THE NARROW GAUGE

No. 54 • JULY 1970

THE NARROW GAUGE RAILWAY SOCIETY

Hon. Secretary
Mike Swift,
47 Birchington Avenue,
Birchencliff, Huddersfield

Hon. Editor
Henry Holdsworth,
76 Tower Lane,
Leeds 12

Hon. Membership Secretary
Ralph Martin,
27 Oakenbank Crescent,
Huddersfield HD5 8LQ
(For renewals & membership enquiries)

Cover Photo

Another superb photograph by Ivor Peters. TRALEE A DINGLE RAILWAY 2-6-0T No. 1 & 2 arrive at Dingle with Cattle train from Tralee.

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Letters to the Editor

The cover photograph on No. 53 showing 'PIXIE' at Cadeby Rectory was taken by Mr. P. Shoesmith of Kings Norton, Birmingham 30; my apologies for mislaying this info. when you sent in the photograph.

Editor

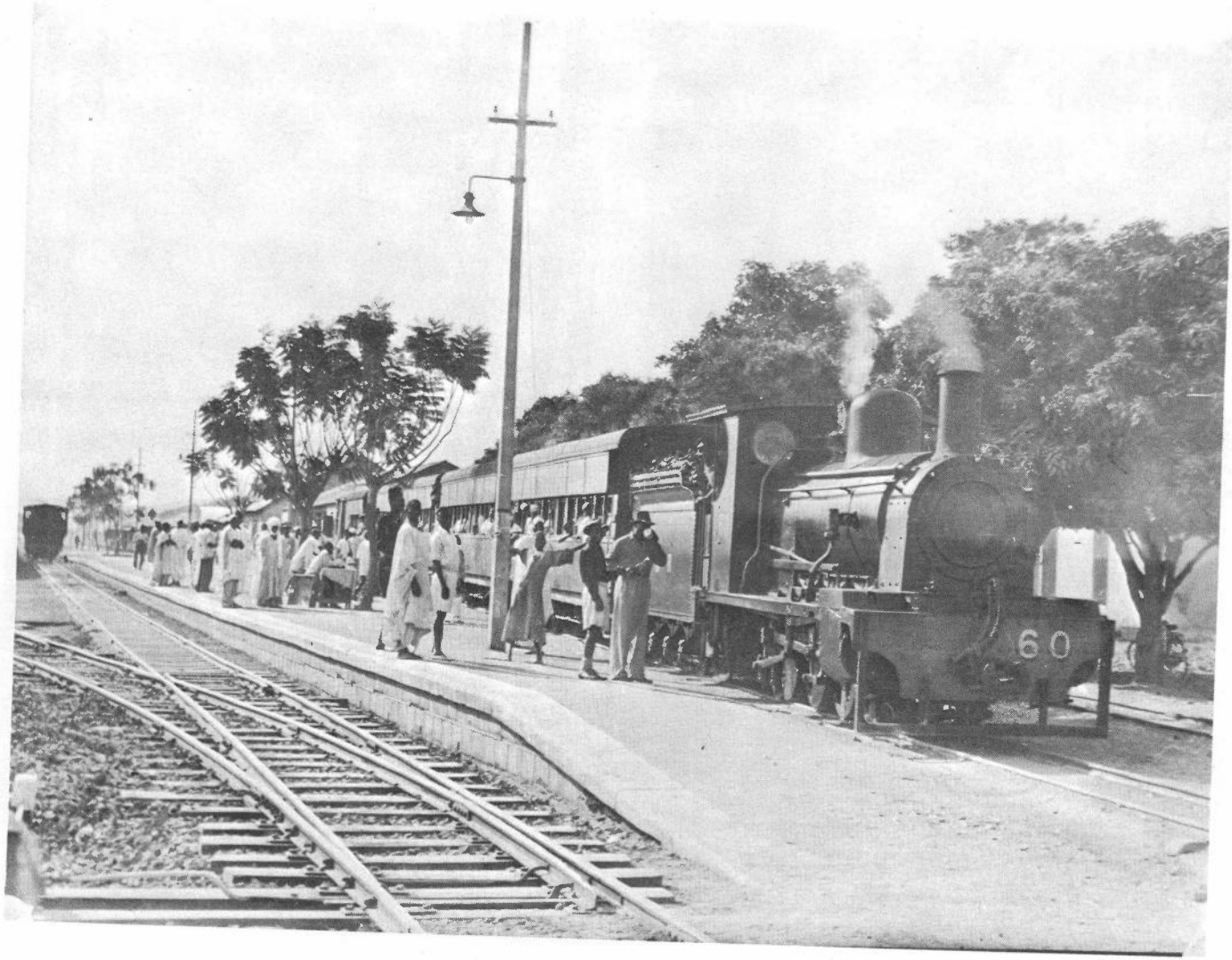
From Andrew Wilson, Dartford.

The "Railway Gazette" have agreed to us reproducing the photo opposite showing the Bauchi Light Railway. The train is about to leave Jos for Zaria. Loco No. 60 built 1911. Last train from the top of the platform left 20/6/52 when the station was rebuilt.

From Mr. D.A. Brewer - Greenwich

During a recent visit to explore the remains of the Southwold Railway, prompted by the article by Barrie McFarlane and Dick Ninnis, we had a most interesting talk with Mr. A. Barrett-Jenkins.

Two bits of news which readers might find interesting arose concerning the luggage van body, firstly in that Mrs. Oddy is no longer accepting donations towards renovation, and that, more important, the van body will be going to the East Anglia Transport Museum Society at Carlton Colville, nr. Lowestoft when transport can be arranged. Hoping this information is of some use.


60

Letters to the Editor

From R. N. Redman, Horsforth.

An interesting photograph sent by a correspondent in Australia showing an 18 ton Clyde Diesel and a Hunslet 12 ton steam loco at a North Queensland Sugar Mill.

My second photo for Miniature fans is Hudswell Clarke No. D 565 NEPTUNE for North Bay Railway, Scarborough, ordered 5th February, 1931, delivered 22nd May, 1931. Weight 9 ton - cost £1080 with 5 bogie chassis for the coaches at £130 each. Shown here at the British Industries Fair (B.I.F.) Castle Bromwich 1931.

Scarborough's second loco TRITON delivered 29th April, 1932, cost £1500 with 5 more chassis at £130 each.

From Symon C. Haynes - Devizes

The cover picture on Narrow Gauge No. 52 raises an interesting point. The A.C.N.R. 0-6-0 and 0-6-0 locomotive bears more than a passing likeness to the locomotive shown on p.316 of "The British Steam Railway Locomotive 1825-1925" by E.L. Ahrons. The latter is a Kitson-Meyer built by Kitson. Could it be that the Kerr Stuart is in fact a Kitson-Meyer type built, as a repeat order of the original Kitson design, by Kerr Stuart because of a lower tender or Kitson being too busy?

Am I right in believing that the Kitson-Meyer system of articulation was in fact a modification of the original Meyer system?

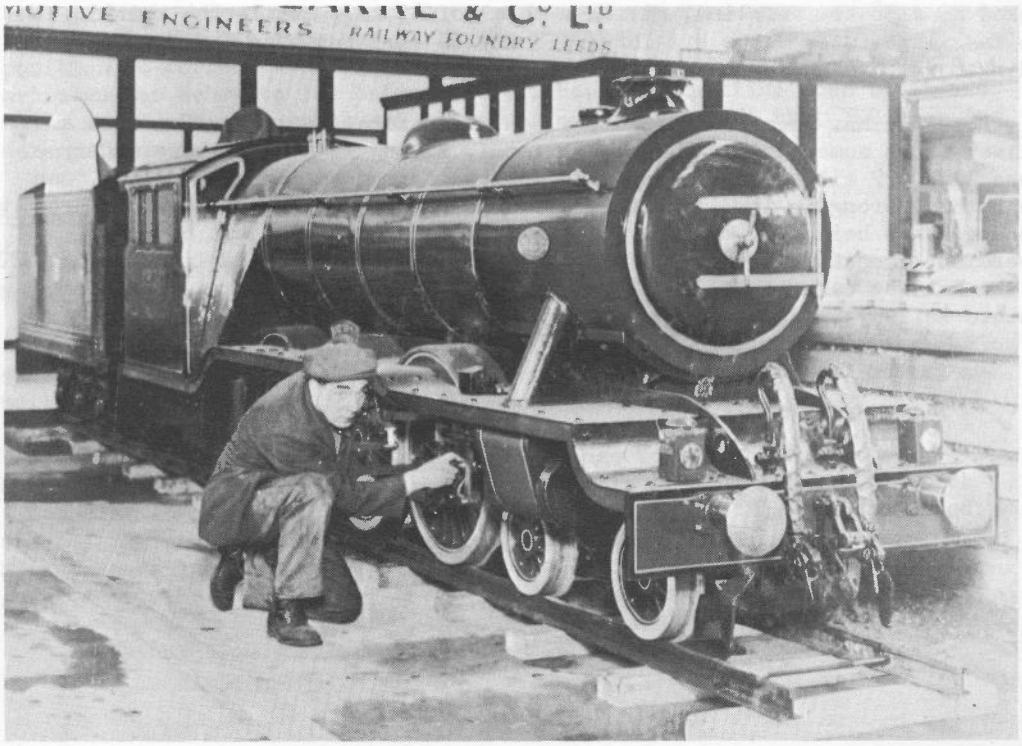
From Rodney Weaver - Kenilworth

NG 52 is another excellent issue with a lot of very interesting material. One or two points call for a little comment.

BREDE was a rare example of a Bagnall fitted with Modified Baguley valve gear, a bracdside view of which was published on p.266 of Industrial Railway Record Vol.1. Curiously enough, the sole surviving example of a locomotive fitted with this gear is of similar size to BREDE and also spent its working life on a waterworks line - in Calcutta.

The 2-8-0T illustrated on p.13 is rather interesting. Can anyone substantiate my theory that this was built as a rack-and-adhesion locomotive? How else can one account for the split wheelbase and the shaft above the long gap? The low-profile horizontal cylinders suggest that there was originally another pair above them driving the rack wheels.

The Feldbahn 0-8-0T did not have a superheater - I know someone who has just rebuilt one in rather unexpected fashion who has confirmed this. (Details will appear later). Just what the separately-quoted heating surface was I cannot imagine, perhaps there was a feed water heater on certain batches?


MOTIVE ENGINEERS
RAILWAY FOUNDRY LEEDS

Letters to the Editor

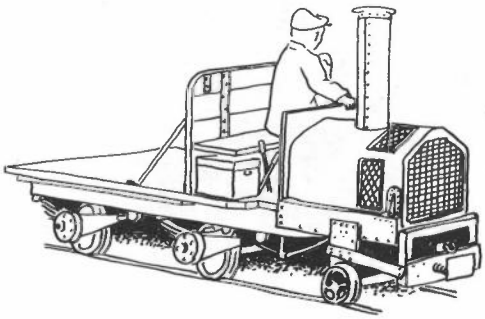
From Sydney Moir, Benoni, Transvaal, South Africa.

It was nice to see the picture of the Great War 'Hunslet' 4-6-0 on page 35 of Issue No. 52 ... and it makes me wonder why D. Trevor Rowe, who writes of it having been taken in 1968, has not given us a few more facts about the Correntino Railway.

Frankly, I did not imagine that any of the ex-Great War locos still existed, other than in the hands of Preservation Societies. Could it be that some of the almost pre-historic rolling stock is still in use? Mention is made of sixteen of the 4-6-0 Hunslets going to the Buenos Aires Great Southern; anyone who consults the Railway Gazette of February 16th, 1923, will learn that these steam locos were accompanied by twenty of the 20 h.p. Simplex petrol tractors, one of the 22 h.p. version, and ten of the 40 h.p. ones. This fleet of locos had 1,350 one-ton trucks, 200 three-ton trucks, 225 six-ton trucks (converted from 3-tonners by joining together two bodies and mounting the result on bogies with roller-bearing axle-boxes), 200 six-ton trucks built by Hudson and 64 five-tonners from Koppel to shift around .. and something like 240 kms. of railway on which to do it.

Not all in one piece, though, for the article from which I took the facts states that in the Balcarce District there was a line of 51 km. with branches of 7 km. and 8 km. sprouting from it; the Orense District had a total of 70 km. serving 50,000 acres; in the Copetonas area there were five feeder sidings linked to a 38 km. mainline, giving a total of 45 km.; while the mainline in the Cascalares area was a bit longer, being 40 km., but also had five feeder sidings, which added another 14 km. to it.

Possibly Mr. Rowe considered the use of 'potato' in connection with a railway to be somewhat derogatory, whilst I, living in a land where a narrow gauge line 177 miles long can equally well be termed an 'apple' railway, can see nothing wrong in it. In both cases, the railway transports agricultural produce, this being the mainstay of the traffic. However, just by way of diversion, I enclose a couple of sketches (made from photos published originally in the Railway Gazette of July 23rd, 1926) of a loco that worked on a real 'Potato Railway'.



There is a reference to the Lincolnshire Potato Railways, "Laid in various places in the Fen country, mostly 2ft. gauge", in the Oakwood Press Light Railways Handbook No. 7. Mr. Kidner gave a sketch of the rather queer little power unit (could one call it a locomotive?) stating that 'both lines employed i.c. locomotives'. However, on coming across the article LIGHT RAILWAYS FOR POTATO TRAFFIC IN SOUTH-EAST LINCOLNSHIRE in the Railway Gazette, I found that this little locomotive was really a paraffin-fired steam-tractor! It operated over something like 20 miles of track, servicing 7,000 acres of land owned by W. Dennis & Sons, stated to be one of the largest potato-growing firms in south-east Lincolnshire. Mr. Kidner had titled his sketch "First Littleworth Engine", stating that the railway ran west from Littleworth Station.

In the issue for November 19th, 1926, the Railway Gazette gave a photo of a rather pretty little 0-6-0 tank, suited for 20 lb. rail, built for the Nocton Estates, Lincolnshire. Possibly this also worked on a 'Potato Railway' .. has anybody any facts and figures?

Going further back still, I found a note, in an issue of 1909, that is of interest. Mr. A.H. Worth, of Holdbeach, a farmer who owned 1,450 acres of land lying three miles from the nearest railway station, had sunk the sum of £10,000 in a ten-mile railway system. It was narrow gauge, and connected with a private siding at Fleet Station on the Midland and Great Northern Joint. Since Mr. Worth had around 10,000 tons of produce to handle annually, the line presumably earned its keep. The point is ... does any reader know anything about it?

May I make one more appeal to the readers? All you fellows who are in a position to correct the errors made by we who take the trouble to write articles for Henry to lay before you ... how about getting down to it and doing some writing yourselves? It could easily turn out that YOU have far more information than WE!

From Howard Clayton, Lichfield.

We would like to comment on the letter by Sidney Leleux in your issue No. 53 of March 1970.

Writing of the Bassett-Lowke "Little Giant" locomotives, Mr. Leleux suggests that a list, with dates, be prepared of these engines, to try and build up the history of their lives.

We would like readers of The Narrow Gauge to know that this suggestion has, in fact, been carried out, and as a result of considerable research (including information supplied by Mr. Vaughan) a list has been compiled which is as nearly complete as is possible. It will appear in a History of Miniature Railways, the first volume of which, dealing with the 15 inch gauge, is to be published by the Oakwood Press later this year.

Co-authors: Howard Clayton, Robin Buttrell, Michel Jacot.

"THE SONGOLOLE"

THE DUTTON ROAD RAIL SYSTEM

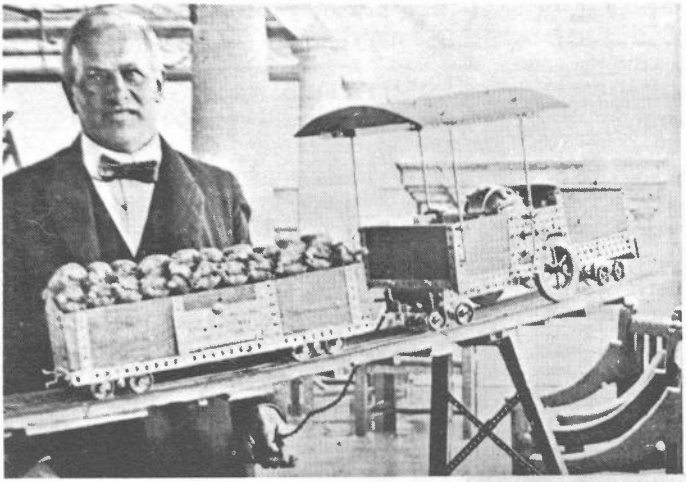
SYDNEY MOIR

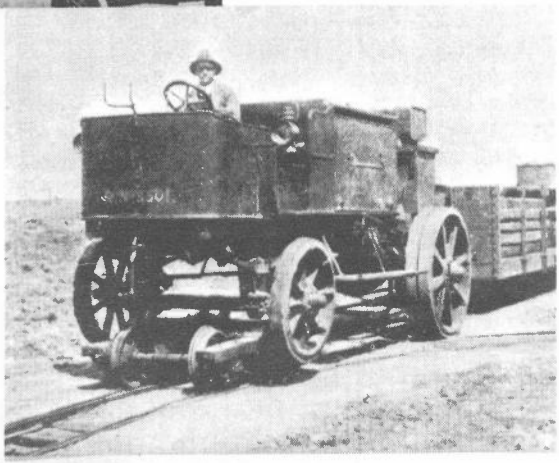
Away back in 1868 a gentleman named Page had taken a look at rail transport in England, comparing it with that of the roads. He observed that the effort required to overcome the inertia of a railway vehicle was far less than was required to start a road vehicle of the same weight. To set against that, the grip of a metal wheel on a gravelled road was far greater than that of the same wheel when on a metal rail and under a similar axle-load. It appeared as if one could have the best of both worlds by using a power unit in which the driving wheels worked on a road surface while the load hauled rode easily on a railway track.

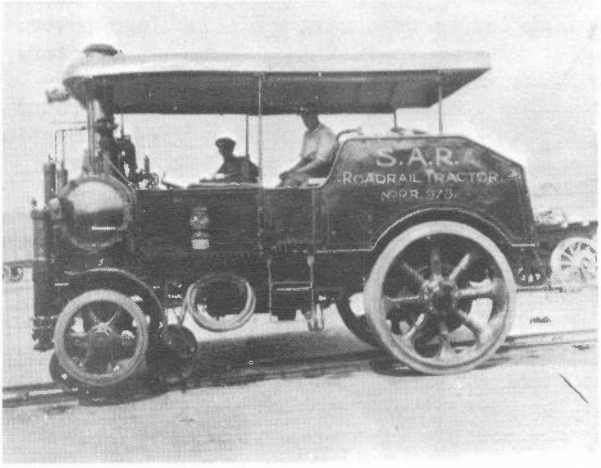
So he had put forward a proposal for a method of transport permitting the haulage of larger loads than could be dealt with by horses and carts, which required less power, and which eliminated the need for costly grading and the use of easy curves. Page's system called for the laying of a light narrow gauge track along the edges of the public roads, a track that would have plankways laid on either side of the rails and running parallel to them. This combination of road and rail was to follow the highways exactly, in both curvature and gradient: on entering the towns - where the rails were to be embedded in the road surface, much as was done later with tramways - the tracks were to fan out, following the streets to terminate in warehouse yards and in stores.

To prove his theories, he had built two models of the special type of locomotive required. One was powered by clockwork, weighing sixteen pounds: it proved able to surmount grades as steep as 1 in 3, thanks to the traction provided by "roughened iron wheels" working over sawn planks. The second model was far larger, taring seven hundred pounds (of which half was on the driving wheels) and performed satisfactorily on grades of 1 in 10.

Apparently Page's ideas were never put into practice in England, and road and rail went their separate ways. Half a century later, Frank Dutton, at that time Superintendent of the Signals and Motor Transport sections of the South African Railways, revived the idea. Modernised, it seemed to be THE method of providing economical construction and service for agricultural branch lines. From 1919 onwards, Dutton wrote articles on the economics of branch-line operation, amassed facts and figures dealing with power-weight ratios, haulage capacities and required tonnages of traffic, and built demonstration models of Loco-Tractors for the Road-Rail system. In place of the clockwork mechanism of Page's smaller model, Dutton made use of electric motors, building his models with Meccano parts, with the current fed through a trailing cable.






S.A.R.
ROADRAIL TRACTOR

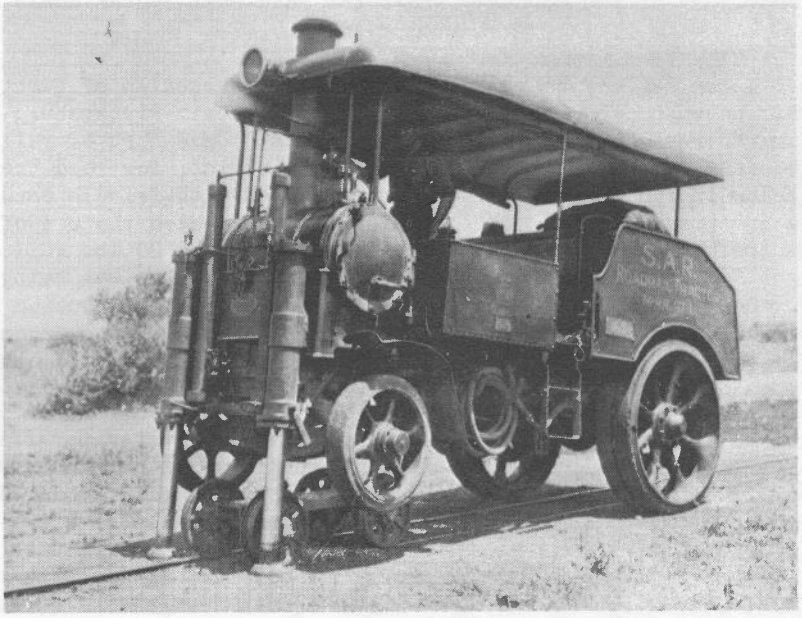
According to Dutton's estimates, a Road-Rail branch could be laid for £700 per mile, which was approximately one-third of the cost of an ordinary 3'6" gauge agricultural line. He proposed the use of pre-fabricated track of the "Contractors" type, having 12 lb/yd. rail carried on steel sleepers: it was to be laid with the minimum of ballasting, for the rails would only carry the rolling weight of the wagons and their loads. The guiding bogies of the Loco-Tractors were carried on the track, it is true, but they supported only a portion of the weight, the remainder being taken by the rubber-tyred driving wheels.

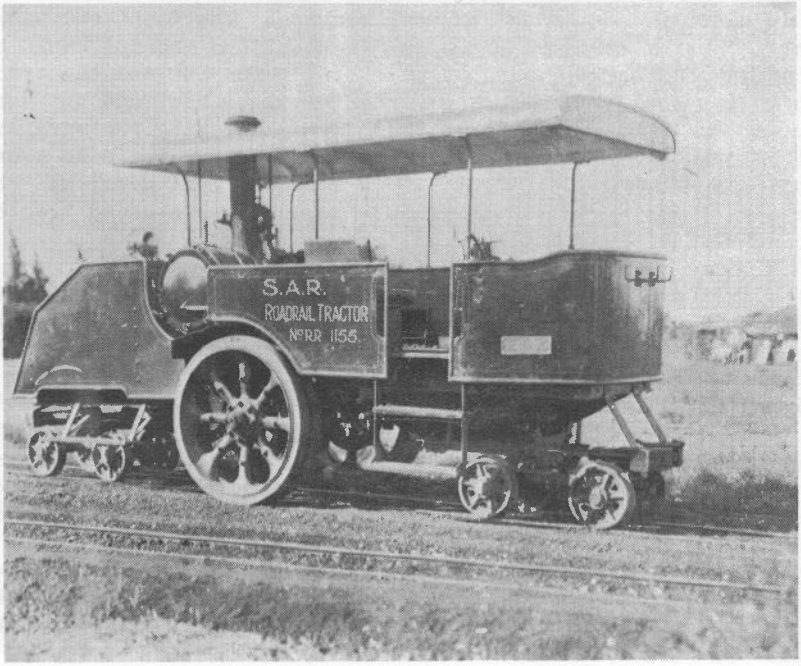
The resistance of a steel wheel on a steel rail is between one-tenth and one-twentieth that of a rubber-tyred wheel on a road: the tractive effort, per ton of load on the axle, worked out at 1,330 lbs. for rubber tyres on a hard road, and 344 lbs. for the conventional locomotive. It was obvious that a relatively light power unit was called for. Equally, very light rolling stock could be used, and it was Dutton's idea that the tracks could be laid out across the fields at harvesting time, with men or animals propelling the trucks over these temporary and unballasted extensions.

Visualising train-loads of only forty tons, with the Loco-Tractor making two round-trips per day, Dutton claimed that the frequent service would help generate traffic. At that time, use was being made of locomotives capable of handling ten times the load, with the result that, lacking the goods to haul, the service was cut to once a week. As a result, a branch line that cost £3,000 per mile to construct, was only in active use for seven minutes per mile per twenty-four hours. The load of charges for interest on capital and for track maintenance could raise the cost per ton-mile to sixteen times that of a heavily-trafficked line. The S.A.R.'s own figures showed that a branch built to conventional standards required to carry 60,000 tons of goods per annum to pay its way.

The figure of £700 instead of the £2,500 considered to be the lowest possible per mile cost for a 2'0" gauge standard branch impressed those in control, and, by way of proving Mr. Dutton's claims, an experiment was authorised. A temporary track was to be laid at Canada Junction, and over this trials were to be run, trials designed to demonstrate the haulage power on straights and grades under somewhat adverse conditions, of a Loco-Tractor. There was no question of feather-bedding the trials. The track was second-hand contractors type: a mile or so was put down on roughly levelled ground and bolted up. A Dennis paraffin tractor was obtained from the Cartage Section, and fitted with a rail bogie beneath the leading axle: the wheelways were produced by the simple means of running the Dennis round the track half-a-dozen times. By way of a train, several old bogie wagons were provided, loaded down with sleepers.

The tractor worked this train up to sixteen miles an hour on the level, there being around sixteen tons behind it. The curves, of 50 ft. radius, presented no obstacles, while 1 in 17 grades could be taken. As far as they went, the figures obtained bore out Frank Dutton's claims, but the commercial application of the system could only be proved by a more comprehensive testing, over a period of years, in handling the traffic of a branch line.


S.A.R.


S.A.R.
ROADRAIL TRACTOR
No RR 1156.

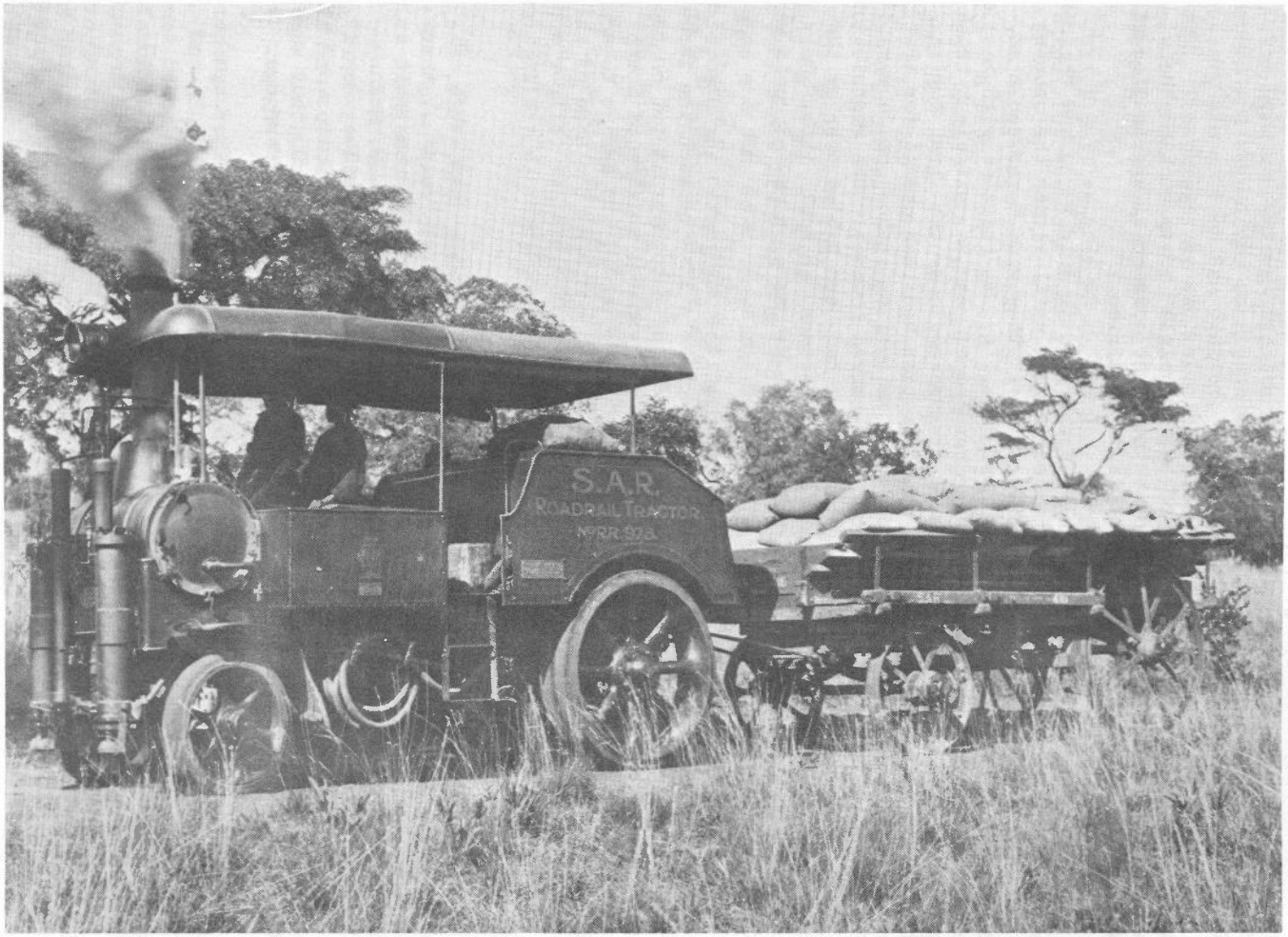
There matters had to lie until it became necessary to provide a branch line, in some part of the country, where the Road-Rail system could show its abilities.

Finally, the Railway Board authorised the construction of twenty miles of Road-Rail between Naboomspruit (on the main Pretoria-Pietersburg line) and the farm "Ceres", out on the Springbok Flats. Some sort of railway was required to develop the potentialities of the district, for road transport over the belts of red and black loam, interspersed with friable sand, became impossible in rainy weather. Dutton undoubtedly expected the use of pre-fabricated track, but the S.A.R. merely transferred the 20 lb. rail of the Pankop Light Railway, from further south .. for the Pankop was being relaid as a 3'6" gauge line. Though several years had passed since Dutton had quoted £700 as being the price of a mile of Road-Rail, the use of the second-hand material kept the figure down to £753. Even the addition of all other inevitable expenses brought the final cost no higher than £1,000 per mile.

Dutton had anticipated the use of specially constructed paraffin tractors on any Road-Rails that were built .. he had published an outline design for such a machine. Had it been built, the wheel notation could possibly have been given as 4-A-A-4, provided one could reconcile bogies on a two-foot gauge with driving wheels that were six feet apart over their outer faces! The idea of a paraffin-fueled prime mover did not find favour with the C.M.E., and the Chief Storekeeper was instructed to obtain designs and quotations for a steam Loco-Tractor. In the meantime, the construction trains were to be handled by converted steam tractors from the Cartage Department.

One of the pair was a dual purpose machine. The front-end was fitted with steam-jacks, by means of which the front of the machine could be lifted off the leading rail-bogie, which could then be run out and the tractor lowered onto its road wheels. It was then ready to continue out across the 300 square miles of the Springbok Flats. Since existing photographs show the unit hauling rubber-tyred road trailer in the country, there is every possibility that No. 973 was used to operate a road 'feeder' service: she would only have been transferred to the rails when the double-ended tractor proved unable to cope with the traffic.

As the tractor used in the Canada Junction experiments had proved itself unable to keep a straight course for more than a few feet when reversed - No. 973 was similarly afflicted - the second machine was more heavily modified. Following the lines of Frank Dutton's proposed paraffin tractor, it was fitted with rail bogies at either end, but with only a single pair of driving wheels between. This 4-A-4 could not be worked off the rails, but it had the advantage of free movement in either direction. According to the plate on the sheeting (clearly visible in the original photograph) No. 1155 was constructed by a Johannesburg firm of engineers, though it is not known if the same firm was responsible for the design. The C.M.E.'s department state they are unable to provide any information on this machine whatever. As a result, we have no way of knowing if the retention of the single axle drive was a matter of convenience in the conversion, or if previous tests had proved the complication of the twin axle drive unwarranted.


S.A.R.
ROAD/RAIL TRACTOR
N°RR 998

"From Ceres Farm to Naboomspruit,
Across the Nijl and never late,
I don't mind a hill and neither a hole ...
JUST LISTEN TO ME, THE SONGOLOLE!"

When T.M. Berrange wrote "The Song of the Songolole", away back in the 'twenties, he was celebrating in verse the first commercial application of the Stronach-Dutton Road-Rail system in South Africa.

Construction of the line had been authorised in July 1923, and the converted steam tractors were only intended to work until either the opening of the line or the arrival of better machines. They were never replaced, and worked the line throughout its short life. As was the case with most of the S.A.R. branches, traffic was being handled as soon as sufficient track was down: 32,000 bags of peanuts were transported over the first twelve miles between April and September. This section had been opened for traffic (transportation at 'Owner's Risk' on the construction trains) on January 14th, 1924. Passengers and large livestock were barred however: the restriction on cattle remained in force after the section had been handed over by the Construction Department to the Open Lines Department on April 15th. Only goods, parcels, poultry and small animals such as sheep, pigs and goats were accepted on the daily train.

In view of the nature of the undertaking, the Administration appointed an Agricultural Officer, whose task was to act as a link between the farmers and the railway. The Turf Farmers' Association of Naboomspruit put on record the following: "His earnest enthusiasm for the general welfare of South Africa has been a delight to the farmers of these parts, who desire to acknowledge his ever-ready help." Unfortunately, we do not know the name of this paragon, whose position was only equalled by that of a similar officer appointed by the Cape Government Railways, many years before, to generate traffic for the newly-opened Avontuur Railway.

When the Road-Rail was formally opened, on September 19th, 1924, the two tractors combined to haul the trucks of the 'Official Train' .. there were no passenger vehicles available at that time .. from Naboomspruit to Singlewood, the new name for the line's terminus. The Hon. C.W. Malan (Minister of Railways), Mr. C.T.M. Wilcocks (Member of the Railway Board), Mr. R.B. Getliffe (Asst. Gen. Man. of the S.A.R.), and Frank Dutton and his wife were amongst those on the train. On arrival at Singlewood, they were greeted by the chairman of the Reception Committee, Mr. T. M. Berrange.

The Minister of Railway tightened the Last Bolt with a silver spanner: Mr. Dutton accompanied Driver Bunting (who, like the track materials and rolling stock, had come from the Pankop) onto the tractor, which moved forward beneath the triumphal arch to explode detonators and break the traditional bottle of champagne. Hardly had this junketing come to an end when deputations of farmers waited on the Minister of Railways with petitions requesting extensions ... one lot wanted the line carried seven miles to Roedtan, another asked for a ten mile extension towards the Nijl River, while a third wanted a branch northwards, across the Flats. Apparently the farmers considered the Songolole had already proved its worth!

The line was informal in its operation. The driver of the tractor accepted and signed for consignments on behalf of the Administration: the labourer, his mate on the tractor, physically handled the goods where necessary. Though sidings and halts had been constructed, the train stopped wherever it was required to do so for the loading of farm produce .. a fact proclaimed by Berrange in the words ..

"I'll pull them along on the shining rail,
And stop wherever they give me a hail .."

The 'hailing' resulted in 436 tons passing outwards from the Flats, while the requirements of the farmers brought return loads of 106 tons, between January 14th and June 30th, 1924. The outward loading was made up of 266 tons of maize, 157 tons of peanuts, $1\frac{1}{2}$ tons of cotton and 12 tons of 'general'. The inwards traffic was mainly constructional (lime and cement, bricks and other building materials) and farm implements.

By the end of the quarter following (September 30th, 1924) the line had really got into its stride. A mixed train was being operated on Mondays, Wednesdays and Fridays, and passengers to the number of 151 Second Class singles and 108 Third Class singles - there was no First Class accommodation - had made use of it. Loadings of Kaffir Corn, Peanuts, Beans, Cotton and Maize had risen to 2,457 tons, while the inwards traffic was 404 tons.

In fact, the little railway had proved itself to such an extent that the farmers of the Rustenburg area were agitating for a similar line to serve their thousands of acres. They never got their railway: in fact, the Songolole was the only example of the Stronach-Dutton Road-Rail ever built in South Africa, though the engineers of the S.A.R. ran surveys and worked out estimates for at least three others during the next few years.

The Road-Rail killed itself through its own success .. with its help the production of the district rose to such an extent that the line could no longer cope with the traffic offered. After two years of operation, the Railway Board issued a Report on the line, advocating that it be lifted and a 3'6" gauge branch substituted. The Report appeared somewhat contradictory, for in one part it stated that the need for a 3'6" gauge line was due directly to the expansion caused by the Road-Rail, and yet in another part remarked that the system had not come up to expectations.

One of the reasons directly behind the examination and the Report was the fact that the Zebedelia Estates had planted out a quarter of a million orange trees during 1922 and 1923, and these trees were now bearing. There was a crop to be handled from Zebedelia .. and if the Songolole was already labouring under its load, extending the line to Zebedelia and adding thousands of crates of oranges would certainly founder it! So a broad gauge branch was laid right from Naboomspruit to Zebedelia, where later on the broad gauge once again met the narrow. And the Songolole was dead.

PHOTOGRAPHS Photos courtesy South African Railways.

1. Frank Dutton with the electrically driven model to demonstrate the Road-Rail system.

2. Paraffin tractor used in the Canada Junction experiments.

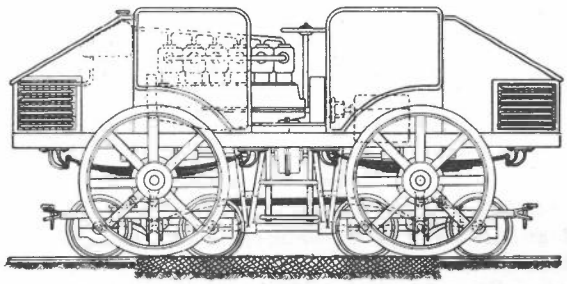
3. No. 973 on the rails.

4. No. 973 with steam jacks to free the unit from the bogie. When retracted the jacks were safety locked to prevent accidental operation.

5. No. 1155 could be described as a 4-2-4 although bogies ran on 2' track and the driving wheels were 6 feet apart. Headlight on one end only.

6. No. 973 on the road.

7. Outline of a double ended tractor proposed by Frank Dutton (paraffin engine).



SONGOLOLE: A hard-shelled, segmented myriapid, found on the South African veld. The multiple legs move with a ripple down the length of the creature. When alarmed it rolls itself into a tight spiral, head inwards.

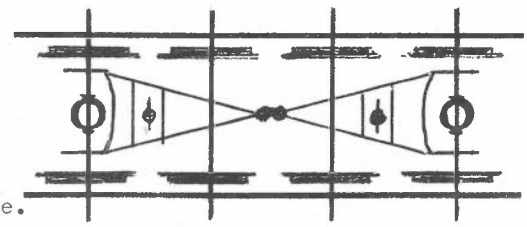
KLIEN—LINDER AXLES

Fred Marris

I have recently borrowed through the local library "Articulated Locos" by Lionel Wiener (1930 Constable & Co.). There are drawings, photos and dimensions of many types of articulated locos, many of them N.G. There are several types of Klien-Linder arrangements:-

HEYWOOD appears to be the first, outer wheels swivel on ball joints. Outer connected to Inner by A frame. Inner wheels slide laterally.

Klien-Linder MAFFEI. Outer wheels swivel on ball joints and slide laterally. Inner wheels fixed to axle.



Outer connected to Outer by 2 A frames.

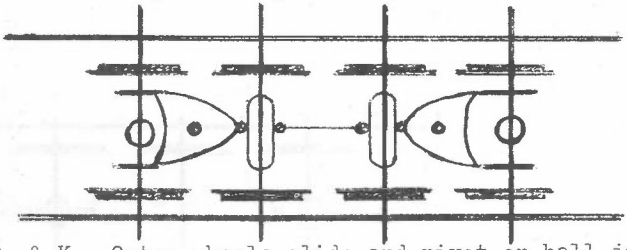
A frame pivot at central point of A frame.

NG no. 50 - Page 31 appears to be this type.

Klien-Linder.
Orenstein & Koppel and BORSIG. Outer wheels swivel on ball joints and slide laterally.
Inner wheels slide laterally.

Outer connected to Inner by A frame, pivoted at central point of A frame.

Inner appears to be connected to Inner by a straight bar.



Klien-Linder - Luttermoller O. & K. Outer wheels slide and pivot on ball joint (but no vertical pivot).
Inner wheels fixed to axle.

With these arrangements on sharp radius - super elevated track weight of locos is thrown inwards, outer leading wheel can climb over the rail (due to the ball-joint). To obviate this drawback, Herr Luttermoller, chief engineer of Messrs. Orenstein and Koppel, brought the junction of the tie rods of the hollow axle still nearer to it at a point situated between the two outer axles, but nearer the inner one.

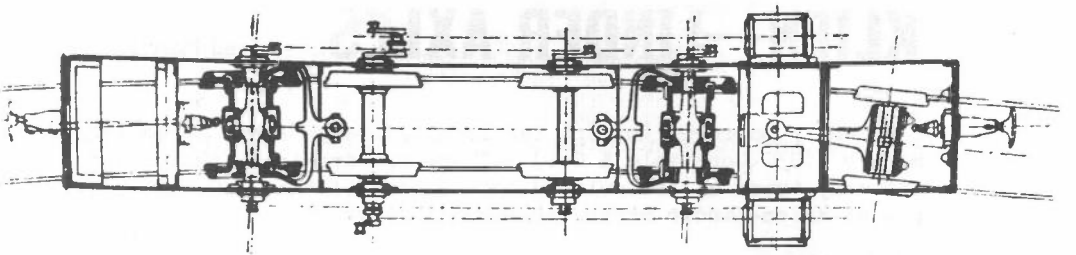
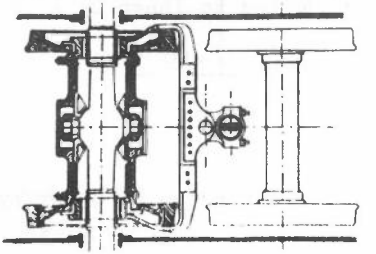


FIG. 110.—The Luttermöller System. Orenstein and Koppel Build.

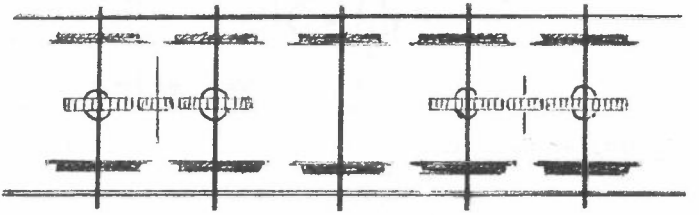
The centre of rotation of the straps is the lower part of a pivot fixed under the framework.



As for the Klien-Lindner axle, the following modifications have been introduced: the central (solid) axle's right and left bronze bearings are only allowed to move horizontally in the steel sleeve. This latter has right and left bronze bearirgs, which are fixed to the wheels with which they rotate. There is, of course, the usual ball and socket joint in the middle.

The A frame is connected to the wheels with an extra bearing which is slotted horizontally, this allows the wheel to pivot horizontally (steer round a curve), but not lift without deflecting the spring. This is the arrangement in phots on page 2 NG no. 51.

Klien-Linder axles were fitted to 4 axle and 5 axle locos, but 5 axle types were soon superseded by locos with end-geared axles. The 3 centre axles were rod connected and the outer axles were geared to them by 3 gears, the inner gear was ball-jointed on the outer rod coupled axle.



The dimensions on page 30 - NG 50 agree with dimensions in this book. I have photographed several pages of dimensions and drawings from this book and I could get prints from them if they would be of use to you. (The centres of the pages are distorted due to the binding of the book).

Do any readers of NG know which arrangement of axles were fitted to the locos drawn and pictured in NG 50?

SCHULL & SKIBBEREEN R-I-P

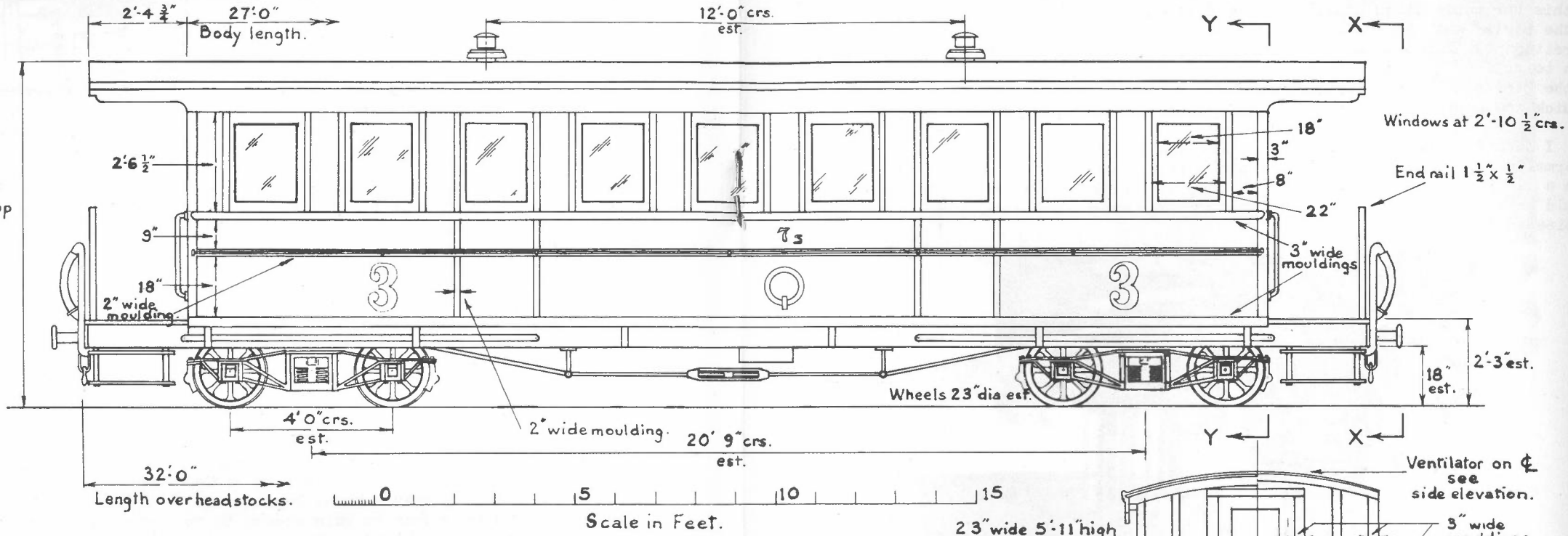
G. R. Thomson

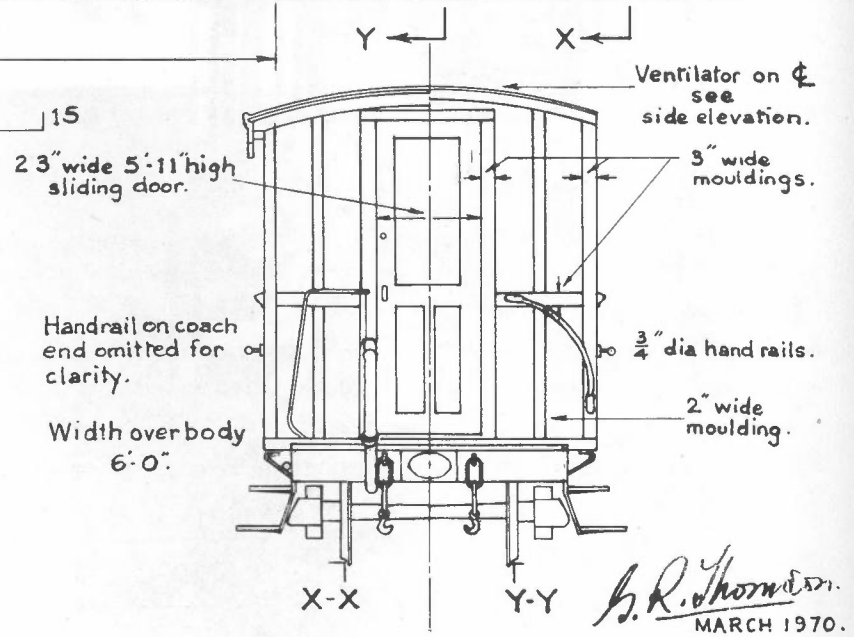
The Schull & Skibbereen Tramway was not famed for its luxurious rolling stock. There were probably only eight passenger vehicles in all when the line was running twenty odd years ago. The fate of this rolling stock was unknown to me and it was therefore a pleasure in August 1969, to discover the whereabouts of at least two of these coaches. This doscovery came about whilst I was enjoying a family holiday in Schull. We were driving on the Bantry to Glengariff road when I spotted two derelict railway vehicles lying in a field near Owvane Falls.

I am no expert on the S. & S. but it took me no more than a few seconds to realise that these were vehicles from the former tramway and about as long to come to the conclusion that one was bogie coach No. 7 and the other a four wheeler with single ended platform, which has since been suggested as being No. 3 or No. 4. How these coaches had come to be at Owvane Falls nearly fifteen miles from the nearest point on the line on which they ran for over forty years, is quite a mystery to the Writer. I had a quick look at the coaches and decided that a return visit was called for without the family when a more detailed survey could be made.

On my second visit I was armed with camera, tape measure, sketch pad, etc. On close examination I found that the body of No. 7 was in three sections. The middle had been cut away and was laying a short distance away. It looked as though this had been done to gain access to the coach as the doorways at each end are only 23 inches wide. Perhaps on the other hand, this had been done to facilitate transport. However, it seemed more than likely that the coach had been cut into three on site. The fabric of No. 7 was really in quite good condition when one considers how long it must have been exposed to the wet climate of South West Ireland. The fact that the roof is in fair condition and much of the glazing is intact has no doubt contributed to this. Had this coach been near an English city it would doubtless have been torn to pieces long ago by young vandals.

In the time available I took as many dimensions as possible and a number of photographs. From this information, what I believe to be, a fairly accurate drawing of the body has been produced. Information on the underframe and diamond-type bogies had however, to be obtained by study of the very few and poor photographs published of the coach when it was in service. In the early years, No. 7 was probably lit by oil lamps which may have projected through the roof rather like top hats. In its latter days, it was more likely lit by electricity. The only sign of paint today is the claret it bore under the G.S.R. ownership. If it ever was painted in C.I.E. green this has quite disappeared, leaving the old colour exposed.





NOTES.

Details of body taken from derelict coach at Owvane Falls, Nr. Bantry.

Details of underframe and bogies from photographs.

Oil lamps projecting thro' roof omitted.

Vehicle glazed on sides only.- Longitudinal slatted wooden seats.

Windows open vertically. Dust screens fitted inside.

Builders- Gloucester Carriage & Wagon Co. 1903.

G.S.R. ownership- livery Claret, lettering and crest as shown.

COACH No 7.

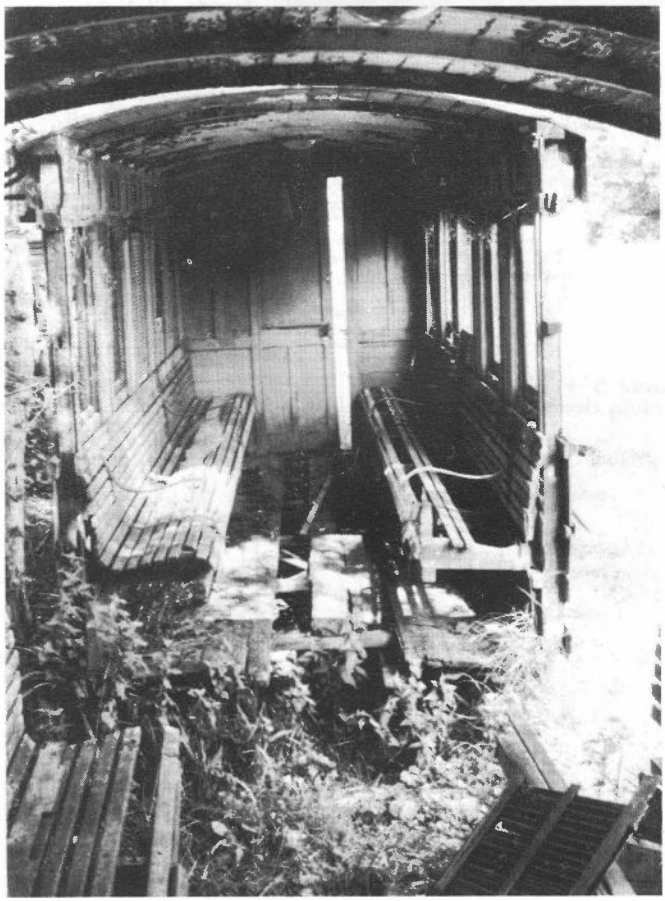
SCHULL & SKIBBEREEN LIGHT RAILWAY.

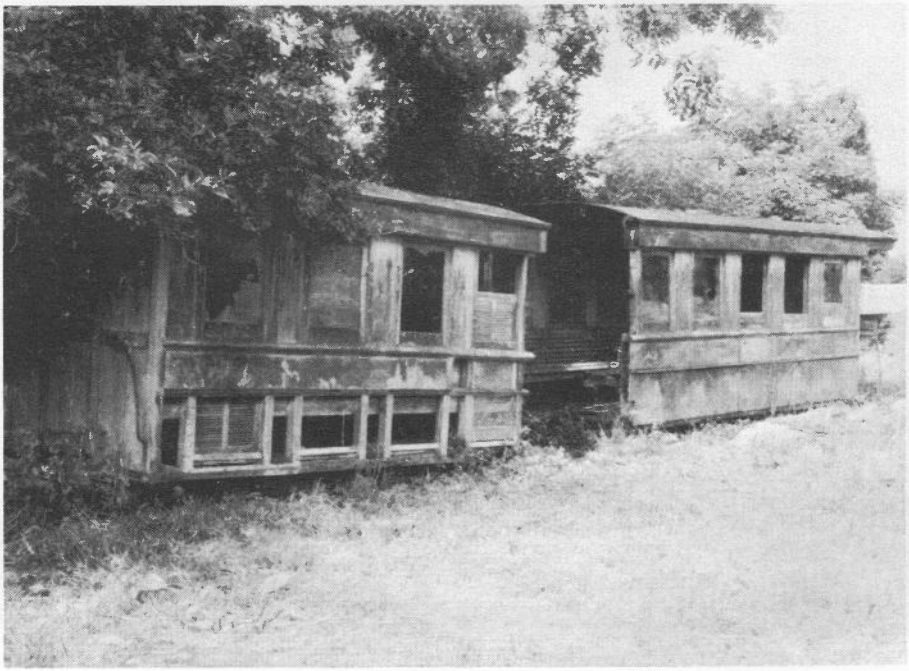
B. R. Thomson.

MARCH 1970.

Since preparing the drawing I feel that I have probably placed the coupling chains too close together. I have also omitted the hinged bar which was likely fitted between the two hand rails at each platform end. The lifting of this bar would allow passage from one coach to another. The lack of details of the bogies and the complete lack of other equipment below the frames is regretted but unavoidable without access to better photographs. Should anyone wish to produce a gauge O model of this coach they would find the bogies fitted to the "Triang Big Train Set" gondola car are not dissimilar and should prove a quick and cheap answer to the problem.

I hope to revisit the site again in August 1970 to obtain further information. I will also take a closer look at the four wheeled coach body with a view to preparing a drawing if Hon. Editor is sufficiently interested. Should anyone know the whereabouts of any other stock from this line I should be pleased to hear of it.





JOHN FOWLER & CO. LEEDS LTD.

Six photographs kindly sent to us by Association Du Musee Des Transportes de Pithiviers (France).

Can anyone identify and give us further information perhaps.

The second photo No. 8144 states on the back:

"Supplied to the India Office £540 f.o.b. with the tender £49 extra (for fuel only) 24" gauge, 5½" x 10" cylinders.
Hauled 55 tons on level, 20 tons on 1-100 grade."

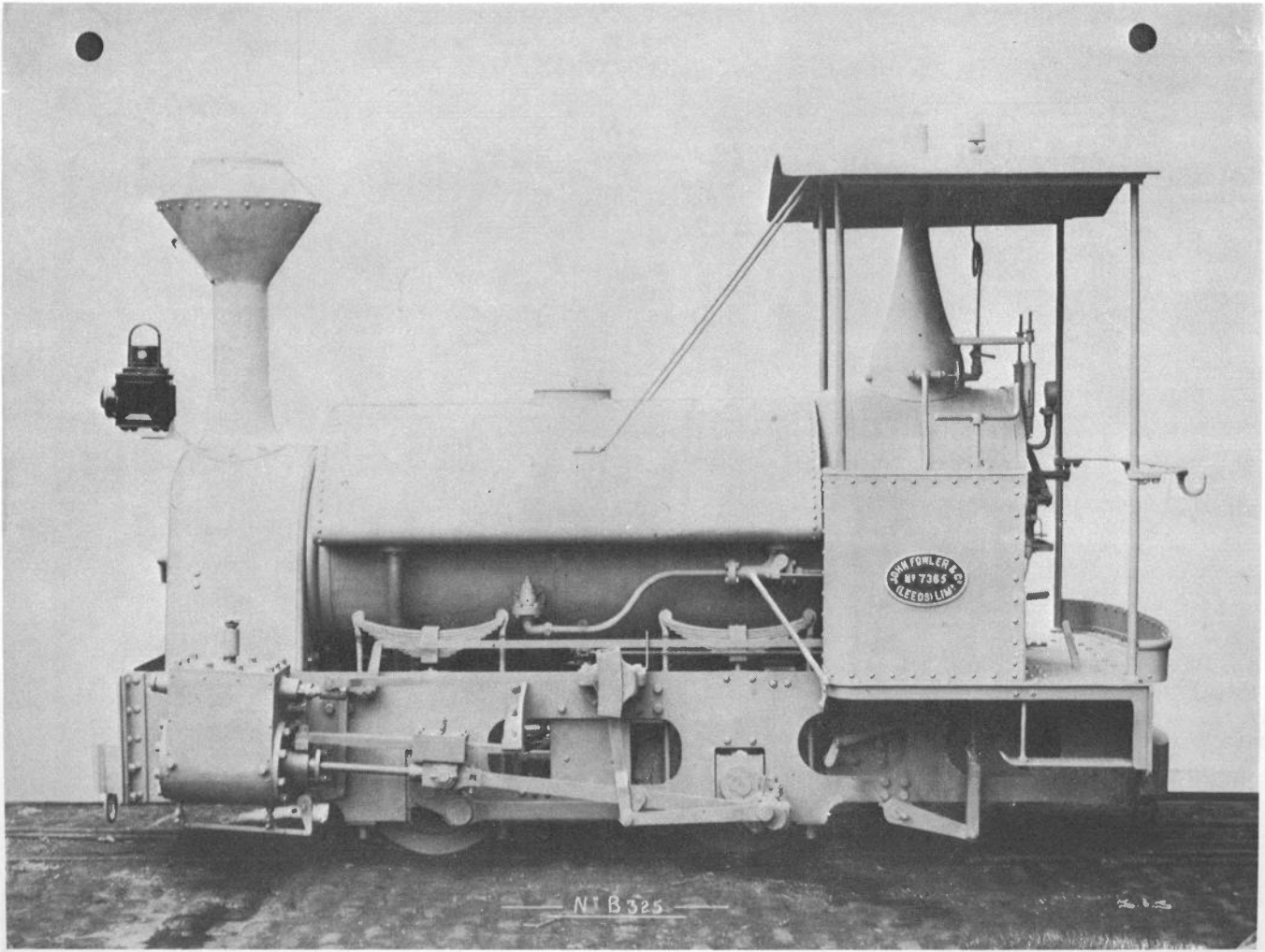
The plates on the fifth loco No. 11538 say:

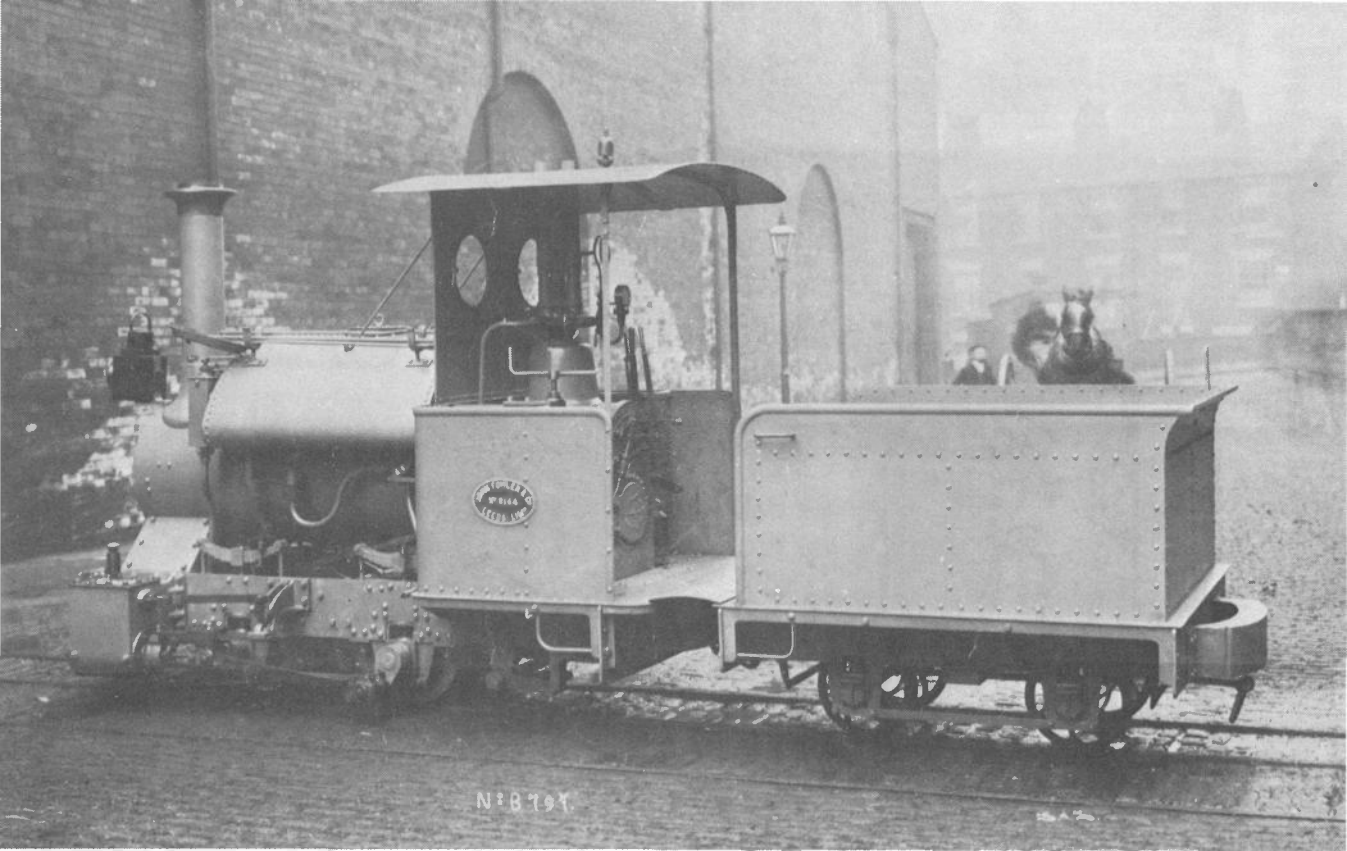
FERRO CARRIL DE LAS PALMAS
- LA MARGARITA II -
Hardy & Co. Proprietaros.

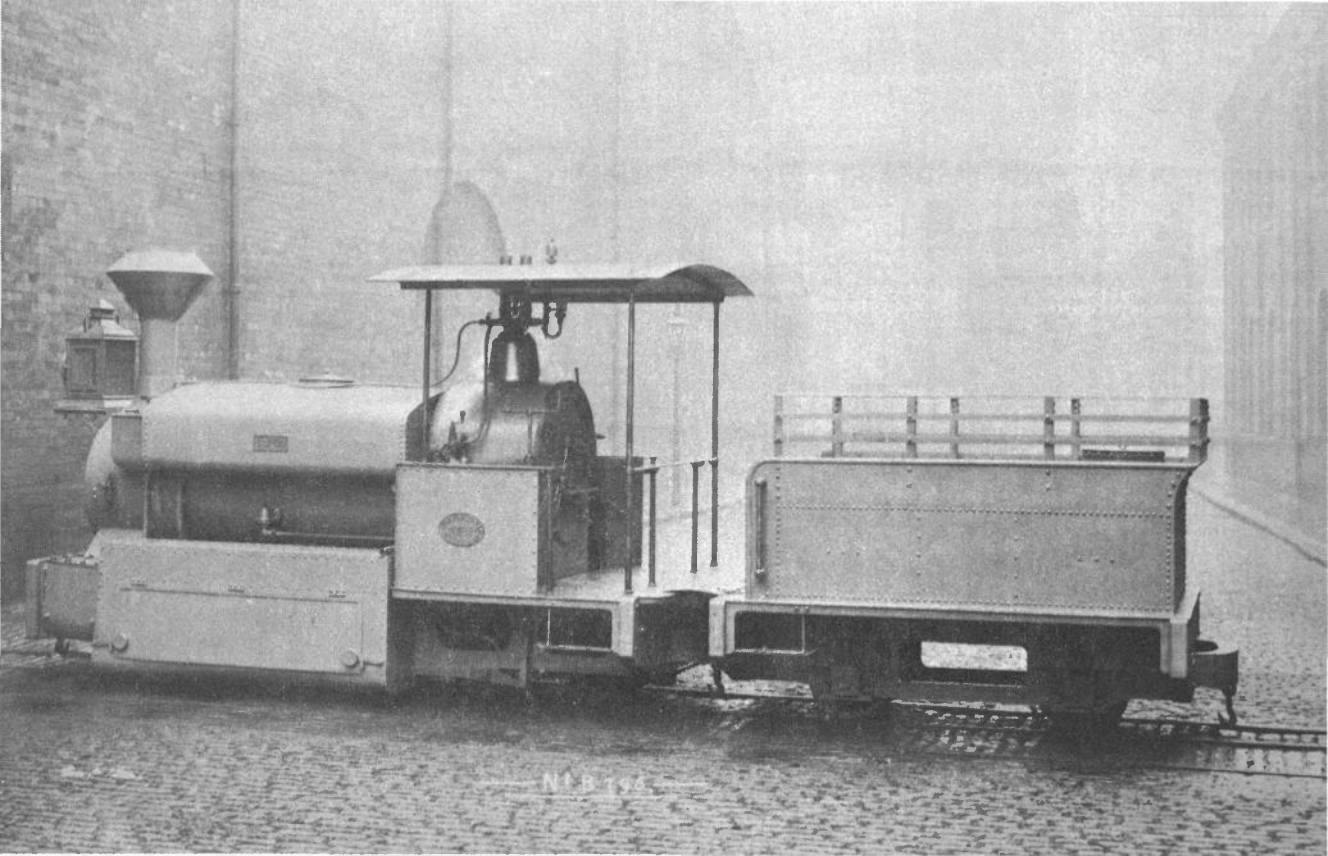
No. 1	0-4-0	Saddle Tank No. 7365.
2	0-4-0	" " & Tender No. 8144.
3	0-4-0	" " " No. 9789.
4	0-6-2	Side Tank No. 10992.
5	0-6-0	Tender loco No. 11538.
6	0-6-2	" " No. 11944 & 5.

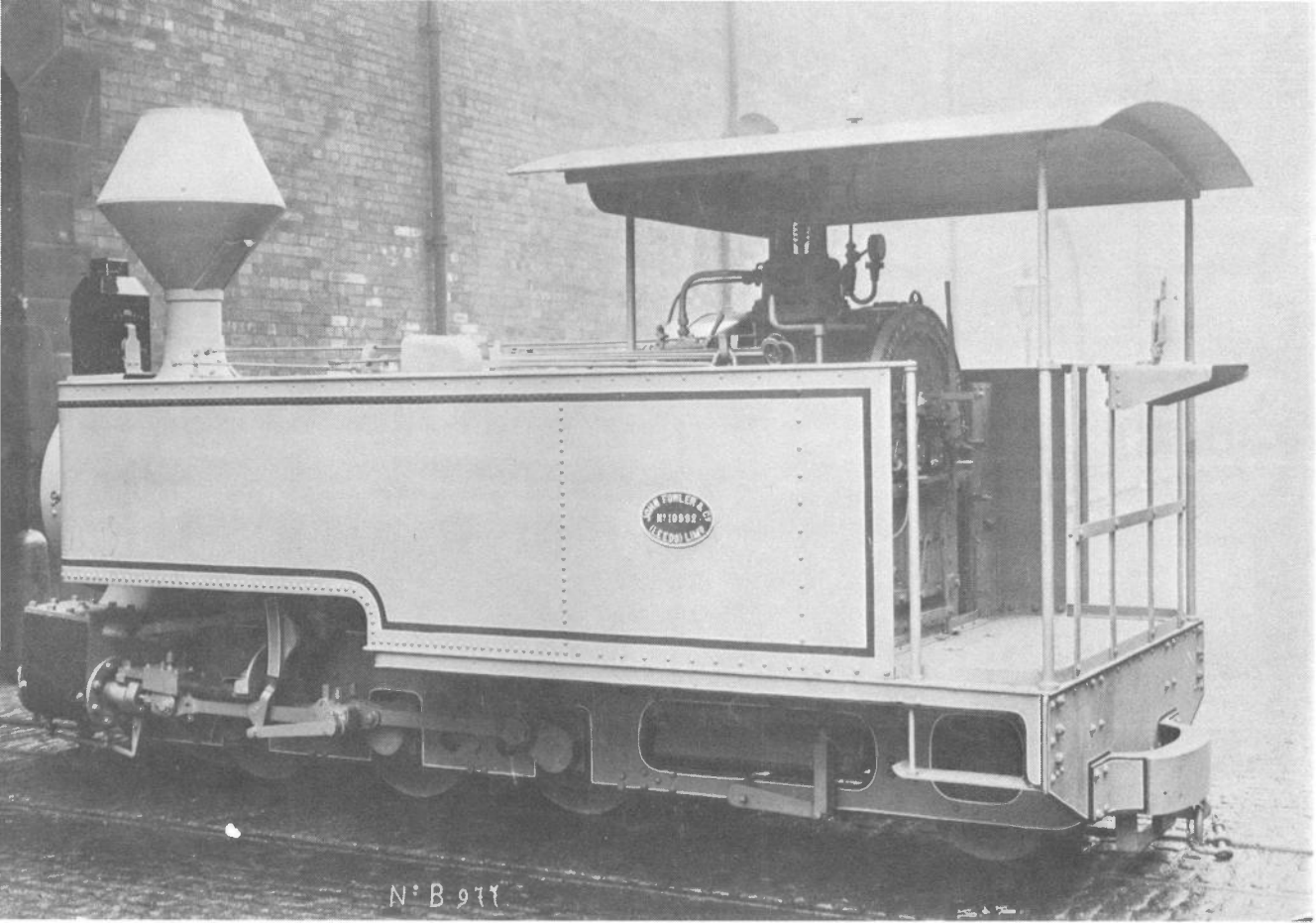
EDITOR'S NOTE

The Secretary of John Fowler Ltd., has given permission to reproduce the photographs but regrets the firm have no records available nowadays on their steam locomotives.

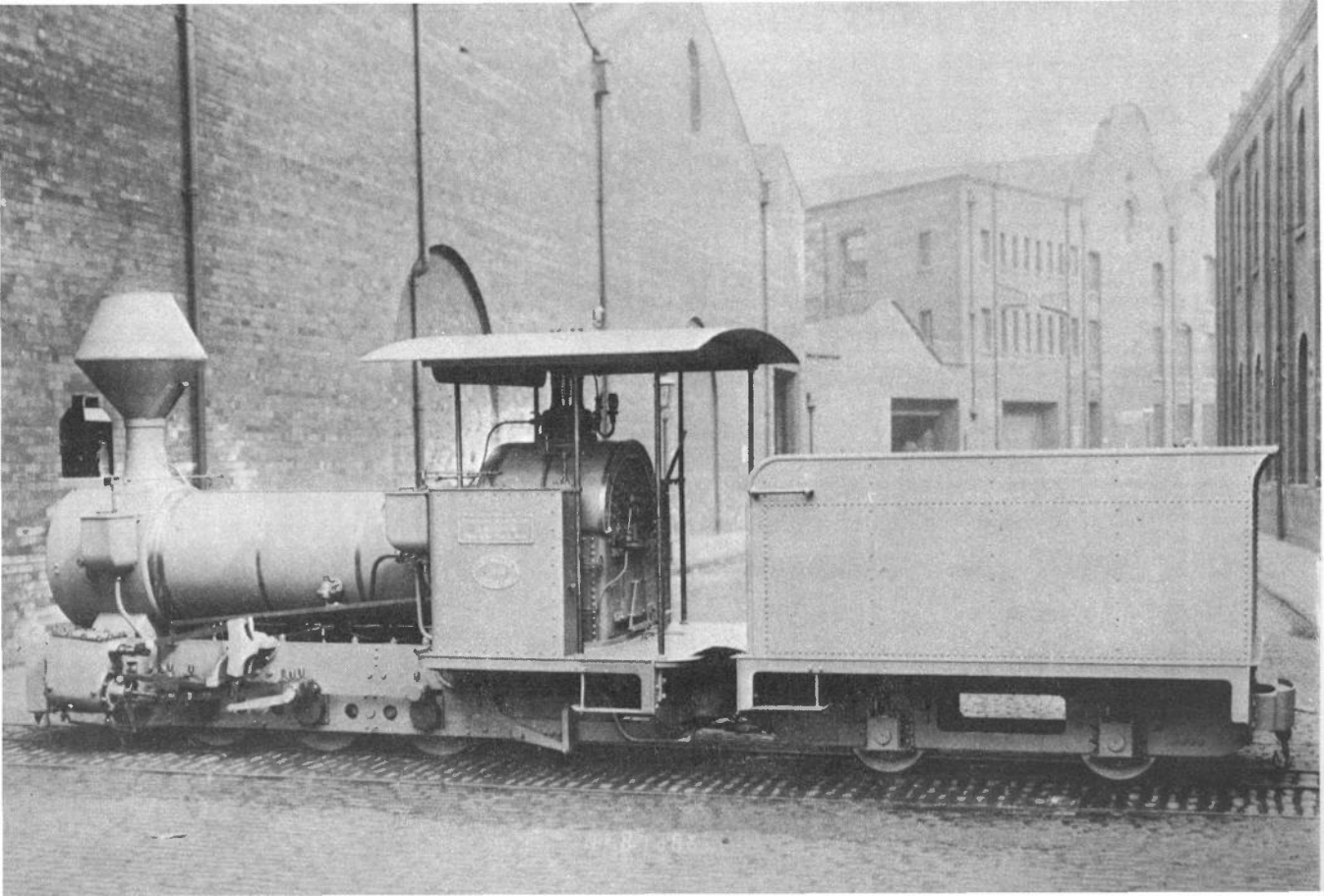

JOHN FOWLER & Co.
No 7365
(LEEDS) LTD.
N1 B325

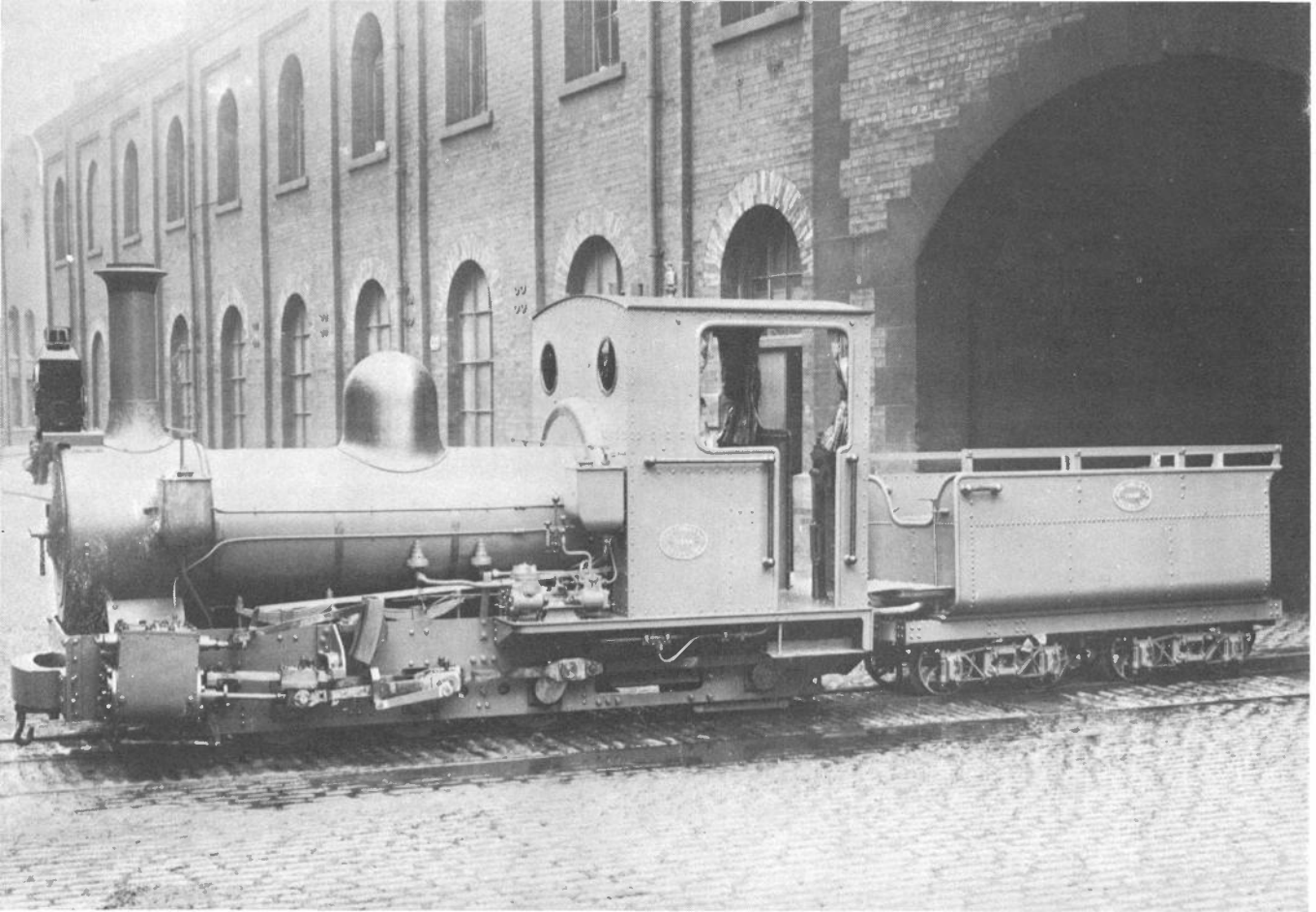

N°8791





N° B 977





'BURRA'

The third "No. 1" on the 2 foot gauge line of the Corrimal Coal and Coke Co., Corrimal, New South Wales, Australia.

Hawthorn Leslie & Co. 3574 of 1923.

In view of the great interest in Sydney's photo of "LITTLE YARRA" in No. 50 can someone fill us in on "BURRA" now.

To the Somme with the L.C.G.B.

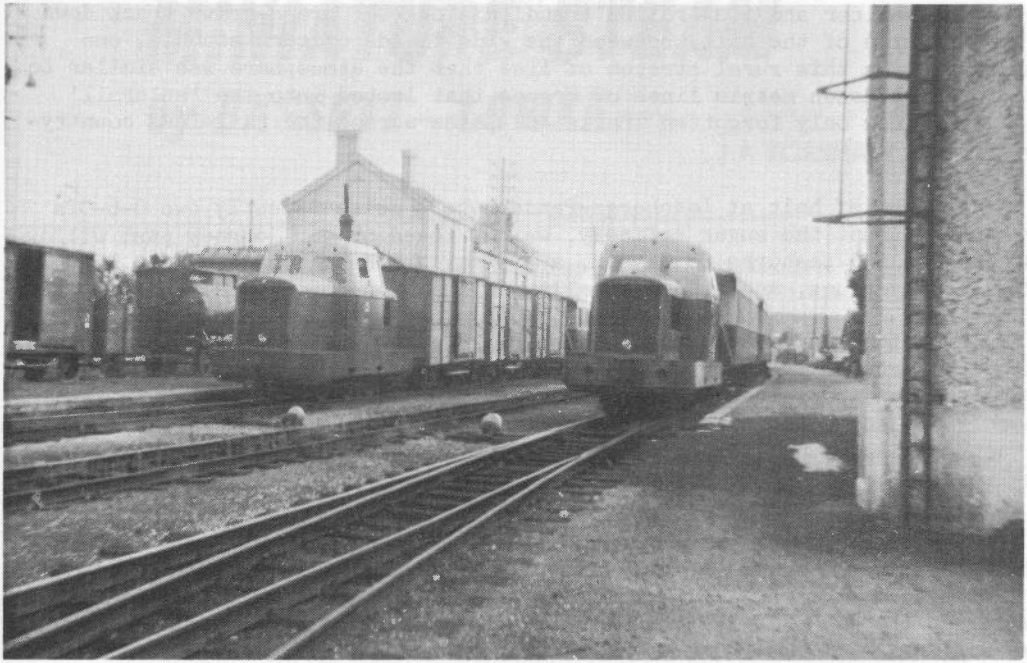
Peter Lemmey

On September 29th, 1968, the L.C.G.B. ran a rail tour to France, covering the line from Calais to Le Treport. Some of those on the tour left the main party at Noyelles-sur-Mer to travel on the metre-gauge Reseau de la Somme.

S.N.C.F. Pacific K82 whirled us over the Douns then along the coastal flats from Calais in fine style. Leaving the steam train at Noyelles, our narrow-gauge party crossed the main line to find the metric terminus beneath the trees behind the station buildings. Waiting there in the platform was our 'special' - ex V.F.I.L. bogie railcar M42 and a bogie coach 'trailer' - which was to take us to Cayeux, on the coast ten miles away. Both vehicles were painted in the latest cherry red/beige livery.

After the scene had been photographed, everyone climbed aboard, the line's "directeur" and daughter took their places in the cab with the driver, and the cavalcade moved out of the station. First joining the gauntletted mixed-gauge in the yard, then leaving the Le Crotoy branch diverging to the right, we soon rumbled round the left-hand curve, over the level-crossing with the N.40 road, then out onto the long embankment across the tidal pastures of the Somme estuary which leads towards St. Valery-sur-Somme. This long embankment was originally a trestle viaduct, and as we crossed it, standing on the rear balcony of the coach, one could watch the rails, buried in the grass, stretching away further and further behind us, as the clump of trees around Noyelles shrank into the distance.

In a short time, we were rounding the curve into St. Valery (Canal) station, where the line's depot is situated. A brief halt allowed us to inspect the three 0-6-0D tractors inside the depot, and the antique Verney railcar M-31 settling deeper into the long grass outside year by year. Rejoining the train, we were soon running out of the station onto the very sharp left-hand curve which leads onto the bridge across the Somme, from which we could look down onto the decks of the yachts and dinghies moored below in the harbour. Once over the bridge, we eased round another curve into St. Valery (Ville) station, then headed away between orchards and market gardens over the hill behind the town, passing a line of derelict locos in a field at the summit.




Noyelles-sur-Mer — Le Pont sur la Baie (1300 mètres)
Edition de l'Hôtel des Voyageurs

As the railcar and its trailer trundled along the grass-grown track down the western side of the hill, between the wide fields of corn stubble, one could imagine on this rural stretch of line that the atmosphere was similar to that of half-a-dozen metric lines of France that lasted into the 'autorail' era, but are now only forgotten tracks and paths across the rail-less countryside.

After a brief halt at Lancheres-Pende, where quite recently two 0-6-0Ts were kept to shunt the sugar refinery, we continued on our journey past willow-fringed dykes and pastures to Cayeux, a typical Northern French resort, with gnarled, salty pines, and sudden squalls off the Channel.

A quick look round at Cayeux, where railcar M40 waited in its shed before working the service train which was to follow ours back to the junction, then we rejoined our special and began our return journey, the railcar again leading. With only one stop, to inspect the derelict locos near St. Valery (these engines, now rusty almost beyond identification, came, I suspect, from the Aive-Rimeux-Beck line), we returned to Noyelles in 50 minutes.

As our steam special was late in returning to Noyelles from the Le Treport branch (because of partial engine failure, and also a party of enthusiasts who got left behind at Le Treport and had to hire a taxi to catch up), we were able to see the railcar arrivals from Le Crotoy and Cayeux flank our M42 in the Somme bay, while over the fence K Class Pacifics and R Class Mikados steamed past on the main line. Soon, however, 231K82 appeared up the line from Abbeville, and was soon rushing us back through an early evening of smoke and sunset along those super-elevated curves of the Calais line.

PHOTOGRAPHS

Two modern ex VFIL 0-6-0D at Noyelles with trains for Le Crotoy (left) and Cayeux (right), 1967.

Lower:- The viaduct between Noyelles and St. Valery (Canal) now replaced by an embankment. Postcard c.1907

MINIATURE STEAM
by BASSETT—LOWKE

J A FORSHAW

I was delighted to see the photographs of the two locos. on the Lilliputbahn, Lucerne in 'Narrow Gauge' No. 53. They are indeed superb scale models in every detail, even to replicas of the prototype Builder's Plate. They are not, however, 15" gauge as stated in NGG, but are built to correct $\frac{1}{4}$ scale gauge. The continental standard gauge of 1435 mm. would give a gauge of 358.75 mm. to be exact and I imagine 36 cm. would have been used in practice. A quarter of the British standard gauge would be $14\frac{1}{8}$" which is just under 36 cm. On a brief visit, I measured the Lucerne gauge as $14\frac{1}{4}$" (just over 36 cm.) but did not do it very carefully and may have chosen a 'wide' spot.

Incidentally, readers may not realise that these locos were built by the Brast brothers, who built and operate the whole railway - both gauges - and are real enthusiasts, as recently as 1963 (4-6-0) and 1966 (4-4-0).

The letter from Sydney Leleux was particularly welcome as I have been interested in the history of the Bassett-Lowke 'Atlantics' for about 12 years now, ever since I worked for a summer on the Lakeside Miniature Railway, and occasionally drove 'King George' and 'Princess Elizabeth'. The mention of an engine called 'Ville de Nancy' being supplied to an exhibition led me to look up an old issue of 'La Vie du Rail', No. 1041 of 10th April, 1966, in which there is a short article and two photographs describing the locos exhibited at the "Exposition de l'Est de la France" held at Nancy in 1909. One of these was a new Paris-Orleans 'Pacific' but the others were two Bassett-Lowke 'Atlantics' - one to 82 mm gauge ($3\frac{1}{2}$") and the other 380 mm gauge (15"; actually it should be 381 mm). The latter was obviously used on a line in the exhibition grounds. The two illustrations show this engine posed alongside the PO 'Pacific' (built by SACM) and hauling its train. The loco is clearly a Class 2 (as one would expect from the date) with bogie tender, and not a Class 3 as suggested by Mr. Vaughan. Another difference is that the name is given as 'Entente Cordiale' and the article states that "she bore the name on two engraved plates, following the outline of the wheel splashers." Perhaps the name was changed after arrival at the exhibition, or could it be that 'Ville de Nancy' was merely a reference to its destination?

The 15" gauge engine and train were awarded a Gold Medal, but the 1/17th model ($3\frac{1}{2}$" gauge), while a most faithful model of a Great Northern 'Atlantic' received only a silver medal.

This same article states that the engine 'Entente Cordiale' and train also operated at the 'Exposition internationale du Nord de la France' in 1911 at Roubaix, which is a few miles N.E. of Lille and almost on the Belgian border, together with 'Green Dragon' which bore on its tender sides the inscription 'London to Paris Express'. I think this probably explains the reference to an engine, 'Rue Baix', possibly going to Luxembourg and supports my theory about the name 'Ville de Nancy', above.

There are many gaps in our knowledge of these locomotives and a good deal of erroneus material has appeared in print in the last few years. At the risk of making confusion worse confounded, perhaps I may be allowed to stick my neck out and put down the results of a careful correlation of what has appeared in print, seasoned with the results of discussion and correspondence with certain persons far more knowledgeable in this matter than I am.

Although it is generally considered that the Bassett-Lowke 'Atlantics' were of three types, officially known as Class '10', Class '20', and Class '30', I would like to suggest that there is also a fourth type, which I will call Class '20A', though the engines involved may be no more than modified Class '20's' rather than having been built new as '20A'. The distinguishing features are that they have outside bearings to the trailing axle and a continuous splasher over the driving wheels, while retaining the narrow firebox. 'Prince Edward of Wales' (Fairbourne) and the two engines latterly at Southport are of this type.

I was rather surprised at Sydney Leleux's statement that the locomotives carried no number as Bassett-Lowke Works Nos. have been quoted, e.g. in NGN.57/7, and appear to be generally accepted, at least for some engines.

It is becoming more and more apparent that a good deal of re-naming went on. One interesting aspect of this is that new names were simply engraved on the 'back' of the original plates e.g. 'Red Dragon'/'Prince Edward of Wales' (Rhyl). It also seems likely that some apparently 'new' engines turned out at Northampton were not new at all but rebuilds. This could well explain my proposed Class '20A' - 'Prince Edward of Wales' (Fairbourne) is supposed to have been new in 1915, yet it seems rather unlikely that, having built two engines of Class '30' with wide firebox, B-L would revert to the earlier narrow firebox design.

Bearing in mind these points, I will now attempt to summarise briefly what I believe to be the history of the individual Bassett-Lowke 4-4-2's, including those listed by Sydney Leleux.

LITTLE GIANT ran trials at Eaton Hall en route from Northampton to Blackpool, when new. Said to have gone to Sutton Coldfield in early 1920's, but if so must have been there only a year or two as apparently worked on 'Sunny Vale M.R.' nr. Halifax from 1923 with name 'Baby Bunce' (NG 50, p.8). Preserved in 1964 by Mr. Tate. (Some sources suggest that this engine went to Halifax after only one season at Blackpool, becoming presumably 'Little Elephant' (see NG 50, p.7) and later 'Baby Bunce'.

MIGHTY ATOM. This engine is a bit of a mystery. I have not seen any other suggestion that she went to Rhyl before Mr. Leleux's. The Sutton Coldfield line is said to have opened in 1906 and I think it more likely she was the first engine there, when new. May well be the 'Little Giant' type said to be in store at T.G. Hunt, Oldbury.

RED DRAGON. New to White City exhibition, 1908. May have gone to other exhibitions. In 1911 went to Rhyl as Prince Edward of Wales, apparently new! Went to Dreamland Railway, Margate, possibly via Belle Vue, Manchester, in early 1920's and remained there until bought for preservation, 1969 (NGN 57/7). This is not the same engine as the Prince Edward of Wales that ran at Fairbourne.

GREEN DRAGON. New to White City exhibition 1908. Exhibition at Roubaix, northern France, 1911. Subsequent history apparently unknown but was almost certainly sent to one of the permanent lines as a 'new' engine under a different name - see below.

ENTENTE CORDIALE. To exhibition at Nancy France, 1909 - probably new but may have been Mighty Atom or Red Dragon renamed. I think this is almost certainly the engine referred to by Sydney Leleux as Ville de Nancy but doubt if she ever carried such a name - see first part of letter. Exhibition at Roubaix, northern France, 1911.

Subsequent history unknown but may have gone to one of the permanent lines under a new name - see below. She was a Class 20 engine.

KING GEORGE V. Believed to have been one of the original engines at Southport. Probably new in 1911 but may have been Green Dragon or Entente Cordiale renamed. Sold at sometime, probably about 1922, to Belle Vue, Manchester. May have worked on other 'Parkinson' lines, e.g. Southend, Yarmouth, etc. Discovered derelict at Belle Vue about 1965 and bought for private preservation (NGN 57/7).

PRINCE EDWARD OF WALES (II). New to Fairbourne in 1915. Class '20A' - differed from Class 20 proper in having outside bearing to trailing wheels under the cab and continuous splasher over driving wheels with single straight nameplate. To Southport in 1923 in exchange for Katie (whose nameplates were removed at Southport. The nameplate in the N.G. Museum at Towyn is not one of these). I think this engine almost certainly remained at Southport, in a modified state, until 1969 as either King George or Princess Elizabeth - probably the former. (It is possible that this engine was not new in 1915 - she may have been one of the earlier Class 20 engines, e.g. Entente Cordiale, much rebuilt but with original frames, wheels, etc., and perhaps original boiler).

DUKE OF YORK. Said to have been working at Southport with Prince Edward of Wales in 1923 and may be the engine said to have been assembled at Northampton 1920-22 from accumulated spares (NG.53). Class not known but if the foregoing suggestion is correct and if,

as I strongly suspect, this engine became Princess Elizabeth (see below) then she was a Class '20A'. (Some sources refer to Duke of York as having been one of the original engines supplied to Southport in 1911 in which case she would presumably have been a standard Class 20).

KING GEORGE. This is the name carried by one of the Southport engines, recently sold for preservation. The name has been carried since the late 1930s at least and the locomotive, though almost certainly a B-L product has been somewhat modified in appearance. It is said that a fire in 1938 destroyed the engines on this line but I suspect that probably the destruction was only superficial - to the sheet metalwork involved - and that it was in the course of rebuilding after this damage that the locos took on their present appearance and names (See also Princess Elizabeth below). In my opinion this loco is almost certainly Prince Edward of Wales from Fairbourne. She is certainly a Class '20A' engine.

PRINCESS ELIZABETH. The other Southport engine. Remarks under King George, above, about modifications, etc., apply to this engine also. It seems likely that this is the engine formerly named Duke of York - see above for suggested origin. She has a much longer smokebox than any other B-L 4-4-2 that I have seen but in other respects the boiler appears to be standard. When I worked on the railway in 1958 her boiler was in much better condition than that of King George and these two facts perhaps support the theory that she may be the engine said to have been built from spares in 1920-22, presumably with an Allchins boiler. Another possibility is that a new boiler was acquired after the fire in 1938 but I think this is unlikely.

SIR ALBERT STEPHENSON. The original 'ABC, Miniature Railways', published by Ian Allan Ltd., some years ago, gives this as the name of one of the engines at Southport in 1938. It could have been Duke of York renamed but I doubt it. I have never seen any other reference to this name.

BERT WYNNE. The reference in NG. 53 to this name is the first I have seen and I have never previously seen any suggestion that a Class 30 engine went to Rhyl; if it is correct then it knocks on the head the idea that only three Class 30 engines were built. 'Bert Wynne' sounds a rather unlikely name for a locomotive; to me it sounds more like the name of a buyer, perhaps a showman.

UN-NAMED ENGINE. The suggestion that a Class 30 Atlantic was built for the King of Siam is a new one also as far as I am concerned. It would certainly be interesting to know what happened to it.

PRINCE OLAF. Said to have been sent in 1912 to the Luna Park Railway, Geneva, possibly with some other name. Certainly ran on an exhibition line at Oslo. To Ravenglass and Eskdale Railway, 1915 and renamed Sans Pareil. Withdrawn from service 1926 and said to have been scrapped about 1927.

SYNOLDA. New to Sand Hutton Railway. Sold 1922 to unknown buyer but soon resold to Parkinson and sent to Belle Vue, Manchester. Said to have subsequently gone to Southend and been scrapped there in 1939 or soon after. On the other hand there is still a Class 30 engine at Belle Vue, named Prince Charles, which seems almost certainly to be Synolda. So it would appear she either never went to Southend or was not scrapped but returned to Belle Vue. (Is it conceivable that Sans Pareil was not scrapped at Ravenglass but went to Southend instead, to be finally scrapped in 1939?)

COUNT LOUIS. New to Count Louis Zborowski for his private railway at Highams, Kent. (Has been suggested that she was not a new engine but was in fact Synolda, but I think this is unlikely). Sold in 1925 to Fairbourne Railway, possibly via Bassett-Lowke as agents. Still at Fairbourne. (May have been un-named when owned by Zborowski).

So far as I know, the foregoing covers all the 4-4-2 engines built by Bassett-Lowke but there may have been others. We shall probably never know for certain exactly how many of these engines were built nor all the details of the history of each one, but it is interesting to speculate on the basis of the information available. It seems fairly certain that only one of the original Class 10 was built and most authorities now seem to agree that only three Class 30 engines were built, - at least for service in this country - but there is much less certainty when it comes to the Class 20 (and 20A). The maximum number of lines in operation simultaneously, using B-L engines, before the introduction of the Class 30 seems to have been reached in 1911. In this year the evidence suggests that there were at least six lines working, including the one at the exhibition at Roubaix. The latter had two engines, apparently, and allowing for 'Little Giant' herself, there must have been at least six Class 20 engines in service if all the lines were in operation at once - and this only allows for each of the other lines having one engine. On the other hand the number of Class 20 engines could have been as low as three (plus two Class 20A) if not all lines were in actual use at the same time in 1911. If this were the case it would mean that all the Bassett-Lowke 4-4-2s ever built, except for Sans Pareil, are still in existence!

In Table 1, I have given the building dates or probable dates and works numbers where known, together with the sequence of names borne by each engine (doubtful names or permutations in brackets). Table 2 gives details of engines known to be still in existence.

I hope that the information given will be of interest to readers; though I am sure not everyone will agree with all that I have said. If it clears up a few misconceptions and stimulates further discussion and research in this fascinating subject, I shall be well satisfied.

Details overleaf.

TABLE 1.

WORKS No.	YEAR BUILT	CLASS	NAME(S)
10?	1905	10	Little Giant/(Little Elephant)/Baby Bunce/ Little Giant.
	1906?	20	Mighty Atom/(King George V)
15	1908	20	Red Dragon/(Entente Cordiale)/Prince Edward of Wales (Rhyl).
	1908	20	Green Dragon/(King George V).
	1909?	20	Entente Cordiale/(King George V) or (Duke of York) or (Prince Edward of Wales (Fairbourne), after rebuilding).
	1911	20	King George V
	1911?	20	(Little Elephant)
	1911?	20	(Duke of York)
22	1915	20A	Prince Edward of Wales (Fairbourne)/ King George.
	1920-22?	20A	(Duke of York)/Princess Elizabeth
31*	1912	30	(?) /Prince Olaf/Sans Pareil
	1912	30	Synolda/(Prince Charles)
	1923	30	Count Louis

*This is the number given by Davies in the 'Ravenglass & Eskdale Railway' but a photograph at Ravenglass shows the engine with a works plate carrying the number 14.

TABLE 2.

ORIGINAL NAME	PRESENT NAME	CLASS	PRESENT OWNER OR LOCATION
Little Giant	Little Giant	10	Mr. Tate, Gateshead.
Red Dragon	Prince Edward of Wales (Rhyl)	20	R. Butterell & J. Milner. (see NGN 57/7).
?	King George V	20	Ditto (ditto)
Mighty Atom	?	20	T.G. Hunt, Oldbury (see NGN 62/9)
Prince Edward of Wales (F'bourne)?	King George	20A	A.B. Mason (NGN 59/8&9).
Duke of York?	Princess Elizabeth	20A	M. Bamford (NGN 63/7).
?	?	?	Mr. Goldberg (see NGN 61/7).
Synolda?	Prince Charles	30	Belle Vue, Manchester.
	Count Louis	30	Fairbourne.