



NO - 5.

JUNE - 1946



The  
Bradford Railway Circle  
C I R C U L A R

EDITORIAL

This fifth issue of the CIRCULAR brings the production to a more mature stage in its development. Most of the troubles inherent in the launching of a small circulation duplicated journal have been happily surmounted and the immediate prospect is one of reasonable success.

The title of "THE CIRCULAR" appears to meet with general approval and it is intended to permanently adopt it in its present form.

The questionnaire regarding the CIRCULAR was sent to 38 subscribing members. Of these about half took the trouble to answer the questions and the editor's thanks are accorded to them for their interest.

A summary of the result is published as an inset and the more outstanding points are dealt with hereunder:

One member suggests that some space should be devoted to model railway matters. It is agreed that this would be desirable, and consideration is being given to the production of an occasional supplement dealing with this branch of our hobby.

The opinion of another member is "That from the Footplate" should be devoted to editorial notes on railway topics of the day or local matters as they affect railways. This is a worthy suggestion, and it is intended that notes shall be published under this heading each month in the hope that they will stimulate interest.

A third member writes: "Correspondence, the opinion of the reader, should play a large part in any magazine, which I do not think it does in yours". In using the word "yours", this member lays himself open to editorial censure. It is to be deprecated

as it suggests that the CIRCULAR is produced for a circle within the Circle, instead of for the whole. This on one side, the opinion of the member is entirely concurred in, and it is suggested that the remedy lies mainly in the hands of the readers.

The publishing of shed visit reports is the feature on which our members are in greatest disagreement, but as a majority are in favour of this, it is proposed to continue publication for the time being. In any event, shed visits will probably tend to become less frequent as the local ground is covered, and this should automatically adjust the matter to mutual satisfaction.

Among the minor alterations prompted by members' suggestions may be mentioned the dropping of the volume number. Henceforward each issue will be a separate entity and will be paged accordingly. The "Looking Ahead" section will in future be printed on the inside of the back cover, with the duty rota, so if you have occasion to hurriedly refer to a "fixture" you will know just where to find it.

Finally, the standard attained can only be upheld by the fullest possible co-operation of the members; the editor cannot possibly be personally responsible for the compilation of every item published. The offers of several gentlemen to submit items for publication are accepted with grateful thanks.

"FROM THE FOOTPLATE"

Mr. Dow, on his visit to the Centre, was asked if he could give any information regarding the experimental flat-bottom track which had been laid down by the L&NER. In reply he said that a decision could only be arrived at after long and exhaustive tests, and the time was not yet ripe.

In the subsequent short discussion a speaker implied that British bull-headed track could not be bettered. It is evident that the L&NER and the LM&SR companies do not share his sunny confidence, as in recent years both have turned their attention to flat-bottom track and have laid down several lengths for experimental purposes.

It is surprising that our British railways have for so long adhered to bull-headed track in view of the excellent results obtained from flat-bottom track, in the U.S.A., on the Continent of Europe, and elsewhere. It was once a truism to say that British track was the finest in the world, but this no longer applies.

Mechanically, the principle of bull-headed rail suspension is illogical, and there would appear to be no condition of service which cannot be met equally well, if not better, by flat-bottom equipment. The rail cannot even stand on its own bottom, but has to be supported and held in place by- of all things- pieces of wood!

The antipathy of the average railway enthusiast towards flat-bottom track is mainly blind, unreasoned prejudice. The outlook which allows that any railway practise emanating, or having its greatest exponents, in the U.S.A. is necessarily inferior to its British counterpart savours strongly of a narrow parochialism, which is not the most desirable standpoint for an impartial and comprehensive view.

It is maintained that bull-headed rail must sooner or later give place to flat-bottom rail, and even though the changeover might be delayed for a whole generation or more, of the ultimate issue there is no doubt.

It is understood that some modification of the LM&SR express locomotive and coaching stock livery was recently under consideration by the directors.

Locomotive No. 623. "Duchess of Abercorn", was experimentally painted a light blue-grey, lined out in gold and Midland red.

In this connection, we suggest a smart and effective ensemble, for the trains on first-class duties, would be Caledonian blue for the locomotives, and Midland red with the traditional "off-white" upper panels for the coaching stock, thus integrating the former liveries of the three chief LM&SR constituents.

One of the first acts of Mr. H. G. Ivatt, upon his appointment as C.M.E. of the LM&SR, was to order the removal of the "air-smoothed" casing from the Pacifics. Dare we hope from this that the "streamlining" craze has passed its zenith?

"Streamlining", and all that it implies, is an obsession which perverted almost every form of public transport (incidentally, the outlook of the travelling public) a decade or more ago; even our railways, with the practical exception of the conservative GWR, falling under the spell. To those who appreciate the clean, beautiful lines of the traditional British locomotive, Mr. Ivatt will be hailed as a man enterprising enough to defy the spirit of the age - and by such a man new fashions may be created!

#### VICE PRESIDENT

The Committee recently invited Mr. Charles Hutton, our senior member, to be Vice President of the Circle, and we have great pleasure in announcing his acceptance of the office.

The Circle is to be congratulated upon having within its ranks this gentleman, whose personal experience has its roots deep in what may be termed the Late Middle Ages of our railway history.

Our best wishes are extended to Mr. Hutton.

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Mr. E. H. Halliwell has been co-opted a member of the committee vice Mr. W. F. Buttery who has resigned.

A Westmorland Night's Entertainment.

by "The Winged Wyvern"  
(with apologies to David L. Smith)

The last glow of a mid-August sunset had faded over the western hills, and the signal lights were beginning to take on an appreciable brilliance, when I climbed up the steps of the North Junction signal box.

I had a lawful occasion to pass the box and, in the manner of country folk, had stopped to pass the time of the day with the signalman. Not having any deep concern about the state of the weather, the gardens or the poultry, I manoeuvred the conversation round to railway signalling, with such "signal" success that I was presently invited (tell it not in Gath!) to "come up and see the works".

I set foot on the forbidden floor of the box, and to merely say that I was impressed is putting it mildly. The "elbow-grease" obviously expended by the staff would have done credit to a Yorkshire housewife - and that is indeed high praise! The twenty odd levers, each identified by colour and legend, were a dazzling array of shining steel, whilst the instruments on the shelf above were an equally splendid show of polished brass.

My new found friend quickly initiated me into the mysteries of his craft. The nature and functions of the interlocking sequences and the block instruments were explained to me and I, needless to say, was a receptive listener. Sykes rotary lock-and-block apparatus was installed, in common I believe with all Midland main line signal boxes, and this afforded a valuable safety check on the occupation of the sections. Incidentally, I learned why some signalmen used a duster when handling the levers: it was not, as I had thought, to protect the hands, but to prevent the steel becoming rusted by perspiration!

Upon being allowed to handle the levers myself, under strict supervision I hasten to add, I soon learned from experience that "knack" rather than force was needed to pull off the Up distant. I had to try several times before I got the faithful repeater to

register "off" - and by that time I was all hot and bothered!

But do not imagine that whilst all this was going on that the legitimate business of the box was at a standstill. Not a bit of it! Trains came and went with almost monotonous regularity, and whilst many of them passed through at a high turn of speed, still more stopped for water and examination. Whilst the engine crew were busying themselves with the fireirons and the water column, the "wheel tappers", with hammer and lamp, would be examining the running gear of the train. Sometimes an engine would stop right underneath us, usually with a full head of steam blowing off with a deafening roar and enveloping us in ethereal clouds!

Once, around one o'clock, a grimy fireman with a cut thumb came up for first-aid. Upon the signalman politely regretting that the first-aid equipment was kept in the Station box our nocturnal visitor departed, breathing fire and slaughter! Half a minute later we heard him telling the tale to his driver, and we gathered from his rather lurid remarks that "our" box was about the most unmentionable on the whole of the rotten system!

Passenger traffic was comparatively light in spite of the "extras" coping with the rush of the shootin' and fishin' element to Scotland, and what there was passed through in a blaze of glory, pounding the fishplates at sixty, seventy, eighty miles an hour.

Most of the Up trains and a few of the Down were double-headed, goods and passenger alike. The engines assisting on the Up trains were usually detached at Aisgill summit and came tender first down into the North Junction yard for fire cleaning purposes and turning, prior to the thirty miles run forward to Carlisle. The standing orders were that these engines, whenever convenient, should couple up before a goods train, partly to be of assistance and partly to reduce track occupation. A shout from the box would sometimes bring an engine out of the yard, but more often than not the only response was an even more

vigorous clattering of the poker and an ostentatious display of the oil can! They gave the show away by whilsting for the road immediately after the tail-lights of the slighted goods train had disappeared! Whilst I always verbally agreed with the signalman re the wicked ways of engine drivers, I must admit that I always mentally applauded the crews who got away with it! The era of the "Claughton" working on the Midland Division was then in full force and some of the expresses were headed by these machines, large by Midland standards but coal eaters and fire throwers of the first magnitude. On one occasion, owing to some congestion at Aisgill which had repercussions 15 miles back, a double-headed train was nearly brought to a standstill. As it slowly passed I easily caught the name on the engine in the bright beam of the number-taking lamp - it was "Alfred Fletcher". As the long train got the road and began to accelerate, the labouring exhausts of the engines roused all the sleeping echoes, so it seemed, from Cross Fell to Wild Boar Fell!

A cold, grey dawn was breaking when I thanked my host for night's entertainment, and as I crept past the deserted turn-table towards my belated bed, a train passed through with a fanfare of trumpets! It was the first of the Scotch sleeping car expresses from St. Pancras, hurrying down to Carlisle and the Border!

#### No. 2678 In Service Again

Mr. B. Field writes that LM&SR 2-6-4T, No. 2678, of 20E (Manningham) shed, is back in operational working after having been out of service for nearly a month owing to damage caused by a derailment; her first run on her return was on Tuesday, April 23, when she worked the 4-10 a.m. express from Bradford to Skipton.

The damage consisted of a broken centre pin in the bogie axle and a cracked waterbox in the injector overflow system. The fact that the loco. was out of service for so long a period, despite the trivial damage, was owing to shortage of materials.

#### QUESTIONNAIRE - SUMMARY OF ANSWERS.

Replies received from:- Miss Finsberg; Messrs. Baum, Bradley, Brearley, Butland, Butterfield, Clough, Dickinson, Field, Halliwell, Hutton, Jagger, James, Lawson, Lea, Milner, Scholey, Shackleton, Sparkes, Waddington and Wilson. Total - 21.

Question.	Answer.
Do you think the displayed front cover should be retained?	2 Definitely YES. 15 YES. 2 Indefinite.
Do you think the page devoted to the officers is serving a useful purpose, etc.?	1 Definitely YES. 18 YES. 2 NO.
Do you think we should continue to publish accounts of shed visits, in view of G.H. Butland's excellent log, etc.?	1 Definitely YES. 10 YES. 8 NO. 1 Indefinite. (Mr. Butland did not vote on this question)
Would you like us to publish short original articles written by members or friends?	100 per cent YES. (2 with qualifications)
If your answer to the previous question is "Yes" can YOU write a two page article for us?	14 YES. 6 NO. 1 Indefinite.
What is your opinion of the correspondence page?	Consensus of opinion is that it serves a useful purpose and should be retained.
Have you any criticisms of the editorial columns under the heading of "From the Footplate"?	18 NO. 3 advance criticisms which have been met in this issue.
Do you like the general arrangement of the production?	20 YES. 1 "It isn't really bad"
Have you any criticism, etc.?	18 NO. Three put forward criticisms or suggestions which have been dealt with in the editorial, or otherwise met in the text of this issue.
Do you think we shall be justified in buying a foolscap size duplicator, to facilitate production?	19 YES. 1 NO. (One member implies objection but this is evidently due to a misunderstanding of the question)
Do you wish us to continue production of the Circular?	100 per cent YES. (Several Y E S - Y E S -

The following two letters have been received from our valued correspondent Mr. G. E. James:

To the editor:

Dear Sir

Regarding the remark on page 34 of the May issue that I do not agree with Mr. Scholey on the size of the wheels of the engine "Garnett" at Esholt Sewage Works. The dimensions I gave were those applicable when the engine was first put to work at Esholt, but they may have been varied slightly by the time the engines were sold; and this would particularly apply to wheels owing to the wear of the tyres.

I once came across a six-coupled tank engine at a South Yorkshire colliery of which all the wheels were of different sizes and those on the right were considerably smaller than those on the left. On my remarking about this to the engineer he pointed out that their track to the main railway sidings - over which this engine usually worked - curved almost the whole of the way and in the same direction; and as the outer rail was elevated it threw more weight on to the right side of the engine than the left, hence the excessive wear of the right wheels.

When I suggested they might have a short triangular bit of track for turning the engine periodically he said the cost and trouble of such would be more than that of fitting new tyres; and, further, the driver would certainly object to pushing the loaded wagons up the incline to the sidings with his back to the firebox. So apparently it is sometimes necessary to bow to the driver's wishes.

Yours faithfully,  
G. E. JAMES.

To the editor:

Dear Sir,

A member has questioned my statement on page 35 of the May issue that the Midland Railway 0-6-0 tank engines Nos. 1102 to 1141, built 1874/1875 were renumbered 1620 to 1659 in 1907; on the grounds that one of these 1100s were renumbered in the 1800s.

That is correct; but they were not the engines I had in mind. It did not occur to me to mention that some of those old 1100s were later duplicated by new engines of practically the same design; and in case I have misled any other readers I give below a list of these duplicates with the 1907 new numbers in brackets and the building dates.

- (a) Nos. 1102-1106 (1775-1779) built 1890. ) Many
- (b) Nos. 1107-1115 (1816-1824) built 1891. ) still
- (c) Nos. 1121-1130 (1845-1854) built 1895. ) at work.

All were built at Derby and had the usual 4'7" wheels and 17" x 24" cylinders: but (a) and (b) had a water capacity of 740 gallons whereas (c) had 800 gallons; as also had the 1874/5 engines. These latter had the suffix "A" added to the number when the new engines appeared, and all were scrapped in 1925-32.

Yours faithfully,  
G. E. James.

#### The Furness Railway

The Circle had a real treat on Wednesday evening, May 1st., when Mr. J. Thorhill gave a very interesting and instructive talk on "The Furness Railway".

With the aid of several admirable large scale maps prepared by the speaker himself, Mr. Thorhill traced the development and progress of the Furness Railway from the original line, which was opened in 1846 from Kirkby-in-Furness to Dalton, right up to the grouping in 1923 and on to the present day.

The lecture was mainly historical and geographical in nature.

Mr. Thorhill interspersed his remarks with numerous anecdotes, amusing and otherwise, and photographs of the district in question were passed round by way of illustration.

Later, when the meeting was thrown open, a very interesting discussion ensued.

Altogether, the lecture was greatly appreciated by the score or so of members present.

LOCOMOTIVE PRACTISE

On Wednesday, 15th May, Mr. Charles Hutton favoured the Circle with a very entertaining talk on "Locomotive Practise at the end of the 19th. century". Mr. Hutton opened the talk with some notes on locomotive working in the 'nineties.

It was the era of "singles" and six wheeled coaching stock; such engines as Stirling's "eight-footers" were still in their prime, and even the "Flying Scotsman" was mainly composed of non-bogie short bodied stock. The GNR rolling stock of the period was mentioned as being the roughest riding in the whole country, and the late E.L. Ahrons was credited with saying that he imagined the coaches were fitted with octagonal wheels!

At the beginning of the 'ninties the Broad Gauge had not quite run its course, and all the far West-of-England expresses were headed by engines of the old "Iron Duke" class, giving place to the "Achilles" class upon the gauge conversion.

Mr. Hutton next referred to the various classes of Webb compounds and the work which they did. He said it was hard to understand why Webb did not continue construction of the relatively successful "Teutonic" class instead of launching out on the indifferent "Greater Britain" class and the altogether unspeakable "John Hick" class. The classic joke of men with pinch bars being employed at principle stations to give the unwilling engines a little encouragement to start was mentioned.

The "railway races" of 1895 came in for some extended reference. Mr. Hutton said the West Coast partners won hands down, a success which he attributed to good generalship. The Caledonian set the pace throughout the whole period and the North Western came gallantly to scratch. On the East Coast route much effort was wasted by "waiting time" at stations, and it was not until the GNR had fired the NBR with enthusiasm, and the two together had brought pressure to bear on the MBR, that anything spectacular was achieved. The East Coast partners lost the "races"

chiefly because they persisted in arranging a schedule for tomorrow which the West Coast people had beaten yesterday!

It was stated by Mr. Hutton that the particular valve setting devised by Hugh Smellie and perpetuated by John Lambie was applied by John McIntosh to the "Dunalastair" types, on which it played no small part in their successful performance.

It was on the "Dunalastair" class that the boiler bulged out over the splashers for the first time, McIntosh thus inaugurating the big boiler era. It was rumoured, however, that a big boilered 2-4-2 tender engine was being designed by William Stroudley, when he met his untimely death. R.J. Billinton succeeded Stroudley and the anticipated engine never materialised. In its place appeared the "Grasshoppers", very handsome machines, but of only moderate weight and power.

David Jones' pioneer 4-6-0 engines were mentioned and Mr. Hutton said that it was not until their declining years that these came into prominence. It was also mentioned that the first batch of the "Castle" class were in reality a Jones design, although popularly attributed to Peter Drummond.

Mr. Hutton referred to the advent of the GNR "Atlantics", and also mentioned that around the turn of the century Bradford had an independent dining car train to King's Cross, for the working of which two of Ivatt's 4-4-0s, Nos. 1301 and 1302, were skidded at Bowling.

After mentioning many of the bigger types which appeared in the early 1900s, Mr. Hutton specially referred to the Caledonian 4-6-0s. In his opinion these engines were of really outstanding design and he very much regretted that St. Rollox was eclipsed at the grouping.

Mr. Hutton closed his interesting talk with some reference to the GWR locomotive practise during the period covered.

The talk was well illustrated by a representative selection of photographs and two old paper weight models.



The "Grasshoppers" of the LB&SCR.

by John Thornhill

In June 1895 something of a stir was caused at Brighton works by the turning out of a four coupled locomotive with a leading bogie, the first of its wheel arrangement to be built by the LB&SCR.

This, also the first of R.J. Billinton's express engines, was an altogether new design and it presented many features of interest.

In wheel arrangement and general proportions it was similar to the Johnson machines at work on the Midland Railway, and reflected in no small measure its designer's long association with Derby works. Further to this it represented a radical departure from Stroudley's practise and was the very antithesis of his famous front coupled machines of the "Gladstone" class.

Turning to a brief description of the engine's salient features; the running plates were maintained at the same level from the cab to a point in front of the smoke box and were, moreover, of such a height as to expose the coupling rods in all positions, whereas the universal practise in contemporary design was for the coupling rod to disappear under the splashers at the top of the throw. This exposure of the rods gave rise to the nickname "Grasshoppers", and the arrangement was the tip of the long shadow of coming event! At the extremities the plates were bent down to buffer beam level, and at the fore end this formed the so called "piano" front which was a characteristic feature of Billinton's 4-4-0 engines. Owing to the height of the running plates it was not possible to introduce Johnson's graceful curved splashers, but these had an echo in the small splashers over the bogie wheels. The sand boxes were placed beneath the running plates as in Midland practise.

The cab was a combination of Johnson's curved spectacle plate and Stroudley's side sheets with Billinton's own design of roof. This Billinton variation of the Stroudley cab could quite properly

be included in the famous family of cabs which originated on the Highland Railway in 1862.

The chimney was of Johnson's design, beautifully proportioned and tapering towards the top, the base being sunk into the crown of the smokebox giving a particularly neat finish. The dome, carrying Salter's spring balance safety valves, was of the Stroudley type but placed on the middle ring of the boiler as in Midland practise. Instead of Johnson's brass safety valve column on the firebox Billinton fitted a mahole cover and on this the whistle was mounted, Kirtley style.

The motion was pure Stroudley, with circular section connecting rods and marine type big ends. As a matter of interest this Stroudley motion was used on all inside cylindered engines right down to the last class designed by L.B. Billinton (son of R.J.) before the LB&SCR lost its identity in the Southern Group.

The Midland pattern of screw reversing handle was fitted in preference to the heavy flywheel type of Stroudley's design, and this was placed well back from the cab front, in some cases an abnormal distance.

The superstructure of Stroudley's tender was low in build so that a man could stand on the coal and pass safely under the bridges, and in this respect Billinton followed suit. He also adopted Stroudley's good idea of having the coal scoop raised above the footplate so making it un-necessary for the fireman to lift each shovel full of coal into the firebox.

The whole assembly formed a particularly pleasing design with the honours fairly equally divided between Billinton, Johnson and Stroudley. The rather modest proportion of the boiler was the chief weakness as this only had 1342 square feet of heating surface.

Between June 1895 and January 1898 twenty-four of the class were put in service, and all of them carried a name.

An engine similar in all respects to the others

out having a boiler with 1465 square feet of heating surface was built in January 1898 and this was named "Bessemer". It achieved some distinction as being the very last engine to be designed with Salter's spring balance safety valves.

#### DUTY ROTA

June 3rd.	Mr. Cowdery.
" 10th.	Mr. Dickinson.
" 17th.	Mr. Exley.
" 24th.	Miss Pineberg.

#### LOOKING AHEAD

June 12th: An open debate in which all members are invited to take part. Subject: "Are modern locomotives inferior in appearance to the older ones" 7-30 p.m.

June 26th: A talk by Mr. G. E. James on "The Locomotives of the Somerset and Dorset Joint Railway" 7-30 p.m.

June 29th: Visit to York Station and Sheds. Depart Forster Sq. Stn. 12-20 p.m. arrive York 1-40 p.m. Return York 6-2 p.m., arrive Forster Sq. Stn. 7-52 p.m.

July 1st: Centennial Anniversary of the opening for public traffic of the Leeds and Bradford Railway. It is proposed to mark the occasion by a trip to Leeds and Back. Meet Forster Sq. Stn. for 8-43 p.m. train to Leeds. Return from Leeds on 9-40 (Bfd. 10-8) or 9-45 (Bfd. 10-34)

#### BRADFORD RAILWAY CIRCLE

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