is now preserved in the N.R.M. at York.

2. *0-4-0 ST No. 884*

In 1885 the LYR purchased 2 new tank engines from Black, Hawthorn & Co. (LYR Nos. 883-4).



884 ended its days as the Horwich works 'Cab' engine, pulling a 4-wheel well wagon fitted with a wooden shelter, which carried materials between the works and Blackrod station on the main line. Scrapped 1908.

3. *2-4-0T No. 518*

In 1875 the L & Y purchased three 0-6-0 goods and three 2-4-0T's from Beyer Peacock, for which the E.& W. Junction Railway were unable to pay. The 2-4-0T's became LYR 517-519.

In 1891 No. 518 was fitted with a 3-ton steam crane in the bunker for use in Horwich Works. Scrapped 9/1922.

One source says it latterly worked the Horwich Works cab (probably after the demise of 884 in 1908).

4. *0-6-2T No. 146*

This was a Kitson 4'-6" Barton-Wright goods tank built in 1881, which ended its days in 1931 as Horwich crane engine. The crane appears to be the one carried by 518, so probably it took over about 1922. Photographs show it in both L & Y and LMS livery (11601), whilst others show it without the crane, with the back of the cab cut away.

5. *Aspinall/Barton-Wright Saddletanks.*
LMS numbers 11304/05/24/68/94.

I have not been able to trace the date when these engines became Horwich Works shunters, but I think it must have been in early LMS days. They survived into the 1960's, the last to go 11305 (LYR 553—Sharp Stewart 6/1877) being the very last ex-L & Y engine in use on B.R. (9/1964). They retained their LMS numbers under B.R. ownership as departmental engines.

C.— OTHER DEPARTMENTAL ENGINES:

1. *0-4-0ST No. 789*

This was one of a batch of four Manning Wardle 0-4-0ST built 1887 purchased second-hand by the L & Y in 1881 (Nos. 789-792) for shunting duties.

789 finished its working days in P.W. Stores at Castleton near Rochdale in 1/1914.

2. *0-4-0ST 'Pugs'*
LMS Nos. 11220/34/38/45/53

Eric Mason recorded that these five little engines became departmental engines in LMS days:—

11220	C & W	Department	Newton Heath	1924	scrapped	6/30
11234	"	"	" "	1929-33	"	10/57
11238	"	"	" "	1924	"	6/31
11253	"	"	" "	1924-28	"	6/63

11245 became a 'service loco' (duties not specified) in 1931 but was sold in January 1933 to the North Wales Granite Co.—being hauled to the top of a mountain at Penmaenmawr for use in a slate quarry. Presumably 11234 and 11253 were returned to revenue service in 1933 and 1928 respectively.

3. *Crewe Works Shunters 0-6-0ST*

In the early 1960's a few Barton-Wright 0-6-0ST ended their days as Crewe Works shunters. I have only been able to trace 51446 on such duties (1961). This retained its B.R. number even as a departmental engine. Scrapped 3/1962.

Railway Carriage Heating

Compiled from an essay made in November 1924 by an LYR/LMS trainee.

Dr. G. H. Foxley, M.Sc., A.R.I.C., A.I.R.I.

The old system of heating carriages was by means of portable foot warmers filled with acetate of sulphur.[1] The method was cumbersome and costly to maintain and has now been abandoned. The temperature it is endeavoured to maintain is 55°-60°F and steam is almost universally employed except in the case of trains hauled by electric traction when resistance heaters are used. Gas has occasionally been used, principally in Scotland, where the waste from the roof lamps was used to heat a radiator beneath the carriage seat. The steam systems may be divided into:

1. Storage pressure heaters
2. Non-storage pressure heaters
3. Atmospheric (pressure) heaters

1. Storage pressure heaters are in extensive use on the old L.Y.R. They consist of an outer steel barrel 5" diameter, ¼" thick, and of such length as may be necessary to meet the requirements of the compartment to be heated. Cast steel caps close the ends of the barrel and the steam inlet and outlet is provided one at each end. Inside this barrel is placed an inner tube 4 3/8" diameter and 4" or so less in length than the outer tube or barrel. This inner tube is known as the storage drum and it is filled to the extent of 7/8" of its volume with a solution of brine and is sealed.

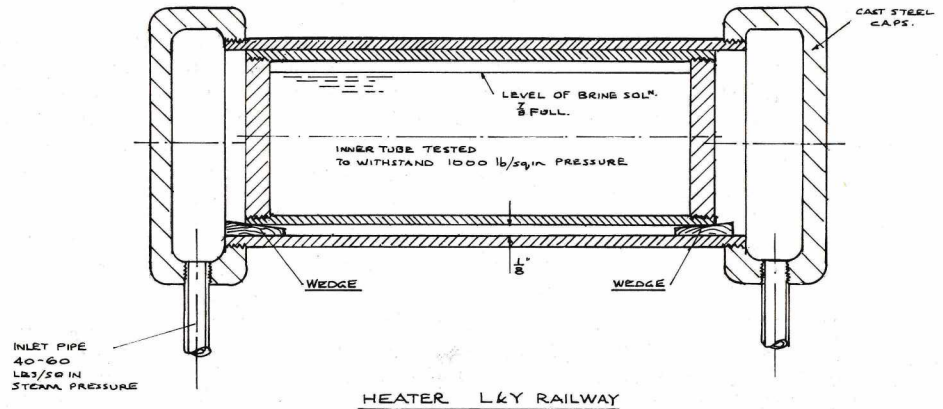
Steam is admitted to the annular space between the inside of the outer tube and the outside of the inner tube. The inner tube is wedged up from the bottom into contact with the inner top side of the outer tube. The steam gives its heat to the outer tube and so warms the external area. At the same time heat is stored up in the inner tube and the mixture in the inner tube will retain sufficient heat to keep the compartment warm for one and a half to two hours so that in the event of a train standing in sidings without engine power the train does not become cooled off. One hour is needed to warm up a compartment comfortably.

2. Non-storage pressure heaters. These are very similar in every respect to the storage type except that the inner tube is not employed. Since there is no storage tube they cool off very rapidly when the steam supply is cut off. The pressure employed varies from 40-60 lbs per sq.inch. A very strong point in their disfavour and in any pressure system is that in the event of an accident, passengers are exposed to the risk of being badly scalded. In order to overcome this objection the atmospheric non-pressure system has been devised.

3. Atmospheric Heaters. In this system one end of the heater is always open to the atmosphere and no pressure can accumulate in the heater itself. In order however that each carriage can have its fair share of steam, a pressure of 40 lbs per sq.in. is usually maintained throughout the length of the train and a reducing valve placed on each carriage.[2] A reducing valve is fitted in some atmospheric pressure systems allowing a very small flow of steam into the heaters (e.g. G.W.R.). In ours the full steam pressure of 40 lbs is led right up to the heaters and the fall of pressure controlled by automatic devices. There are many types on the market. The most important are G. D. Peters, Westinghouse and Stills.

NOTES: *1. There is no such compound as this—I understand acetate of soda was used for this purpose.*

2. A sketch not reproduced here shows the reducing valve placed at the centre of the carriage.



HEATER L&Y RAILWAY
c. 1924.

Gas Lighting of Trains

Oil gas for train lighting is manufactured in retorts in much the same manner as coal gas in coal gas works and after passing through the usual scrubbers and condensers, is pressed into large reservoirs connected with station supply mains. The oil from which the gas is made passes through a special valve at about 3 gallons an hour into the upper of two retorts and should make 220 to 230 cu.ft. of gas, i.e. 70 to 80 cu.ft. of gas to one gallon of oil. After treatment to extract impurities the gas is pressed into reservoirs at 150 lbs per sq.in. Coke is used in the retort benches to convert the oil into gas and 160-170 lbs of coke is used in the production of 1,000 cu.ft. of gas in single bench retorts and 112 lbs in double bench retorts. Each 1,000 cu.ft. of gas yields as a waste product 0.77 of a gallon of hydrocarbon oil which is used for enriching coal gas and 4.7 gallons of tar and requires 13.3 gallons of oil.

Oil gas has a calorific value of 1,200 British thermal units per cubic foot and when first made has an illuminating value of 10 candles per foot reducing to 8 candles per foot when compressed. From the store holders and gas travellers the gas is conveyed through steel pipes 7/8" inside diameter, 1 5/16" outside diameter into sidings and station mains. The gas cylinders on carriages vary in diameter from 18" to 24" and from 3' to 9' in length depending upon the type of carriage and its requirements. The train cylinders are pumped up to about 120 lbs per sq.in. and the supply to the burner is through a regulator or governor which reduces the pressure to the few ins. of water required at the burners. The burners of today are of the incandescent type and make use of inverted mantles. The candle power of such lamps is approximately 25 and gas consumption is 0.65 cu.ft. of gas per hour at a pressure of 8" of water. A larger burner is sometimes used which gives 50 candlepower and using 1.05 cu.ft. of gas per hour.

1 lb per sq. in. = 2.305 ft. of water

8 ins. of water = a pressure of $\frac{8}{12 \times 2.305}$ lbs. per sq.ins.

L & Y Bogie Merchandise Wagons

Noel G. Coates

Arthur Butterworth's article on page 23 of Platform 2 and the attendant picture of the Tubular-Framed Bogie experimental wagon has reawakened interest in this early attempt at raising carrying capacity.

This topic has already attracted some publicity and members are recommended the following references:—

H. A. V. Bulleid *'The Aspinall Era'* Ian Allan (1967) pp. 138, 174, 176.

R. J. Essery, D. P. Rowland & W. O. Steel *'British Goods Wagons from 1887 to the Present Day'* David & Charles (1970) p.26

N. G. Coates *'HMRS Journal Vol. 7 No. 4 October 1970'* p.75

A. C. Bubb *'HMRS Journal Vol. 7 No. 5 January 1971'* pp.111/2.

R. Pochin *'HMRS Journal Vol. 8 No. 7 July 1974'* pp.131-3.

(The last reference includes a highly comparable drawing with the L & Y wagon, particularly the underframe.)

Views of bogie vans and wagons are scarce, in view of the number built. Here we see No. 31189 being loaded with bales of cotton.

Photo courtesy: Bob Mills

From this information a brief summary is that Aspinall became interested in high carrying capacity stock following his visits to America in 1872 and 1890. A company called the Tubular Frame Wagon Co. Ltd. based at Barrow-in-Furness began turning out vehicles as 'samples' in 1890. One theory could be that Aspinall directly requested a vehicle for trial or it may be that he was offered one and accepted the offer. However, very little is known about the actual vehicle, beyond the single photograph, nor what it did; it was lettered for carrying coal and possibly the 1893 experiment was one of several carried out with different consignees to assess practical problems in traffic. Whatever, Aspinall was in America again in 1899 and his interest appears to have been re-awakened and new designs were prepared leading on to full production; details of these can be found in Table 1.

If any member has additional or conclusive information about this or other bogie merchandise vehicles then both the Editor and myself would be pleased to hear about it.

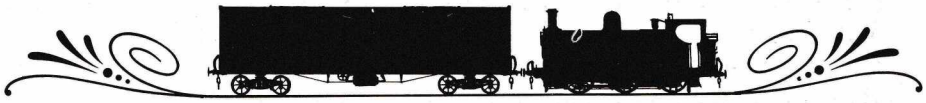


TABLE 1

Diag. Book Page	*Description*	*Date Ordered*	*Order No.*	*Qty.*	*Drawing*	*Charge Account*	*Floor Space Capacity*	*Tare*	*Additional Information*		
42	30T Bogie Coal Wagon	3/9/01	H32	2	4285	Capital	296½ sq.ft. 1185 cu.ft.	14-18-0	Running Nos. 30448/9	Scrapped 1921 & 1922	40' long 8' wide
45A	30T Bogie Open Goods Wagon	13/2/02	K33	25	4546	Capital	262 sq.ft. 1032 cu.ft.	14-1-2	Running Nos. 30298-30322		35' long 8' wide
45	30T Bogie Covered Goods Wagon	26/3/02	M33	25	4585	Capital	1800 cu.ft.	15-0-0	Running Nos. 30323-30348	24 extant Dec. 1922	35' long 8' wide
58	30T Covered Goods Wagon	? /04	R36 *†	25	5274	?	2000 cu.ft.	14-17-1	Running Nos. 31151-31175		35' long 8' wide
59	30T Open Goods Wagon	? /04	S36 *†	25	5273	?	262 sq.ft. 1032 cu.ft.	13-18-3	Running Nos. 31176-31200		35' long 8' wide
59A	30T Low Sided Wagon	? /05	N37 *†	10	5577	?	281.8 sq.ft.	12-2-2		40' long	7'-6½" wide
	"	?/10/06	K38 *†	20	"	?	212 cu.ft.	"		"	"
	"	27/10/06	V39 *†	10	"	Capital	"	"		"	"
	"	4/11/07	R41 *	20	"	"	"	"	Bogies to Drwg 6568	"	"

Finally a new 45' long Low Sided Wagon was drawn to 6666 but never proceeded with.
All wagons were vacuum braked.
* Steel underframes
† Swivelling bogies

1008—AND ALL THAT

Reprinted from the S.L.S. JOURNAL, October 1955, by kind permission of the editor, W. A. CAMWELL Esq.

The Late ERIC MASON

About two years short of half a century ago when the writer, along with two school friends at Lytham, started to compile a shed list of Lancashire and Yorkshire Railway engines—we already had a reasonably complete engine list obtained from information copied out of the Working Timetable Appendix—there were one or two sheds about which information was very difficult to obtain, consequent upon Blackpool drivers, always very helpful in supplying us with shed allocations, not having any workings to these sheds, and also to the fact that those sheds had no workings to Blackpool. One of these difficult sheds was Southport, and although we were aware of the identity of the larger engines stationed there as on periodical day trips to Manchester we would note what engines carrying the code 17 were employed on the expresses to and from that city and Southport, it was always a case of so near and yet so far as regards the smaller engines. Across the River Ribble from the sea front at Lytham we could see the clear outline of Southport pier and the larger buildings, and could follow the trains working along the old West Lancashire line between Southport and Preston and could see the engines exhaust as they drew out of the stations on the south bank of the river. But field glasses were no use for number spotting over that distance, and in any case we should never have accepted an allocation unless the shed number could be seen even if we had known that most of the trains on that section were worked either by Southport or Lostock Hall sheds.

As a result of all this, engine 1008—the text of this theme—was a missing link for quite a long time. I think it was at Manchester Victoria that I first saw her on a stopping train about to leave for Wigan, and great was the joy at the next meeting of the gang: 1008 was a Southport engine, traced at last. Now, in the light of knowledge subsequently acquired, it seems probable that this engine—known to have gone to that place new, along with most of the first lot to work the Liverpool and Southport line—spent the first twenty years or more of her life at the seaside. Great, again, was my satisfaction when, at the close of 1919, I was appointed to take charge of Agecroft shed, I found 1008 on the allocation list of that depot. I cannot recollect seeing 1008 in the works during my spell there though it is highly probable that she did come in during that period, and may have been transferred to Agecroft after repairs, as she was not in the Sandhills and Southport district when I worked there subsequent to completing my training at Horwich.

At Agecroft I found 1008, along with 1011, 1042, 1214 and a few of the 13XX series quite at home in a link of assorted jobs going to Accrington, Bradford and Southport, the larger tanks (1538, 839, 5, etc.—pre-superheating) doing the Normanton, Liverpool and Blackpool trains. No.1008 figured in an amusing incident—to me at any rate—in the early 1920's. I had purchased from a good friend at Accrington a second-hand photographic enlarging lantern, one of the old horizontal type, and this was housed in a large wooden box over a yard long and about eighteen inches wide and deep. The problem was to get this cargo from Accrington to my digs in Pendleton, so with the aid of a colleague at Accrington, the box was roped up and carried to the station, no mean distance, the intention being to put it in the front van while I rode on the engine—it was 1008, of course—to "keep an eye on it" so to speak. On arrival

at the station we were so fatigued with manhandling this awkward parcel that on seeing what appeared to be a reasonably long strong-looking brush handle with a dangerous nail sticking out at one end (which we removed) lying against an ashbin near the end of a platform we promptly co-opted the assistance of same and decided that it would further help me to deal with the parcel at the Pendleton end. This proved to be quite correct and as the fireman of 1008 and I had to convey the thing from the shed to my rooms—nearly a mile—at 2.30 a.m., we blessed the thoughtfulness of the good person who had discarded the broom handle at such an opportune time. It was some days later that I heard that when it was time to close the station at Accrington that night and it was proposed to turn out the gas lamps, a hue and cry was raised as the station lamp-stick was missing, and the unhappy lamp-man had to do his final chores of the day's work with the aid of a pair of step ladders and the free use of a superheated vocabulary not unknown on the railway under certain adverse conditions.

Another recollection of 1008 comes to me of a trip on the 7.5 p.m. express from Manchester to Southport when an Agecroft driver—Walter Trafford—gave a practical demonstration of what was known in those days as a seven and ninepenny stop. This consisted of a full application of the vacuum brake made with such judgment that a passenger train would stop at almost a precisely predetermined spot without the brake being released or played with at all after the initial full application. I must confess to feeling apprehensive as to the desirability of this rather unorthodox handling of the vacuum brake, but could not help admiring the skill and road knowledge which the driver must have possessed to enable this feat to be done. On another occasion, another driver, with engine No. 5 on the 5.25 p.m. Salford to Accrington treated me to a similar experience at the foot of the 1 in 40 bank at Accrington station, but this time I was more than "windy" as any reader conversant with Accrington station will appreciate. The description—seven and ninepenny stop—was a relic of the days when express drivers had threepence a day higher rate than the ordinary main line men who received seven and sixpence, and I suppose it was a tribute to the extra skill required by express men to make emergency stops when necessary, but the whole thing was not very convincing and certainly did not meet with the approval of drivers as a whole.

No. 1008 left the Agecroft fold before the late "twenties", for the L. & N.W. division, with quite a lot of other engines of the same class, but they again got scattered about and 1008—then 10621—got into the London area, but for how long I cannot say. The last time I saw her was as 50621 working from Manningham, a few years ago.

To be continued.....

L. Y. R. Sentinel Steam Wagons

Bernard Fielding, LL.B.

Following the publication of an article last year in a contemporary magazine on *"Sentinel Wagons in Yorkshire"* which made brief reference to the L & Y, I have done some research into the subject of the L & Y Sentinel Wagons. I contacted the author, (Mr. J. L. Thomas of Worcester) who is an expert on Sentinel wagons, and who has written a book on the subject. I also contacted our Hon. Sec. for any information and photographs. The results of my research are tabulated below.

Nobody can produce a complete L Y fleetlist. It is known that there was a petrol lorry No.1, so a separate list appears to have been started for the Sentinels. By the time the fourth sentinel arrived, the list would seem to have become merged with the petrol lorry list.

The *"L Y Album"* states that six Sentinels were kept in Bradford. This may very well be so, but a complete list of them has not been traced. Possibly they were switched around as Marshall (Vol.4) shows No.1 in Oldham in 1919.

No.140 was an oddity, having been converted to an articulated 6-wheeler, with massive iron girders and disc rear wheels with metal strakes.

It seems curious that only five LMS numbers have turned up. Possibly they scrapped the remainder.

These wagons often ran with a trailer, converted from a horse dray, on solid rubber tyres.

LY No.	*Maker's No.*	*Reg'n No.*	*Date*	*LMS No.*	*Location*
1	2225	AW4472	1918		Bradford & Oldham
2	2226	AW4473	1918		Bradford
3	2227	AW4474	1918		Bradford
122	3402	AW8015	1920		
124(?)	3469	AW8234	1920	41A	
125(?)	3539	AW8442	1920	44A	
134(?)	3672	AW8729	1920	49A	
135(?)	3767	AW8967	1920	53A	
136(?)	3801	AW9054	1921	54A	
137(?)	3814	AW9060	1921		
140	3876	AW9113	1921		Halifax & Brighouse
		(6-wheel articulated)			

* *According to the December 31st 1920 official returns published by the L & Y the company had received, in addition to the three 1918 vehicles, 15 more in 1920 at a cost of £1,390 each. It seems the missing seven cannot be explained.* *Ed.*

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