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The Society also produces a newsletter four or five times a year and a series of booklets on various branchlines of the railway, all of which are supplied to members at periodic intervals.

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COVER PHOTOGRAPH: This photograph taken at Preston in August 1929 shows 7'3" 4-4-0 No. 368 and 2-4-2 No. 10820 having just taken over a Barrow/Blackpool Central Special. The train has come in from the North and will be taken out again in the same direction before turning onto the Preston & Wyre line at Maudlands. During the peak holiday periods Preston Station became extremely congested and trains travelling from the North for the Fylde Coast were frequently run through the station onto the East Lancashire line, then run via Lostock Hall and the Second Farington Curve to reappear in the station travelling North about 15 minutes later. Thus access was gained onto the P&W Line without reversing. This particular working has not followed that route and it may be that the train from Barrow has been joined to another Special to make one train, hence the additional locomotive power to take the heavier train onto Blackpool.

Photo: F. DEAN

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Wilpshire Station looking towards Blackburn, in BR Days

WILPSHIRE

P. H. S. HAWORTH

Diesel-induced disillusion after our move from North Wales to south west Essex in the autumn of 1962 caused my interest in railways to wane swiftly. Dispondency had begun with the withdrawal of the first Stanier Class 5, No. 45401 in 1961, and deepened with the removal of twenty-one more in 1962. I recall the pleasure given by the sight of their previously intact ranks in my Ian Allan 'ABCs'. Then came the demise, except for a handful of 'Jubilees', of the Stanier express passenger classes, and steam's retreat to the North West, which is where the present account begins.

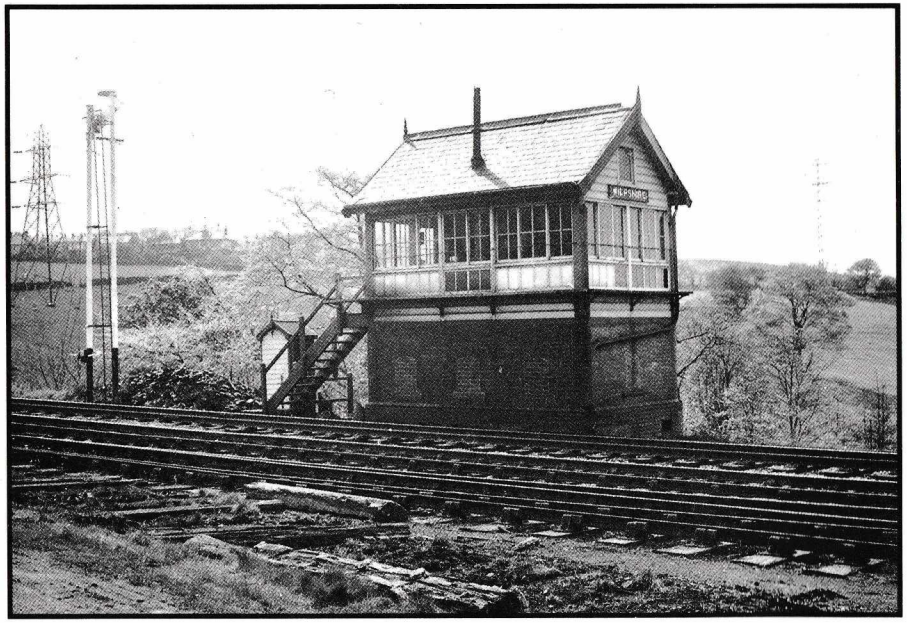
A visit in 1964 to the home of an uncle and aunt who live at Wilpshire, north of Blackburn, initiated a series of holidays there, ending in August 1967. A bridge takes the Blackburn-Hellifield line over a residential road in Wilpshire at a point just to the south of the signalbox, and here I was pleasantly surprised to see Ivatt Cl. 4 2-6-0 No. 43119 coasting tender-first down the bank towards Whalley, a light trail of steam issuing from the safety-valves. I was shortly able to claim No. 43119 as 'my engine', for she became closely associated with these Lancashire holidays and prompted the renewed observations which were a valediction to everyday steam on one of the last lines where it was dominant.

The London Midland Region had unwittingly provided a host for me in Bob Cookson, the Wilpshire signalman. He had slid open a window when my cousin and

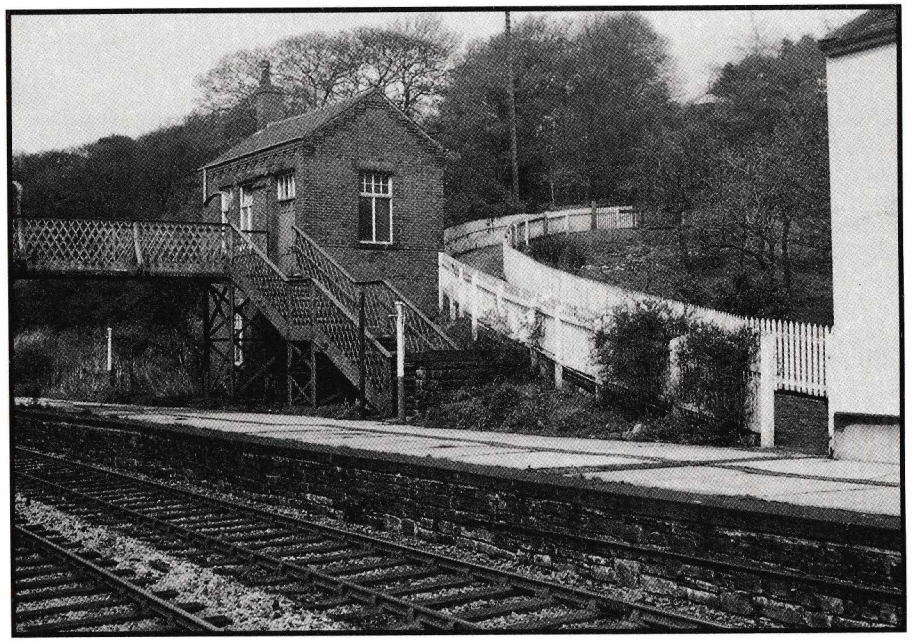
I had tentatively approached the box, and was looking quizzically down at us, when I surprised myself by asking him if he would let us view his box - a rash suggestion which he took up with alacrity.

Bob Cookson was short, wiry, genial and reflective. Wilpshire, a quiet box, was his last: he had, immediately before, been at Lower Darwen Engine Shed box. He was a newcomer to former Lancashire and Yorkshire lines. He proudly showed me his watch, which commemorated fifty years' service, which had begun as a signal boy on the London and North Western at Wigan in 1912. Most of his career had been spent on the LNW lines in the Wigan area, largely at Standish Junction where the Whelley loop rejoined the West Coast route three miles north-north west of Wigan. His most vivid early recollections were of Webb 'Special DX' and 'Coal Engine' 0-6-0s with their trains of mineral wagons displaying the varied liveries of such owners as Blainscough, Garswood Hall, Rose Bridge and Wigan Coal Corporation. He also recalled the 4- and 6-wheeled LNW brake vans, and the similar 'tin tabs' of the L and Y.

The box at Wilpshire was spotless and had a characteristic tang composed of gas, industrial soap and polish. When Bob came on duty at half-past five in the morning, he tended the stove assiduously, swept up spilled ash, washed the floor and polished the steel handles of every lever in the frame, taking an occluded view of his less conscientious colleagues who did not do these things. The signalling had been simplified at the expense of the advanced starters since the cessation of the passenger service and the removal of the sidings which had been on the Up side. The Down Home and Up Distant each had supplementary posts for the support of sight-boards, but only the Distant retained its board. This signal was extraordinarily hard to pull off, for it



The Signal Box at Wilpshire



Detail view showing the footbridge, brick Booking Hall and the curved ramp down to the platform

stood far down the bank on the 1 in 68 leading to the northerly mouth of the 325- yard long Wilpshire Tunnel. The arm rose through a disappointing angle, and its lever, at the left-hand end of the frame, was pulled with the help of the extra leverage provided by a bent metal strip for the left foot, and bolted to the end of the frame. This strip offered the necessary additional swing for the practised, but the lever was apt to slip from one's grip as it came to the mid-point, and slam home with a discomfiting clang. The Down starting signal had a tubular steel post; the Up Home was a right-hand bracket signal in the deep and bosky cutting between the station and the bridge taking the road down to Salesbury. The Up starter was mounted on the customary wood post of square section, and I recall the dull wink of its light changing from red to green for the passage of a southbound night freight headed by two 'Black Fives'.

The headshunt for the sidings had been retained, and was reached by trailing points from the Up line and from the Down line, too, via a simple crossover on the Up line. Exit from the loop at either end was protected by ground signals: the aim was to allow the banking engine to stand clear of the main line, but in practice it came to rest there, opposite the box, until 'Train out of section' was indicated from Daisyfield, the box in advance of Wilpshire. The banker pushed as far as the Ramsgreave Road bridge or a little way beyond, slowed gently, stopped, reversed and came down to stand by the box to the accompaniment of the metallic 'ponk-em-ponk-em-ponk-em dongle' of coasting valve-gear. It then went to Blackburn and did some work there before returning to Whalley to await the next Up freight which whistled for assistance on the bank.

The initial three miles of the bank from the station at Whalley and the viaduct

over the River Calder were at 1 in 91, steepening to 1 in 88 above Langho and 1 in 68 to a point in Wilpshire Tunnel, then easing to 1 in 85 through Wilpshire until the Ribble-Darwen watershed was gained. Here a short fall at 1 in 73 began the long descent into Blackburn via Daisyfield Junction where the Accrington line came in from the east. Mr. Cookson helpfully pointed out the best viewpoints for photography and arranged a highlight of my observation by stopping Cl. 5 44971 at the box for me to take an illicit ride with her Lostock Hall crew down the hill to Whalley. When we emerged from the tunnel the entire noble sweep and curve of Ribblesdale swung into view south of the confluences of the Hodder and the Calder with the Ribble, and bounded by Longridge Fell, the ramparts of the Forest of Bowland in Browsholme Moor and Waddington Fell, with the distinctive profile of Pendle Hill to the north east. Wilpshire Lane bridge, at the top of the long curve from Langho crossed the line at its steepest point where it entered the ample cutting leading to the tunnel. Here the stirring progress was recorded of Cl. 5 45253 with the Carlisle-Brindle Heath Class C vans, and 't' Long Meg', anhydrite in hoppers from Lazonby to Widnes with Cl. 9F 2-10-0 92009 and 43119 assisting at the rear.

The first train seen from the signalbox windows was a Clitheroe-Blackburn freight drawn by the most appropriate of all the locomotives still in service in the area in 1964, a Hughes-Fowler 'Crab', No. 42828. I soon realised how fortunate I had been: No. 42898 had been in recent use from Lower Darwen shed, but 42869 and 42878 had been laid aside, awaiting disposal. In 1965 the Cl. 4 2-6-0s were doing the work of the 'Crabs', and I did not see another. Now is the time to praise the excellent smaller 2-6-0s. The recognition they deserved came when No. 43106 of Lostock Hall was preserved. Lower Darwen, on closure in mid-February 1966, had five Cl. 4 2-6-0s, with their purely functional charm, namely 43019, 43041, 43046, 43118 and 43119. They moved to Lostock Hall and continued to work round Preston and Blackburn from there. For the record others noted as active in Lancashire were 43049/73 and 43120, and in Yorkshire, Nos. 43043/98, 43124/5, 43130 and 43141.

The normal composition of the Blackburn-Clitheroe freights was a head of up to twelve Presflo wagons for cement traffic from Horrocksford, near Clitheroe; two or three box vans, a guards van and a Stanier 50' parcels van. Apart from such friends as 43118 and 43119, which performed regularly, I also noted Cl. 5 44870 and Cl. 4 2-6-4T 42224 on this train - this last a highlight, too, for she was unusually clean.

The four adjacent station buildings at Wilpshire, each successively higher than its neighbour, formed an attractive group on the Up side. The tall red brick booking hall had had a door giving direct access to the substantial footbridge leading to the lightly-built Down platform with its relatively new light grey brick shelter. There was ample time for reflection while waiting on the footbridge for another Carlisle-Brindle Heath Class C (Cl. 5 No. 44901): firstly, on my family's pre-war use of this station and the line which it served, and secondly, on the retrenchment which had affected it in the late 'fifties, leading to the loss of the passenger service in September 1962. My father had made several journeys to Hellifield behind Aspinall and Hughes Cl. '5' and '6' 2-4-2Ts, and twice to Clitheroe in the novel LMS/Leyland 3-car diesel unit which ran from Spring Vale and gave passengers at the front their first unaccustomed view of the line ahead. He had watched the perfectly-proportioned Cl. '27'/3F 0-6-0s from Lower Darwen shunting in the sidings below the castle walls at Clitheroe. He had an uncle and a cousin who lived in Wilpshire and daily travelled to work from Wilpshire to Daisyfield, convenient for Stanley Street Mill, standing with a host of others on the Leeds and Liverpool Canal.

What I felt most keenly, standing on the bridge as the box vans and plate wagons rolled by and steam dissolved amongst the cutting's trees, was the loss of continuity represented by the passing of the indigenous L and Y classes of long standing. Lower Darwen had had four Cl. '23'/2F 0-6-0STs and seven Cl. '27s' in May 1955, and three of these had been present in a slightly larger complement there a decade earlier. However, I was aware of a degree of continuity offered by the Cl. 5 and 4 2-6-0s seen, which had been built at Horwich, and also Cl. 5 4-6-0s 44672, 44678 and 44681, built there in 1950.

I noted with satisfaction the durability shown by the large numbers of Classs 5s and 8Fs of the initial batches still in traffic, and best of all No. 45041, admirably clean, passing Preston on the Down relief line with a long parcels train.

A final representative morning in Wilpshire box during Bob Cookson's shift began quietly. The floor dried, the handles of the levers glinted, and incandescent gas lighted the pages of the train register book open on the desk, and was reflected in the glass of the signalbox clock which displayed the proud initials 'LYR' on its face. A

General view of the Station looking towards Whalley

column of steam over Brownhill proclaimed the approach of 43119 on her way down to Whalley. She ambled past the box, with a wave from the driver, and later reappeared at the end of the Carlisle-Salford freight, a stentorian Class 5 leading. The Down signals were later cleared for the Saltney-Carlisle, 8F No. 48307 with forty vans. Then the Up signals went off, and stayed so for a long time, awaiting the arrival of the Long Meg, her 9F now at walking pace and her exhaust scaring the birds from the telegraph wires. A pause as mid-day approached, and smoke curled from the Wilpshire chimneys visible from the box standing on its high one-sided embankment, and it was time to walk home.

Routine steam ceased. Bob Cookson passed on. The box and its signals came down. Only the heavily soot-stained stone of the Ramsgreave Road bridge indicates yet the passage of the trains which inspired.

LONDON COAL

'1208'

Superheated 0-6-0 No. 12132 (Formerly LYR No. 1113) passes along the LNWR Main Line South of Preston with a train comprised mainly of coal wagons (LGRP No. 16810)

It was in 1906 or 7 that one of the Lancashire Collieries got part of the contract for the London Gas Works coal and they started to send the stuff over to Goole for shipment.

In the beginning we were handling it in a mixture of wagons - private owners (generally 10 tonners) and also in Company wagons with end doors. Because of the length of block sections these were generally limited to a maximum of fifty wagons and this was just about an easy load for either an 'A' class or the 0-8-0s. Occasionally, however, if there was a shortage of wagons or an urgent demand for coal, the trains could be made up to sixty or seventy wagons and then would be classed as 'right-away' freight. This meant they had priority over all other freight trains and local passenger trains. Its one of these workings I want to tell you about.

I was in the top freight link at Sowerby shed and the five crews shared four engines - at the time I'm talking about we had two small boilered 0-8-0s and two 'A' class 0-6-0s. All kept in fine nick by the shed fitters - known to us as 'Up' and 'Down' - because of their arguments about the wedges on axle box brasses.

Our workings were mainly from either Greetland or Mytholmroyd Yards into Lancashire, but we also worked back from Rose Grove or Manchester as far as Normanton or Wakefield, depending on the state of traffic.

However - back to my story. There had been a shortage of wagons for several days and we'd been down to Greetland three times to pick up the empties brought in from the stations down the Bradford branch and had humped them 'over the top' at

Copy Pit. We were on days and 'Shed' warned us for an early start on the Wednesday morning - "I want you ready to leave at six in the morning - I'll give you a knock at 4.30" - and next morning sure enough, the window was rattled at about that time. Down to the shed where my fireman, Will, and I found 1248 - an 0-8-0 - was steamed ready for us.

'Shed' called us into the office and warned us - "You're getting a load for Goole - gas coal from Wigan. Light engine to Stansfield curve, then 'right-away' through to Goole. Ted Wilson's your guard - make sure he's with you when you leave." Out we went to the engine and whilst I went round the motion, my mate was checking over the tender - then into the shed he went and emerged with a long slice over his shoulder - "We shouldn't need it - but you never know."

Ted Wilson arrived and slung his bag onto the footplate - we'd worked together quite a number of times and knew each other's methods. "Its cawd this morning - we're not going up Baccards - are we?" "Well -" "Tha con turn in't triangle" - "Alright then." So we drew away from the shed and up behind it to the turntable. "Cum on, Ted - tha'll hev to shov if tha wants a warm ride!"

Back on the 'plate, we eased 1248 out on to the shed loop and my mate went across the lines to the box. Soon we were let out onto the 'down' and at the station throat crossed over to the 'Up'. We drew up to the starter, my mate joined us, and then the board went off. Quickly we were into the tunnel and away up through Luddenden, Mytholmroyd and Hebden Bridge. At Eastwood, I whistled for the main line as we rattled through.

Approaching Hallroyd Junction, I slowed down and stopped at the box where my mate and the guard dropped off whilst I drew forward. The signals went off and I went up past Tod. No. 1, crowed, and was crossed over and put up the Burnley Road - exchanging pleasantries with the Banker crews as I passed. "We'ant nobody wark wi'thi' then?" noted my solo effort of the moment. I was called out on to the branch and crossed over in the station, then into the loop where I drew down to the end, opposite the Hallroyd Junction Box. I busied myself with the oil can and a check round, until my fireman came down from the box saying "They've passed Portsmouth with 71 on."

Shortly they appeared - two 0-6-0s with their string and drew up close behind us. The drivers came forward and we exchanged words whilst the firemen were pinning down a few brakes before uncoupling. The window of the box opened and the signalman shouted "I'll take you out after this passenger."

A "Big-un" (7'-3" 4-4-0) idled past with 7 on and then the three engines were called out on to the main line - the two 0-6-0s were crossed over, and I was flagged back onto the wagons. Will came over to couple us on and I pushed back as he lifted the wagon brakes. Ted Wilson came down from the back and said "We've got a double van up theer - but I'm nobbut usin' one - so do'ant go too fast!"

The signal box window opened - "If tha'll get a mo'ove on, tha'll get to Mytholmroyd first pitch." So we 'pipped' and moved off, my mate hung out, then shouted "Teds on" - so I opened her up and we banged into the two short tunnels. Its downhill nearly all the way to Wakefield with short block sections so we'd to keep our eyes open. Eastwood, Hebden Bridge - one of our lads shunting with a tank, Mytholmroyd coming up - the distant is on - we're going into the loop - a whistle for Ted and the train tightens up, steam brake on and we swing across and ease down to the starter. Will swings down and sets off for the box.

The Main Line boards are now off both ways. I know the 'Up' train is the 'Director' (Leeds - Bradford and Liverpool Express) but the Down train I don't know.

The Atlantic appears round the bend from Luddenden with the big elliptical roof stock in tow, nodding away as she climbs towards Summit Tunnel. Back comes my mate "It's a 'Butter' they want to put in front of us - we should get through to Mirfield then." As he explained - the 'Butter' appeared - a "Little-un" (6ft 4-4-0) with sixteen of the blue vans and one of the new six wheeled 'tabs' bouncing along behind.

As she vanished round the bend, the mains went back on and our starter dropped - out we went once more, with Ted's green flag out from the van. Through Luddenden and onto the Troughs - our speed not really high enough, but we got a few gallons, through the tunnel and a whistle for 'shed' as we pass homeground!

Now we were really rolling and the boards were off as far as we could see - short sections now - right through to Wakefield, meant we would have to be 'double-blocked' all the way. 1428 was drifting along with a short cut-off and half regulator, valves on the lift nearly all the time - Milner Royd, Greetland, Elland, Brighouse all came and went - this was the way it was meant to be! I whistled for the main at Cooper Bridge, but our luck had run out. As we approached Mirfield the boards told us we were on to the slow lines. With a long blast I warned Ted and felt the train tighten as we both braked. We swung across and slowly ground along past one set of signals, up to another which cleared - but the next stayed on and finally we came to a stop just before the Junction at Heaton Lodge.

There we sat whilst a 'Wessy' local for Leeds crossed over and preceded us down the slow lines "So much for't 'Right Away;" grumbled Will, "These Wessy signal men niver read t'rules!" As he entered Mirfield No. 1's section we got the board from Heaton Lodge, but the flag was out at the box, so as I gently drew forward, my mate was hanging out to see what the message was. One of the signalmen came on to the balcony and told us to "Tak' it steady an we'll keep ye rollin'".

Cautiously we felt our way down past Sutcliffe's sidings and past Mirfield No. 1 with the boards showing off. The station and No. 2 box were just ahead and here we were put through the down loop whilst the Wessy stood at the platform. Feeling our way over the yard entrance and the Cleckheaton branch, we were routed once more along the loop line. Approaching Mirfield No. 5, I whistled for brakes and then 'crowed' for the boards.

We'd almost come to a stand when we got the clear and crossed to the slow line. Now we should be alright - except - that 'Wessy' passenger was coming up on the fast and would have to cross our path at Thornhill. Ted 'flashed' his brakes and I eased the steam to a crack so that we were just drifting along. The passenger belted past with a long scream and we could see his boards were off for the Junction. Slowly we approached the gantry, whistling for the road and at the last moment our route cleared.

Opening up, we plodded through Thornhill and over the Dewsbury Junctions with the wagon shops in the triangle (but thats another story), then past Healey Mills Yard with not a suggestion of a board against us. Ahead was Wakefield with its maze and as we came to West Junction the flag was out again much to Will's disgust. Slowly we approached the box to be greeted with "Cans't mak it ony faster?" to which I replied "Will we get thro?" - "Double block to Sharlston!" My reply was given by the opening of the regulator and 1248 put the collar on and we thundered through Kirkgate station, across East Junction and down past the sheds, then curving away to the left we crossed the Midland Line, felt the Junctions at Crofton with the trucks bouncing and giving us quite a ride - perhaps the Yorkshire Miners knew we were carrying Lancashire coal!

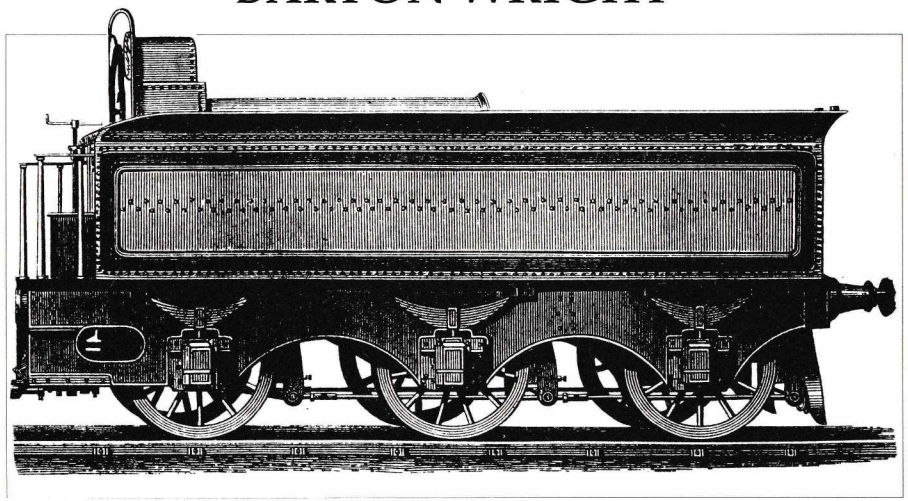
Now we would soon be finished. The line stretched ahead - no loops big enough to hold our train - we'd got to keep rolling! Sharlston came and went, Hessle, the G.N.

main line crossed above us, then Snaith and still everything was 'off'. As we approached Rawcliffe Bridge Junction, we were checked, and picked up a fellow driver for the shed, who told us we were to drop our load at the sidings at Mineral Junction. As we approached Engine Shed Junction our friend "Legged-off" and we ground our way under the bridge and into the sidings, where the 'yardies' were waiting to break up our train. Ted went to talk to Control whilst we made our way back to the shed.

Another Day's work was over.

Coal through the Sandhills; Aspinall 'A' Class No. 492 approaches Gilletts Crossing Halt, St. Annes with a Down coal train in August 1924. Note how the railway boundary fence has been virtually buried in the sand. Sand encroachment was always a problem on parts of the Fylde Coast Line (see page 20 of Platform 9.) (photo Frank Dean)

THE SIX WHEELED TENDERS OF BARTON WRIGHT



This is the first of three articles on this subject. Peter Priestley has produced detailed drawings of the various six wheeled tenders attached to Barton Wrights 0-6-0 and 4-4-0 classes of locomotive. These depict the tenders as built and after later LYR modifications. The notes are compiled by J.B. Hodgson.

When Barton Wright was appointed in 1875 to the new position of Locomotive Superintendant of the LYR he had no option but to continue the policy he had adopted on the Madras Railway and purchase complete locomotives from British Locomotive Manufacturers, built to their own designs.

Kitson and Co. were chosen to fulfil Barton Wright's first order mainly because they were at that time building a series of 4' 6" 0-6-0 tender engines for the Taff Vale Railway. These fulfilled the LYRs most pressing need for a simple well made goods locomotive.

Barton Wright accepted Kitson's design, except for some modifications to the cab/splasher area. The tenders were standard Kitson products with minor modifications such as LYR pattern lamp sockets.

The first locomotive and tender was delivered to the LYR in July 1876. Over the next eleven and a half years a total of 280 units were produced by Kitson, Sharp Stewart, Vulcan Foundry, Beyer Peacock and the LYR, the latter being the last locomotives to be built at Miles Platting.

These new 0-6-0s were sent to all parts of the LYR system reaching the limits of regular working on most of the branches, eg. Hellifield, Colne, whilst in Yorkshire there was much tender first working from Goole shed.

Given the number of builders and the long period of construction, it is not surprising that the tenders displayed a number of variations. The most conspicuous of

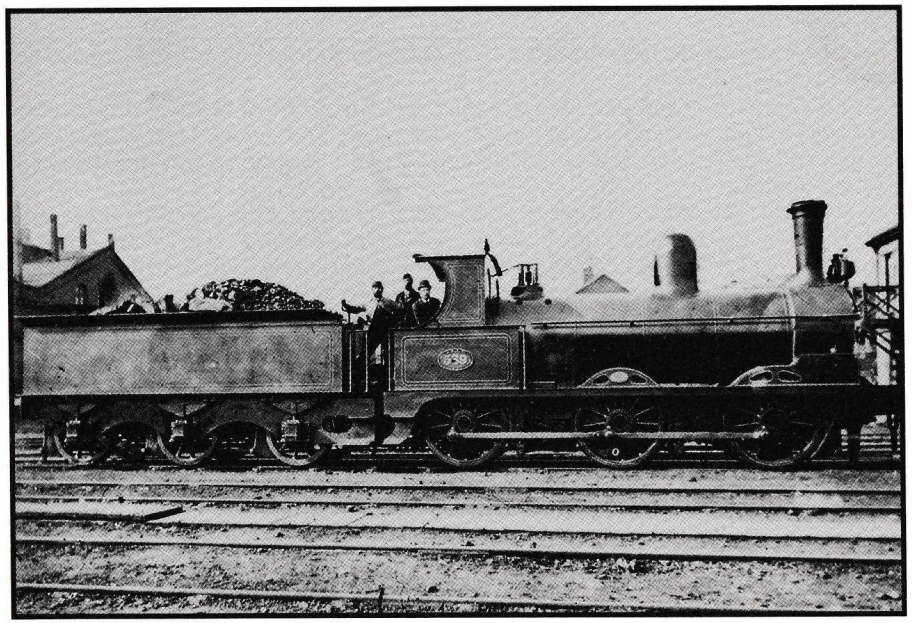
which was the provision in some batches of a tender weatherboard or as it was described in 'The Engineer' for 7 January 1881 "Sharp's patent arrangement of cab, tool box, and filling hole combined." Owing to the unfortunate fire at Derby Works when many LYR records were destroyed, it has not proved possible to confirm which batches were fitted with this arrangement whilst the records of both Vulcan Foundry and Sharp Stewart do not shed any light on the subject. However photographic evidence shows that both the original Kitson batch and the batch built by Sharp Stewart in 1877 did not have the feature.

'The Engineer' for 7 January 1881, in describing the batch constructed at Vulcan Foundry in 1880/81 makes specific mention of Sharp's patent arrangement and suggests that it was an innovation at that time. It seems likely therefore that the tenders in this Vulcan Foundry batch were the first to have this fitting.

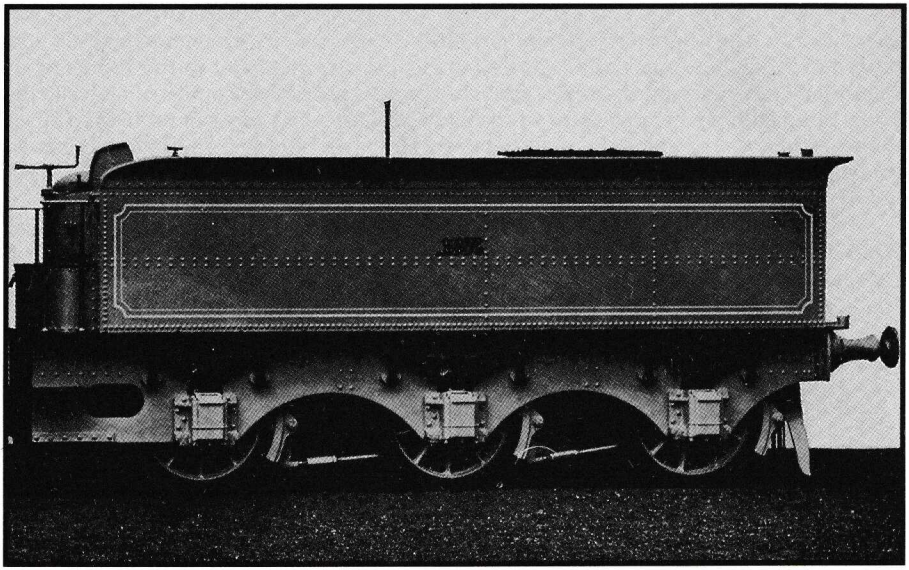
Local knowledge recalls that where these tender cabs were fitted, a rolled tarpaulin was fastened to the outside and in poor weather was tied across to the cab roof. These tenders in common with the locomotives were fitted with Turton's patent wrought iron buffers, which seem to have been favoured by Barton Wright.

The first locomotives and tenders to be fitted with the vacuum brake were in a batch built by Kitsons between October 1878 and October 1880, units constructed from December 1879 being so fitted.

Figure one accompanying this article depicts a tender from the batch built by Vulcan Foundry in 1880/81 and fitted with the Sharp's Patent Equipment. The springs were carried in large shoes whilst the axle boxes were to the standard Kitson design.



The original Kitson Tenders were constructed with countersunk rivets and were thus smooth sided as this example built in July 1877 shows.



This Tender was paired with locomotive No.957 which was one of the last batch turned out by Beyer Peacock in 1887. The Sharp's Patent Equipment was not fitted to these Tenders. (Photo courtesy of Vintage Carriages Trust)

These were perpetuated on all the tenders made under Barton Wright's orders, even the Miles Platting built ones.

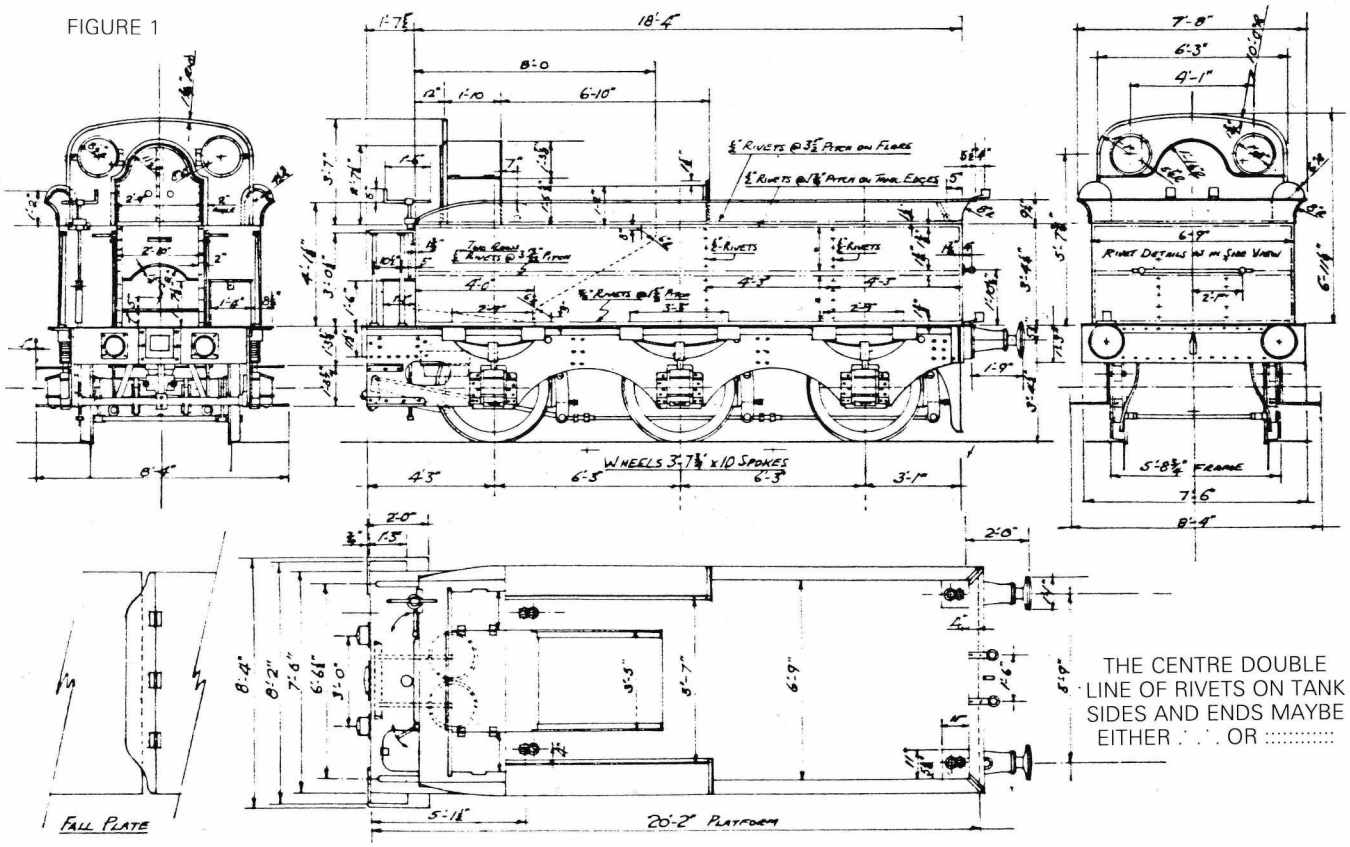
Between 1890 and 1900 all but the last 50 of Barton Wright's 4' 6" 0-6-0s locomotives were rebuilt into saddletanks thus releasing some 230 tenders. Most of these were subsequently paired with some of the new Aspinall 0-6-0s which were purposely built without tenders.

Towards the end of the century and afterwards, under the influence of Aspinall and Hughes, the tenders underwent a number of changes. The Sharp's Patent Equipment was removed and front and rear coal plates fitted. Standard springs with 2' 7" centres replaced the originals and standard LYR axleboxes were fitted in the original guides. The tenders gradually received heavier pattern buffers to Hughes design, and the gap between the front handrail and the front of the tank was plated, the new plate carrying a grabrail. All of the tenders paired with Aspinall 0-6-0s received water pick up gear, if not already fitted.

Most footplatemen had come into the possession of their own toolboxes and so the tenders had to be modified to retain them, particularly where locos were double manned. Some tenders carried toolboxes fore and aft, others crosswise. These were generally mounted on angle iron runners fastened to the tank top plate. The tenders receiving water pick up gear were also fitted with a centrally mounted water filler situated towards the rear of the tank. As new tanks were fitted internal baffles were installed to prevent swilling of the contents. New tanks were not fitted with lifting shackles on the top plate, whilst all tenders as they passed through Horwich were given their own number plate, but that is another story!

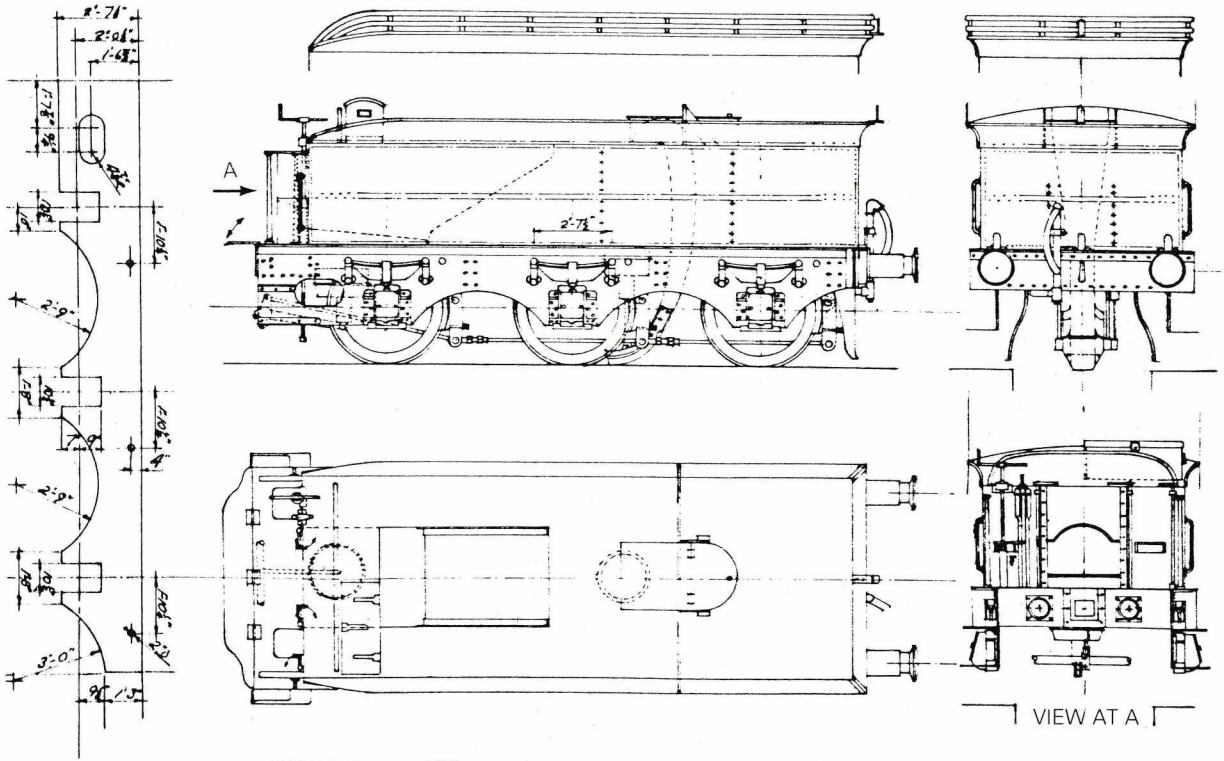
For Aspinall 0-6-0s used on long hauls tenders were equipped with coal rails

FIGURE 1



SCALE 4mm = 1FT.

FIGURE 2



SCALE 4mm = 1FT.

UNDERFRAME DETAIL

This unusual view taken at Horwich shows one of the tenders in LMS days and displays the footplate and the various controls.

(greedy boards) possibly to a standard design which may have been made, if not fitted at Horwich.

All these alterations are incorporated in Figure Two accompanying this article which depicts the tenders in late LYR condition.

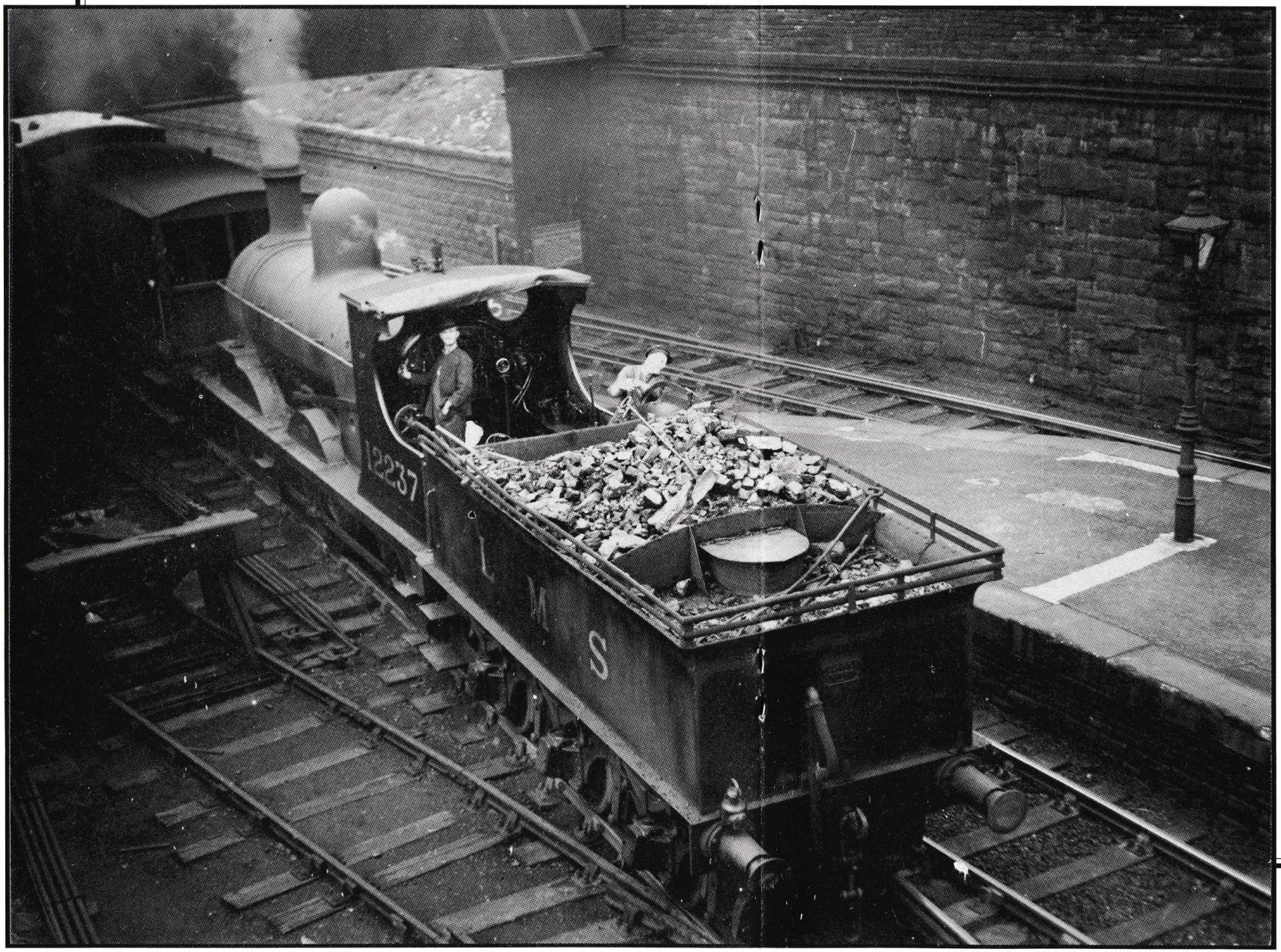
It must be borne in mind that tenders had a major overhaul in six working weeks, whilst a locomotive took from eight to eleven working weeks, so the chances of getting your tender back after a major overhaul were very small. As a result, personal or shed items such as coal rails tended to be removed before Horwich visits and would be replaced on the tender attached to the returned engine. On the tender front plate were the controls (see ViewA in Figure Two). Reading from left to right these were:

A) Handbrake column (to apply turn clockwise).

B) Water scoop control (vacuum operated). This was generally mounted on the tank top plate in front of the coal plate and approximately in line with the handbrake column.

C) Water supply valves (one on either side of the coal hole). These supplied water from the tender to the locomotive and were turned across the locomotive for off.

D) Water level pipe (on the right hand side). This had a series of holes in the vertical pipe and the jets of water issuing therefrom indicated the water level. This was always turned off!



Having discussed Barton Wright Tenders elsewhere in this issue it is perhaps only fair to give a little space to one of Aspinall's creations. This photograph taken at Halifax in the 1930's shows 'A' Class No. 12237 (formerly LYR No. 1242), apparently engaged in shunting duties. The locomotive is one of lot 18.

It was turned out in 16th July 1894 and was paired from new with an Aspinall Tender. The tender itself is in typical workaday condition with coal spilling into the rear space and fireirons stowed in a haphazard manner.

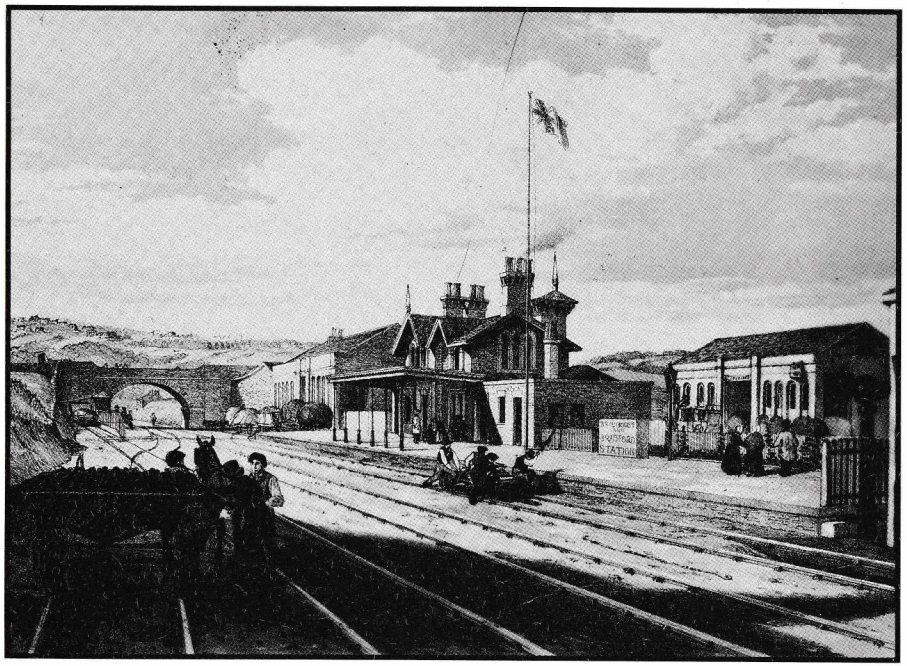
This particular tender is fitted with coal rails but there appears to be no provision for the fitting of toolboxes. There is a wealth of lineside detail in this view: notice how the point rods pass under the buffer stop and visible above the locomotive cab is an LYR warning notice and gradient post. The gas pipe for the platform lamp can be seen running under the coping stones at the edge of the platform.

All in all a view with plenty of LYR atmosphere despite being photographed in the 1930's.

(Photograph J. Coltas)

EARLY DAYS IN THE CALDER VALLEY - BRANWELL BRONTE

BRIAN BARKER



One of A. F. Tait's engravings of the Manchester and Leeds Railway. This view shows the station at Brighouse

October 1990 saw the 150th anniversary of the opening of the Yorkshire section of the Manchester & Leeds Railway. A famous employee of the company at the time of the opening was Branwell Bronte, brother to the three sisters Anne, Emily and Charlotte.

Patrick Branwell Bronte was born in Thornton near Bradford on 26th June 1817. He was the fourth child of the Rev. Patrick Bronte and his wife Maria. Throughout his formative years it soon became apparent that Branwell had inherited a similar artistic bent as his sisters, although albeit to a lesser degree. His obsessive and mostly unsuccessful search for fame through his writings, poems and paintings brought on bouts of depression, often resulting in him turning to drink and later drugs for solace.

By July 1839 The Manchester & Leeds Railway had been constructed as far as Littleborough on the Lancashire side, and by mid 1840 down the Calder valley to Hebden Bridge on the Yorkshire side of the Pennines. The section in between which contained Summit Tunnel was not completed until later that year, although not

opening throughout until 1st March 1841, due to difficulties encountered in constructing the tunnel. Until that time any passengers and goods wishing to travel through were conveyed by stage coach, supplied by the M & L, between the two stations. A journey which due to the cold bleak windy Pennine moors in winter, must have been undertaken with some trepidation.

George Stephenson the lines resident engineer, made the following comment on completion of Summit Tunnel at a celebratory dinner in Leeds. "I will stake my character, my head, if that tunnel ever gives way so as to bring danger to any of the public passing through . . . I don't think there is such another piece of work in existence in the world. It is the greatest work that has yet been done of its kind."

On the 3rd October 1840, two days before the official opening, the Halifax Guardian carried the following notice.

The public are respectfully informed, that on and after MONDAY, the 5th October, 1840, this Line will be FURTHER OPENED, for the Conveyance of Passengers and General Merchandise, between LEEDS and HEBDEN BRIDGE; and the Trains will start from each of those places, and depart from the intermediate stations, as follows:-

Start from Hebden Bridge	*Depart from Sowerby Bridge*	*Depart from Normanton*	*Arrive at Leeds*
Morning	M. H.	M. H.	M. H.
8 o'clock	15 past 8	21 past 9	50 past 9
30 past 11	45 past 11	50 past 12	20 past 1
Afternoon			
15 past 3	30 past 3	25 past 4	6 past 5
Start from Leeds	*Depart from Normanton*	*Depart from Sowerby Bridge*	*Arrive at Hebden Bridge*
Morning	M. H.	M. H.	M. H.
45 past 7	15 past 8	21 past 9	36 past 9
10 o'clock	30 past 10	36 past 11	50 past 11
Afternoon			
3 o'clock	30 past 3	36 past 4	50 past 4

Passengers may be booked through to Manchester by the above Leeds Trains, and will be conveyed from Hebden Bridge to Littleborough by Coaches provided by the Company.

September 29th 1840. *BY ORDER OF THE DIRECTORS*

As can be seen there were three trains per day in each direction at the start of operation, although Sunday trains did not commence running until some time later. There is a reference to a Locomotive depot in Hebden Bridge being closed down in 1862. This was probably used to house the locomotive needed to haul the first train from there each day at 8 o'clock.

The very first train out of Hebden Bridge was quite an event, being accompanied by a lot of riotous behaviour. The Wakefield Journal of the following week described the occasion thus; "At the opening last week, at Sowerby Bridge especially, the crowd of people was so great and the rush so alarming that after a brief stay of four minutes it was thought absolutely necessary to cause the train to move on. There being no room in the carriages, the adventurous travellers mounted the tops; but those who could not sit stood upright until the whole of the carriages were covered with a crowd of standers and they thus travelled from Hebden Btridge, stooping down as they passed under the tunnel and the numerous bridges on the line, and then rising and cheering like a crew of sailors to the astonished spectators. We have seldom witnessed a more alarming scene. The train was proceeding at 20mph and if a single individual had failed to stoop at the moment of passing under a bridge his brains must have been dashed out and the fall of one person must have thrown many others off the carriages to their almost inevitable destruction."

The week after opening, the first train to depart from Hebden Bridge was retimed so as to leave at 7.45 a.m. An interesting sideline which has just come to light concerns the printing of the M & L's timetables in the Halifax Guardian. The locomotive and coaches used in the silhouette were comprised of individual printing blocks, resulting in the Guardian's compositers having a bit of fun and marshalling a different train each week.

At least two enterprising citizens of Halifax, Sarah Daxon and Charles Whiteley are known to have operated coaches to meet the trains at Sowerby Bridge.

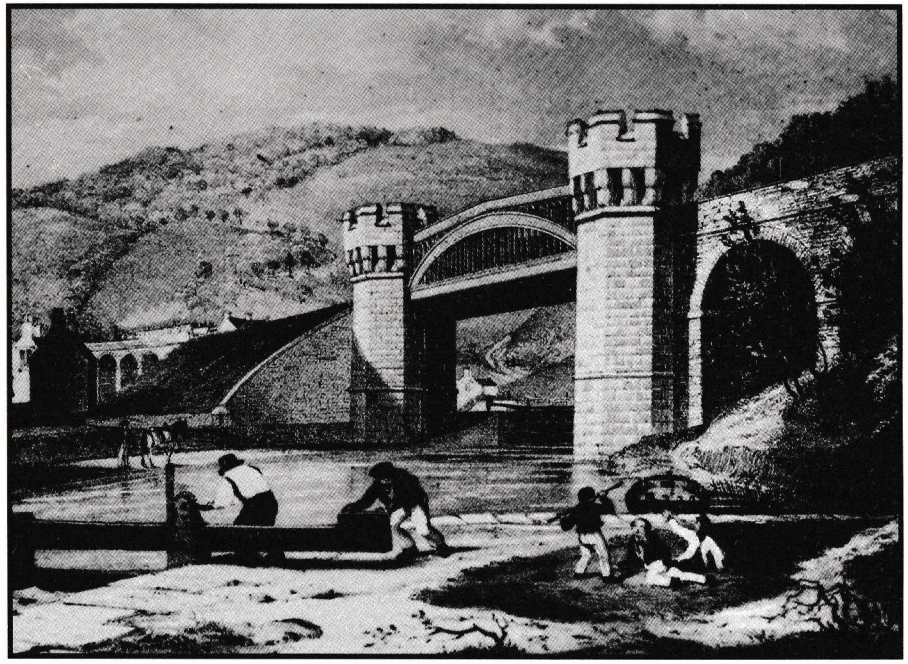
Branwell had been prompted to apply for the job of Assistant Clerk in Charge at Sowerby Bridge, by a friend, a Mr. Woolven, who was already in the employ of the Manchester & Leeds, although in what capacity is not known. Applications for the post were addressed to Capt. Laws R.N. who at the time was the Superintendant of the Line. After vetting the applicants, Capt. Laws placed Branwell's name before the Board whose decision it was to appoint the successful applicant.

At a Board meeting at Hunts Bank, Manchester on 31st August 1840, Branwell was engaged at a salary starting at £75 per year and increasing by £10 each year, up to a maximum of £105, to be paid quarterly. Also engaged on the same day was George Duncan who was to be Clerk in Charge at Sowerby Bridge with a starting salary of £130 per year. Branwell took up lodgings with the family of Ely Bates, in Sowerby Street, very near to the station. He took up his duties on the 29th September 1840.

Not much of a station existed at Sowerby Bridge on the official opening of the line on the 5th October. Tenders had been issued for the construction of the station buildings and station master's house, but the work was far from completion. Wooden structures had been built to be used temporarily as offices. These were situated on what was later to be the site of the Goods Yard.

For the first few months of operation, before the connecting link was in use, trains travelling between Hebden Bridge and Leeds by the circuitous route via Normanton were hauled by locomotives belonging to the North Midland Railway. The Manchester and Leeds engines not yet having been delivered to the Yorkshire section. The Leeds Mercury on the 4th December 1840 had the following comment to make on the lines opening "The high chain of hills which separates the counties of York and Lancaster is intersected by one valley, the valley of the Calder - so narrow, winding, full of natural irregularities... so preoccupied by the turnpike road, the river and canal... as to make it exceedingly difficult to carry a railway through it."

By early March 1841 there were now five morning and four afternoon trains



Another of Tait's engravings, this one depicting Gauxholme Viaduct near Todmorden

operating in each direction, with three trains each way on Sundays. Such a sparse timetable left Branwell with plenty of time on his hands and he renewed his friendship with Joseph Leyland of Halifax, whose father Roberts Leyland was a bookseller and the editor of the Halifax Guardian. It was whilst in the employ of the Manchester & Leeds that Branwell had several of his poems published in the Guardian, thus becoming the first of the Bronte children to appear in print. Although this no doubt was achieved by his connections with the Leyland family.

As time passed, Branwell began to spend more and more time with his Bohemian circle of friends, often meeting in the taverns and public houses throughout the district. His work on the railway must have begun to suffer, but as yet no complaints were brought against him. Quite the contrary in fact, for on the 1st April 1841 Branwell was promoted to Clerk in Charge at Luddenden Foot station, with a starting salary of £130 per year.

Just as had occurred at Sowerby Bridge, Luddenden Foot station buildings had not yet been finished, and once more Branwell was obliged to take up lodgings in the village, which consisted of the typical steep terraces of stone houses leading up to the pennine moors.

He had one Porter under his charge, a man named Walton, who later had to take on more and more of Branwell's duties as he came to take less interest in his job, and would often leave work early to spend time drinking with his friends, usually in the Lord Nelson Inn. After a short time at Luddenden Foot, Branwell wrote the following poem about his feelings for his work;

I . . . at amid
The bustle of a Town-like room
'Neath skies, with smoke stained vapours hid -
By windows, made to show their gloom.
The desk that held my ledger book
Beneath the thundering rattle shook
Of engines passing by;
The bustle of the approaching train
Was all I hoped to rouse the brain
Of stealthy apathy . . .

That Branwell did at times show an interest in his job is bourne out by a letter which was read out from him at a Directors meeting at Hunts Bank, on the 4th October 1841, regarding certain alterations which he thought should be done at Luddenden Foot station. These were ordered to be carried out. Part of Branwell's duties consisted of the issuing of tickets, but with the onset of winter and the dark nights beginning to draw in his fear of solitude began to take command and Branwell would depart even earlier to his refuge within the Lord Nelson, leaving the issuing of tickets for the last trains of the day to be dealt with by the hapless Walton. The fares for the journey from Leeds to Manchester were now 15/- for 1st Class travel, whilst it cost 12/- to travel inside a coach and 8/- in one of the open trucks.

Unfortunately for Branwell, when the accounts came to be audited at the end of his first year at Luddenden, they were found to be deficient by the sum of £11-1s-7d. He was ordered to appear before the Directors at Hunts Bank along with his Porter, Walton, where he could put forward no satisfactory explanation for the missing cash. He was dismissed from the Company's service on 4th April 1842. It transpired that Walton who was also dismissed, had been helping himself to the till on the many occasions that Branwell had left him in charge whilst he went to the Inn.

Branwell's salary, after the missing money had been deducted, his lodgings and drinking bills paid, left him very much in debt and he returned with his tail between his legs to the family home in Haworth, from where he later in a fit of remorse wrote about his time at Luddenden; .... I would rather give my hand than undergo again the grovelling carelessness, the malignant yet cold debauchery, the determination to find how far mind could carry body without being chucked into hell, which too often marked my conduct there, lost as I was to all I really liked . . .

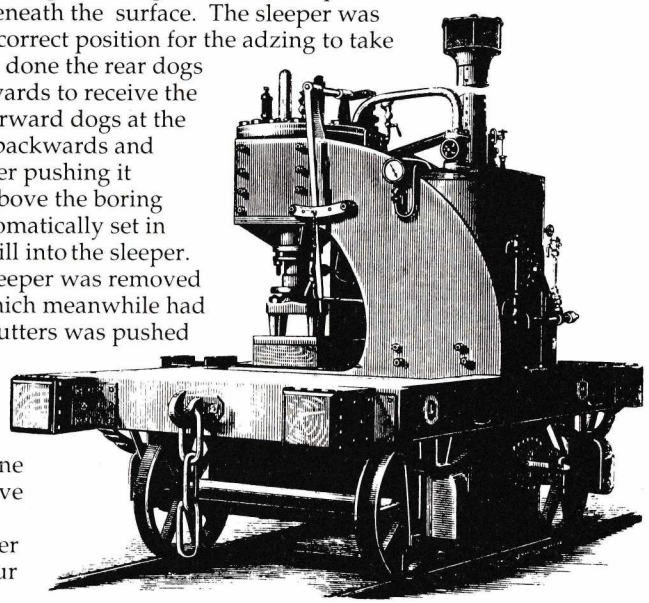
On the question of low pay for railway employees at the time, Herapaths Railway Magazine in May 1841 made the following observation; No Railway situation can indeed be compared to a mercantile one, either in its present pay or future prospects . . . The salaries of the clerks are too low. Can it be expected that young men of good families and steady habits will eke out their lives on the miserable pittances allowed them of £50, £60, or £80 a year which are worse than the pay of day labourers. If the Directors want good servants, they must make the places worth having . . . Let us suppose . . . for we have been informed of such cases . . . that one of these underpaid clerks shows a defalcation in his accounts, is it not naturally to be expected that the equally underpaid clerk, who is employed to check him, should be ready to protect his poor brother rather than the hard-dealing company? Can we be astonished if such things take place? They do take place . . .

MOBILE SLEEPER PREPARING MACHINERY

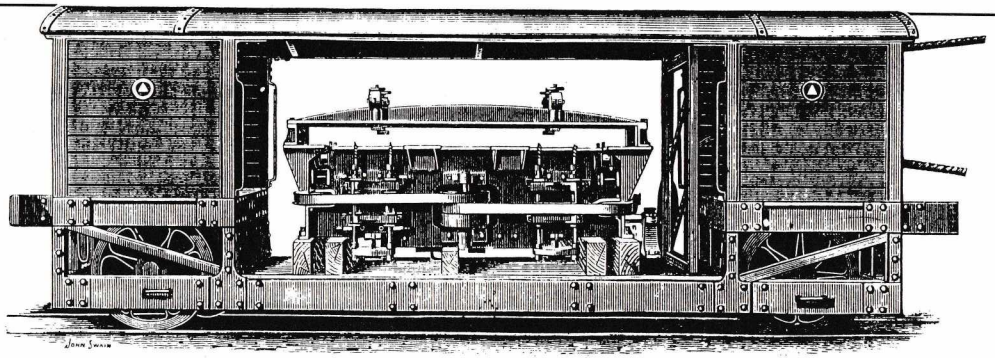
TOM WRAY

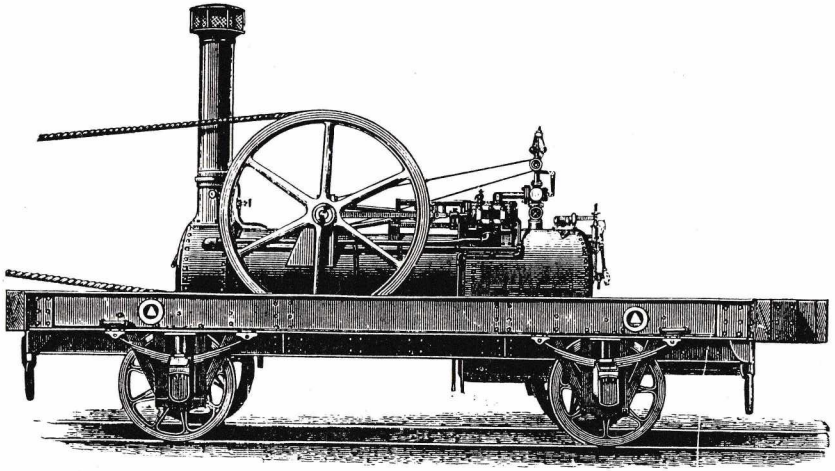
John Ramsbottom retired from the LNWR in 1871 just under thirty years from joining one of its constituent companies, the Manchester and Birmingham Railway. Twelve years later having recovered somewhat from the ill health which had prompted his retirement he undertook a short term of consultancy with the LYR in 1883. The initial period of twelve months was extended to twenty four after which he became a director of the company until shortly before his death in May 1897. His duties as consultant were mainly to liaise between the board of directors and the locomotive engineer, William Barton Wright. There appears to have been considerable rapport between the two men for a large proportion of the recommendations made by Barton Wright were endorsed by Ramsbottom and accepted by the Board.

Ramsbottom also worked on projects which did not impinge upon Barton Wrights domain and one of these is the subject of this article. In 1886 he produced designs for mobile sleeper preparing machinery, one for preparing the sleeper and the other for attaching the chairs to the prepared sleeper. Both these machines were manufactured by Thomas Robinson and Sons, a Rochdale engineering company who had supplied machinery to the LYR for the Newton Heath Carriage Works. The method of preparing the sleeper was to place each one on to the rear of the work plate and push it forward to engage with a pair of dogs which were operated by a cam mechanism beneath the surface. The sleeper was pushed forward to the correct position for the adzing to take place, as this was being done the rear dogs were withdrawn backwards to receive the second sleeper. The forward dogs at the same time had moved backwards and engaged the first sleeper pushing it forward to position it above the boring augers which were automatically set in motion and raised to drill into the sleeper. When completed the sleeper was removed and the next sleeper which meanwhile had been over the adzing cutters was pushed forward to be drilled. The adzing and boring machine was driven by a two inch cotton rope from a 10 hp engine mounted on a locomotive boiler on a separate vehicle. The spike driver was built on its own four wheeled wagon. Not unlike a steam rivetting

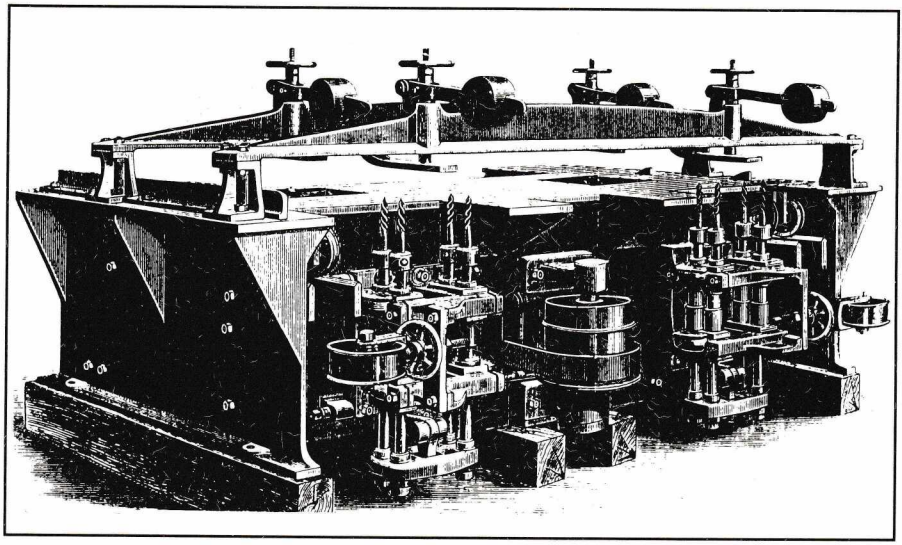


The Steam Spike and Treenail Driver





These line drawings depict the Portable Sleeper Adzing and Boring Machine with its associated engine. The latter appears to be a standard stationary steam engine fitted onto a steel underframe. The axleguards and axleboxes appear to be of standard Attocks design as fitted to the wagon stock of the period. Power was transmitted from the engine to the machine via a flywheel and a series of ropes and belts. Both items of rolling stock are branded with the LYR's illiterate symbol consisting of an equilateral triangle within a circle.



A closer view of the Sleeper Adzing and Boring Machine

machine in appearance a cylinder was attached to a frame in front of a vertical boiler. A sleeper with the chairs having spikes and treenails in their respective holes was placed on a turntable attached to the side of the vehicle. The sleeper was then turned to the correct position beneath the cylinder from whence the piston descended forcing the spikes into the sleeper by means of four punches under a pressure of about ten tons. The steam in the cylinder was exhausted and the piston automatically rose to await the next operation. The turntable was then revolved and the other chair was attached to the sleeper. By using these two machines it was possible to prepare three sleepers a minute.

Though a second set of machinery was acquired in 1897 subject to some modifications by Aspinall it may seem strange that a mobile unit was necessary in the first place. Surely it would have been more economical and convenient to prepare the sleepers at the various permanent way depots and transport them to the locations when required. Of course this is what actually happened, in a series of articles in the Railway Engineer published over several years around 1910 there were several illustrations of adzing and boring machines in the permanent way depots of various railway companies, some of these machines had been made by Thomas Robinson of Rochdale over twenty years since they supplied similar machines to the LYR.

THE DOMESTIC COAL MERCHANT

D. CHAPLIN

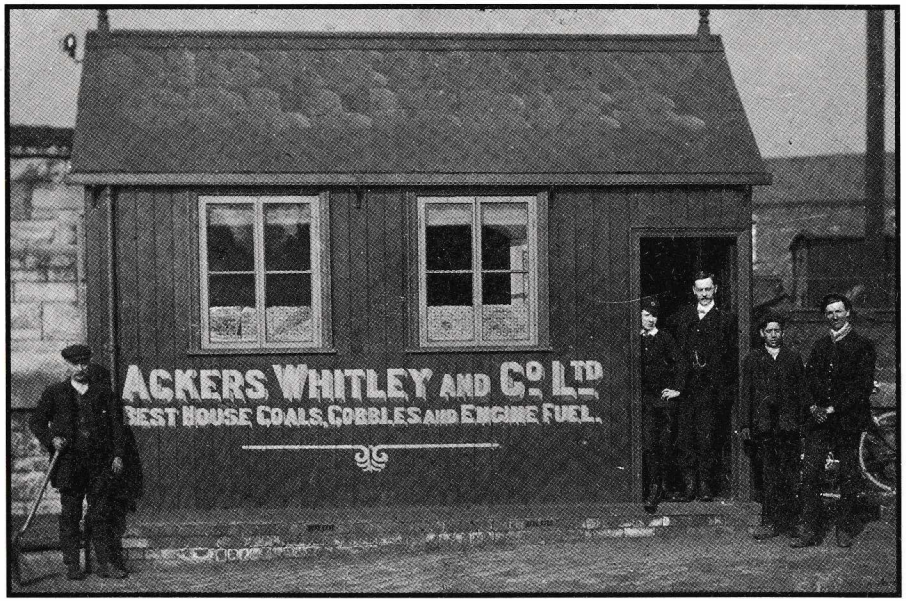
Individually the domestic coal merchant was not a large customer, of the railway, but collectively they were probably one of the largest group of customers of the L & Y.

In the early years of this century, domestic coal was certainly the most important heating source in home use. Gas was in use for lighting the urban areas and some homes had gas cookers. Electricity was in very limited use in the home being mainly used for industrial purposes and powering the tramway systems, its use was largely confined to the larger towns.

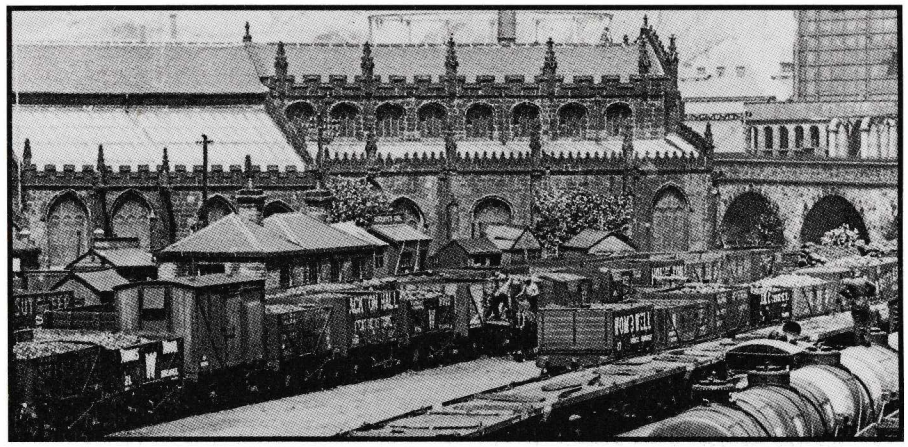
The average household would use about one or two hundredweights of coal a week as even in summer fires had to be kept alight to provide heat for cooking.

It was this market that was served by the local coal merchant in a town. Initially most coal merchants had their depots at the canal wharfs, but most soon moved to railway goods yards when the railways opened. They rented space for an office, storage coal bunkers, and in some cases erected stabling for the horses and carts which were used to distribute the coal around the town. Siding space was rented so that the merchant could stand his own wagons when they were not required.

Many of the merchants had their own wagons which they sent to one of the local collieries with whom they had a contract for supplies. Other merchants had their coal delivered in the colliery companies own wagons, or in the wagons of a coal agent who



Landsale Coal Office belonging to Ackers Whitley and Co. Ltd. As suggested by the faded inscription on the roof. This company worked Bickershaw Colliery which was situated to the South East of Wigan.



View of Halifax Goods Yard taken during the 1930's. In the centre distance two gentlemen appear to be filling bags with coal from a waggon whilst a horse and cart stands in attendance. The wagon door appears to be illegally propped!

would act as a factor for a group of collieries. Mostly merchants dealt with one of the nearest collieries so as to keep the cost of transport to a minimum, it was only when a special grade of coal was required for a particular use would a wagon be sent to a more distant pit. Many of the wagons used by the coal merchants were supplied under hire purchase agreements, (one of the first examples of this type of financing), or they were hired from wagon builders who painted the wagon into the hirers livery for the period of the hire. The wagon numbers of domestic coal merchants often bore no resemblance to the size of the business as two or three extra digits could be added to the real number to give a false impression of the size of the company. In Summer months some merchants would hire their wagons to local builders to fetch bricks from the brick-works, others would supply lime to the local farmers during quiet times in the coal trade.

When a wagon of coal arrived in the siding, it would, if possible, be unloaded straight into bags and taken out to the houses by horse drawn carts, or if demand was slack the coal was stockpiled in heaps which were kept tidy by wooden stockades made of old sleepers. Whilst some L & Y stations had coal cells into which coal could be dropped from bottom door wagons, these were not popular as the softer friable coals tended to break up into slack which was not easily marketed and commanded a poor price.

When unloading a wagon of coal the practice of supporting the wagon door on props was strictly prohibited and in most yards a notice forbidding it was prominently displayed.

One of the principle coal merchants in the trade in most towns was the local Co-operative Society, almost all societies had a coal department which had a faithful group of customers as the 'divi' on purchases mounted up in a year. In some large towns the Co-op had the exclusive use of a yard.

With the smoke from so many domestic fires it is little wonder that there were those spectacular red grey dawn skies beloved of the Impressioniost painters. Those skies like the coal yards are today a thing of the past.

CROSS-COUNTRY BY THE LANCASHIRE & YORKSHIRE

CECIL J. ALLEN

PART TWO

Rebuilt Dreadnought No. 1662 heads a Manchester – York Express into York shortly after the Grouping. (LGRP 16756)

Our first instalment of this article dealt with the Aspinall regime on the L&YR, and with the work of his 4-4-2 and 4-4-0 express engines and his amazingly competent superheated 2-4-2 tanks. There was a brief interregnum from 1899 to 1904, during which Sir John Aspinall's successor, H. A. Hoy, was in command at Horwich; he produced no new designs other than some massive but unsuccessful inside-cylinder 2-6-2 tanks and some remarkable 0-8-0 freight engines with circular corrugated fireboxes. On his retirement George Hughes took the reins, and by 1908 there had emerged from Horwich his chef d'oeuvre – the first of the well-known four-cylinder 4-6-0s of the L&YR Class "8." Like not a few other British locomotive classes, however, the engines were sluggish and their performance was undistinguished until they were rebuilt with superheaters in 1921. It is surprising indeed, in view of the success that had followed superheating on other British railways from 1910 onwards, including Hughes' own application to L&YR 0-6-0 and 4-4-0 tender engines and 2-4-2 tanks that Hughes took more than ten years to decide on his 4-6-0 conversions.

After the 4-6-0s had been rebuilt, the work of these engines improved out of all knowledge. They were still not perfect, by any means; even one small detail of a design can affect its work adversely. In the case of the Hughes four-cylinder 4-6-0s, it was an unusual type of piston valve of Hughes' design, with internal ball compression release valves, that gave the trouble; later tests of one of these engines in which plain narrow

ring valves were substituted showed a reduction in coal consumed per drawbar-horsepower-hour from 5.10 to 4.00 lb., owing to the fact that steam leakage past the valves had been eliminated. On the formation of the LMSR in 1923, with George Hughes as Chief Mechanical Engineer from 1923 to 1925, the first express engines built for the group were of this type, in its super-heated form, and for some years they were used over the Western Division main line between Euston, Crewe and Carlisle, but their steaming was not too reliable and their coal consumption was heavy, so that they were not destined to be long-lived engines.

Needless to say, in this design Hughes abandoned the 7 ft. 3 in. driving wheels that had been standard up till then in L&YR express passenger designs, both 4-4-0 and 4-4-2. Indeed, he reduced the diameter by a foot to 6 ft. 3 in. and mated these wheels to four 16 in. by 26 in. cylinders, though with no more than 180 lb. pressure. The cylinders were later reduced to $15\frac{3}{4}$ in. diameter, but the later series of 1924 had $16\frac{1}{2}$ in. cylinders, though as the pressure was still 180 lb., the tractive effort did not rise above 28,880 lb. In the rebuilding, outside Walshaerts motion was substituted for the previous inside Joy gear, with advantage to the steam distribution. Under LMS auspices, the Hughes, 4-6-0s were "demoted" to Class "5."

An early experience of mine of one of the superheated engines, in 1921, was amusing. Before the First World War two expresses used to leave York at 2.35 p.m., one a through North Eastern-cum-Lancashire & Yorkshire restaurant car express from Newcastle to Liverpool, and the other an NER York-Leeds train, and a ding-dong race over the 11 miles of four track line to Church Fenton was an established custom, with the NER engine usually in the lead. After the war the trains were reinstated, and as though the authorities set some store by this sporting contest, once again the starting times tallied, but now at 2.45 p.m. The L&YR train no longer had restaurant cars, and so usually was a featherweight formation of 130 tons only.

One afternoon I joined it at York, with my friend Shorrock, of Agecroft, in charge of superheated L&YR 4-6-0 No. 1523. We started from one of the bays at the south end of York station at precisely the same moment that the Leeds train started from the north end. Shorrock got away fairly smartly, and then eased his engine somewhat unaccountably, though I was soon to understand why. Somewhere about Copmanthorpe up came the Leeds, with "R" class 4-4-0 No. 711 going hard at over 60 m.p.h., and a most satisfied smile playing about the face of her driver at the ease with which he was overhauling the far bigger Horwich giant. This was the moment for which Shorrock had been waiting. He let the rival get several coach lengths ahead, and then, without moving his reverse, he opened his regulator to three-quarters. The response of the engine was electrifying; we fairly bounded forward, and in less than a mile of level track had worked up from 58 to 69 m.p.h., in the process of which we shook off our competitor with the utmost ease and saw no more of him. The look on the "Geordie's" face as we passed him was something worth seeing!

In the following year I had an interesting series of runs behind the superheated Hughes 4-6-0s on the 5.40 p.m. business men's express from Manchester to Southport, composed of open corridor stock throughout and always well filled. At that time this train was worked by Agecroft shed, and more-over, by the engine which had come through from York on the 2.45 p.m. train to which I have just referred. As far as Hindley No. 3 box, 16.1 miles out of Victoria station, these expresses take the same route as the Liverpool train; then they drop down into Wigan, with a severe slack through that station, after which the line is falling or level onwards to Southport. For the 34.3 miles

from Victoria to St. Luke's station, at which all trains stop, the allowance was 47 minutes, but to-day the best has come down to 44 minutes.

One evening I joined Driver Turner on the footplate of No. 1519, with ten coaches of well-filled open corridor stock behind the tender, 272 tons tare and 295 tons gross. This was the last lap of the day's round trip from Southport to York and back, so that the dustier of the coal was now being reached, but Fireman Beardsley seemed to have no difficulty in keeping the needle of his pressure gauge at the 180 lb. mark. The only full regulator working was up Pendlebury bank – 2 miles averaging 1 in 90, shortly after starting – after which, at Swinton, Turner brought his regulator handle back to the mid-position, which would mean an actual opening, probably, of rather more than two-thirds, and his cut-off to 25 per cent. We had been slightly checked at the foot of the bank, and dropped to 32 m.p.h. on the steepest (1 in 84) length, but we recovered quickly to 56½ m.p.h. at Walkden troughs, and to 67 at Atherton, after which the engine was rolling to such an extent over the colliery workings as almost to make my hair stand on end! We had passed Swinton, 5.1 miles, in 9 min. 50 sec., and by maintaining an average of 60 from there, we were past Hindley No. 3, 16.1 miles, in 21 min. 30 sec., and Wigan, 17.9 miles, in 25 min. 10 sec., nearly 2 minutes early. Three checks hampered the concluding section of the run, but we drew into St. Luke's a shade ahead of time, in 46 min. 10 sec.; net time was 42¼ minutes.

The best start that I timed out of Manchester was on another occasion with the same engine, when we attained 45 m.p.h. by Pendleton, did not fall below 34½ m.p.h. up Pendlebury bank, and were through Swinton in 9 mins. 5 sec. – a very good time with such a load – but the driver was a good deal more cautious between there and Hindley No. 3, to which we took 21 min. 45 sec., and with the easiest of running after the Wigan slack, St. Luke's was reached in 44 min. 55 sec., or 44 minutes net. With an eleven-coach train of 325 tons, Driver Rigby, of Southport shed, on No. 1510, did some unusually fast running after Wigan reaching 69 m.p.h. on the level and cutting the time for the 6.2 miles from Parbold to Bescar Lane to 5 min. 45 sec.; his overall time, without a check of any kind over this congested route, was 44 min. 15 sec. I made a couple of trips, also, with twelve-coach trains of 306 tons – a stiff proposition for this route – but without any loss of time; the engine on both runs was No. 1506, and the overall times of 46 mins. 10 sec. and 45 min. 35 sec. worked out at net times of 44¾ and 45 minutes respectively.

In 1924, Hughes, carrying on the L&YR tank tradition, brought out his immense four-cylinder 4-6-4 tanks–probably the only examples the country has seen of a tank engine design uniform absolutely with an express passenger design, even to the 6 ft. 3 ins. driving wheels and four cylinders, except for carrying water and coal in side tanks and a rear bunker instead of in separate tender. Sixty of these very handsome engines were to be built, but "handsome is as handsome does," and coal consumption and heavy repair costs virtually sounded the death knell of the class after no more than ten had been turned out; parts for some of the remainder were used in building the further 4-6-0 engines of this type built in 1924 and after. I have one recorded run only behind a Hughes 4-6-4 tank, and it was on the 4.25 p.m. from Salford to Colne, which, as described last month, required so Herculean an effort for timekeeping by the Aspinall superheated 2-4-2 tanks.

No. 11110 was the engine, with a 260-ton train, and the greatly superior power of the 100-ton 4-6-4 to the 67-ton 2-4-2 was obvious throughout. It was seen in such feats as an acceleration from 30 to 35½ m.p.h. up the 1 in 96 to Ringley Road, and in a fall of no more than from 52 to 47½ m.p.h. up the 1 in 132 past Summerseat; then, on the long 1 in 78, after speed had been allowed to fall to 26 m.p.h. and the engine was opened out,

No. 10435 formerly LYR No. 1664 heads a Manchester – Windermere Excursion on the West Coast Main Line at Skew Bridge just to the south of Preston. (LGRP 16819)

accelerating to 30 m.p.h. by Haslingden and further to 34 through the station yard, while the minimum at Baxenden summit was 32 m.p.h. Although there had been a very severe permanent way check before Pendleton and a slighter one after Clifton Road, not to mention a slight signal check at Ramsbottom, the train climbed the 20.0 miles from Salford to Baxenden in 33 min. 5 sec., and passed Accrington, 22.2 miles, in 37 minutes precisely, 3 minutes early. Then came another very severe signal check, but even so Burnley Barracks was reached in 48 min. 5 sec., a minute before time.

None of the big tanks now remain, and one four-cylinder 4-6-0 is left. Their place has been taken largely by the ubiquitous Class "5" 4-6-0s, with a few "Jubilee" three-cylinder 4-6-0s. The "Black Staniers" have proved themselves eminently suitable for Lancashire & Yorkshire conditions, and are well liked. One well-known L&Y driver relates how soon after their advent attempts were made to standardise full regulator and short cut-off working, of the 15 per cent order, but the result was so much pounding and surging, and excessive wear of driving axleboxes, as soon to compel a change of method. In his experience, compression could be eliminated with a normal cut-off of 27½ per cent., with the variations to meet power demand made with the regulator rather than the cut-off.

By the time the Class "5" 4-6-0s had appeared on the scene, the 40 minute timings over the 36.4-mile Lancashire & Yorkshire route between Liverpool and Manchester were no more than a memory. But on various runs just before the Second World War, when trains had started late from Manchester, they showed that they could keep such times with ease. For example, No. 5209, with a four-coach train of 125 tons, after being slowed to 10 m.p.h. for permanent way repairs on Pendlebury bank, picked up to 38½ m.p.h., touched 69 m.p.h. by Walkden and no less than 85 at Atherton, while there was another 82 at Dobbs Brow; indeed the 8.1 miles from Walkden to Hindley No. 2 Junction were run in 6 min. 17 sec. Then came a permanent way slowing to 30 m.p.h., but after the train had accelerated from 42 m.p.h. through Pemberton to 48 at Orrell tunnel, there was a whirl-wind descent towards Liverpool, with an average of 87.4 m.p.h. over the

BLACK FIVES ON THE LYR:
Above No. 5206 heads a trio of these locomotives at Liverpool Exchange Station in April 1939, whilst below No. 5219 pulls away from Southport with a heavy train again in April 1939.
(Both photographs by E. J. Morten.)

5.1 miles from Rainford to Kirby and a top speed of no less than 90! There was a third bad permanent way check at the end of the run, but even so the 36.4 miles were run in 41 min. 24 sec., instead of the 45 minutes scheduled.

The net time of this astonishing sprint must have been little, if anything, more than 37 minutes. The driver was Oglesby, a well-known expert from Wakefield, who has since earned well-deserved promotion. On two other runs, with No. 5204 on both occasions, and the same load, he completed the trip in actual times of 42 min. 19 sec. and 39 min. 9 sec., or net times of 39¾ and 38½ minutes respectively. Running of this description was accomplished with 27½ per cent. cut-offs, or up to 30 per cent. on the steepest grades, and the regulator never opened beyond the first port.

In the reverse direction, one outstanding run was made by No. 5305, with twice the load–eight coaches weighing 245 tons tare and 260 tons full–on a train which takes the Wigan route. Shortly after leaving Liverpool Exchange the engine was slowed for permanent way repairs, but then got the bit between her teeth, passing Fazakerley at 65 m.p.h. and Kirkby at 72; up two miles at 1 in 247 speed rose to 74 m.p.h., and up the slightly easier grades beyond Simonswood to 76; Rainford Junction was passed at 71, and after 2¼ miles at 1 in 116-114 to Orrell the speed was still 62 m.p.h. as the tunnel was entered! The average speed of 71.2 m.p.h. from Kirkby to Upholland summit was the most astonishing piece of locomotive performance that I have every known on the Lancashire & Yorkshire system. So Wigan, 19.0 miles from Liverpool, was reached in 21 min. 48 sec. or about 20½ minutes net, the schedule at that time allowing 26 minutes.

With this there may be compared the work of a standard Class "2" 4-4-0, and also of a Class "4" three-cylinder 4-4-0 compound, both with trains of exactly the same 260-ton weight; they almost dead heated one another in running, but while the Class "2" in particular must have been driven very hard to achieve her times, they fall far behind the Class "5" exploit just described. Speeds were 60 and 58 m.p.h. by Kirkby, and 45 and 41 m.p.h. at Upholland; as compared with No. 5305's 7 min. 48 sec. from Liverpool to Fazakerley, 5.1 miles, Class "2" No. 677 took 8 min. 18 sec. and Class "4" No. 1120 took 8 min. 4 sec; to Upholland, 14.3 miles, the times were 15 min. 35 sec., 18 min. 18 sec., and 18 min. 44 sec., and the two 4-4-0s were into Wigan in 25 min. 15 sec. and 24 min. 45 sec., the Class "2" having suffered a permanent way check at Pemberton. Net times were thus 24¼ and 24¾ minutes, well inside the 27-minute allowance.

The only run over Lancashire & Yorkshire metals with a "5XP" three-cylinder 4-6-0 of which I have any details was one behind "Patriot" No. 5549, timed by Mr. D.S.M. Barrie, with a considerable load of 294 tons tare and 310 tons gross, on the 4.55 p.m. "Club Train" from Manchester to Blackpool and Fleetwood. Like the other Blackpool trains, this express takes the difficult Liverpool route as far as Dobbs Brow Junction, and then the mountainous spur across to Horwich Fork Junction, with its 1 in 69 climb to Hilton House, which needed full regulator and 30 per cent. cut-off, though speed did not fall below 32½ m.p.h. Up Pendlebury bank the cut-off setting, at first 15 per cent., was lengthened to 20 per cent., and full regulator and 20 per cent. was used for the recovery from Preston slack; elsewhere 15 per cent. and half to three-quarters regulator were ample. Time was kept easily, notwithstanding signal checks on both sides ofPreston; Walkden, 7.5 miles, was passed in 13 min. 5 sec; Dobbs Brow, 13.5 miles in min. 10 sec.; Dicconson Lane (the sumit), 15.5 miles, in 22 min. 30 sec.; Chorley, 22.7 miles in 30 min. 20 sec.; and Euxton Junction 25.8 miles, in 34 min. 30 sec., 2½ minutes early; Preston, 31.2 miles, was cleared in 43 min. 15 sec., and Poulton, 45.6 miles, was reached in 61 min. 52 sec., or 58½ minutes net–a net gain of 3½ minutes on schedule. The highest speed attained was 70 m.p.h., through Chorley. To-day the run is allowed 64 minutes.

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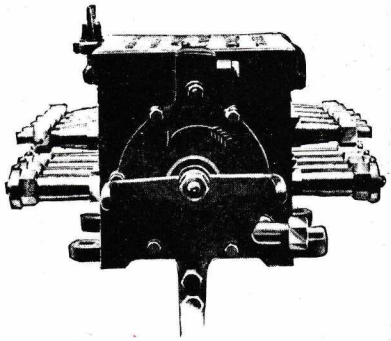

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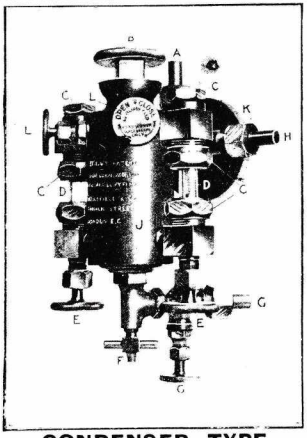

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