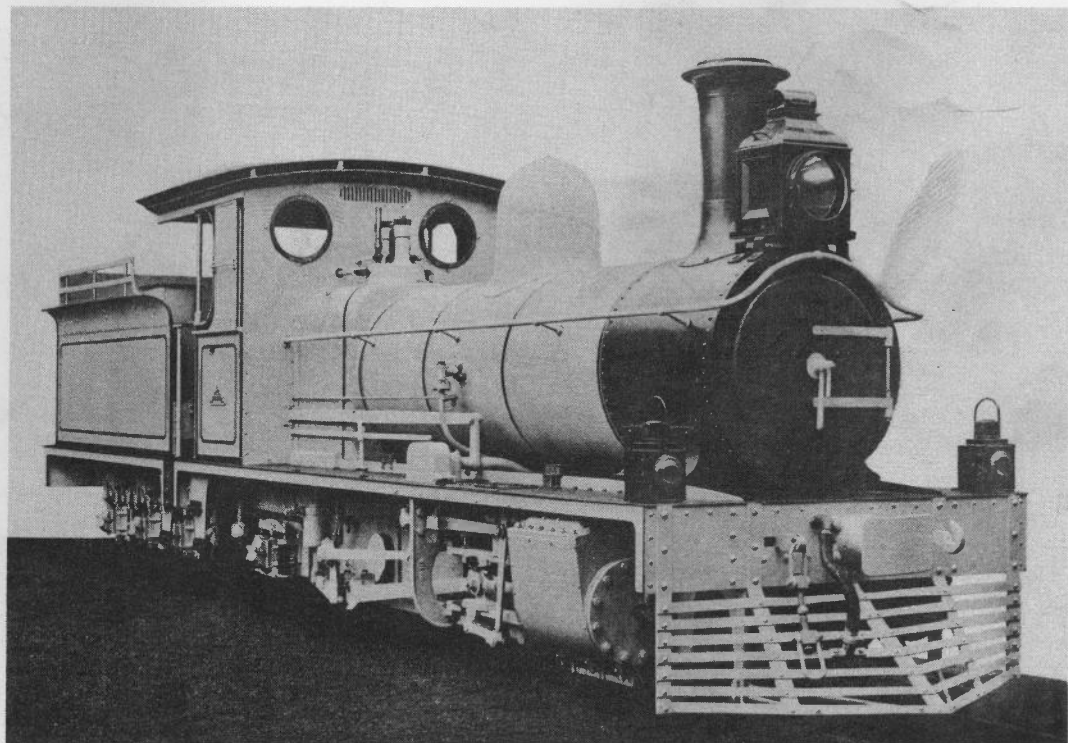


THE NARROW GAUGE



THE NARROW GAUGE RAILWAY SOCIETY

No. 51 • JULY 1969

THE NARROW GAUGE RAILWAY SOCIETY

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Editorial

Little room for Editorial this month in view of the stacks of mail received after No. 50. May I mentioned two points, spare time being VERY valuable I do not normally acknowledge letters or articles unless they include original irreplaceable photographs, or a SAE. I hope my correspondents will understand this (we want an eight day week with seven day weekends).

Secondly our stock of DRAWINGS is seriously depleted after No. 50 and any help in this direction would be gladly accepted, if possible with a write up and photographs on the subject selected.

My thanks for the many kind comments on No. 50, it has given me a lot of encouragement to carry on with the job, my Editorial Policy seems to be acceptable to most of you.

Best wishes.

Henry Holdsworth.

Cover Photo

NASMYTH WILSON & CO., MANCHESTER. 2'5½" gauge 0-6-2 tender locomotive for the Corporation of Western Egypt. Cyls. 14" x 20". Wheels 2'0½" bogie and tender, 3'0" driving. Total length 36'8". Height 10'4". Width 7'6". Weight 38 ton 13 cwt.

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* 4 EXTRA
PAGES
THIS No.

LETTERS to the EDITOR

From The Ravenglass & Eskdale RPS Journal.

.....The arrival of the NGRS Jubilee Issue has prompted these few words, this is always a wonderful publication but No. 50 is superb.....besides the excellent magazine the Society produces a Newsletter, the latest edition runs to 20 sides of foolscap and reports on 57 narrow gauge railways..... We are so impressed with the quality of the Society's publications that we are pleased to draw our members attention to this Society's activities..... (Many thanks indeed. H.H.)

From Ken Plant, Sheffield.

.....a nice issue with plenty of good steamy photographs.....I would question that EVERY loco builder in Germany contributed to the total of 0-8-0 Feldbahns, I reckon there were over 20 builders in 1915.....Listowel & Ballybunion Railway, in 1932 Hunslet received an order for replacement tubes for a boiler "taken off an old single rail loco" and these were supplied to J. M. Slattery, Bacon Curers, Tralee..... p.s. I notice nine of the contributions were from Yorkshire Tykes.

From Howard Coulson, Brabant, Belgium.

.....Congratulations on No. 50, since I cannot attend meetings I read every word in Narrow Gauge and the Newsheets..... Mr. Webb mentions "Alice" as the last industrial NG diesel electric but I believe a Ruston remains at John Howard & Co. on Anglesey..... Did you know a 2-2-2 tender loco of 1842 built to 115 cm gauge is preserved in the Museum in the Gare du Nord, Bruxelles, this may be one of the oldest NG locos in existence today. They ran on a 49 Km. line from Brussels until it was converted to standard gauge in 1890.

From Maurice Billington, Nuneaton.

.....Congratulations to all concerned with No. 50, a truly bumper issue of our constantly improving magazine..... the Hudswell & Hunslet articles were really appreciated, may we have more? Ivan, Ken and Trevor's articles were interesting and the latter amusing, truly we have a grand team of "Staff Writers"

To the Editor and all who have contributed in the past to the success of the mag. I say THANK YOU and let us keep up the good work.....

From Pete Nicholson, Epsom.

.....Its a pity we have to wait another 12 years before another magazine of No. 50 size.....

From John Townsend, Hereford.

.....indeed you may count this as an unsolicited testimonial for the Jubilee issue and use it accordingly.....a tremendous issue of which the Society can be proud. I found the proportion of pages devoted to British and Foreign systems shared 50-50 a perfect balance and one which gave me much pleasure and interest.

From John Forsham, Kyle.

.....The magazine is a great credit to all concerned particularly in view of the specialised interest of the Society.

Editor's Note

We must also remember the help we receive from our friends the Printer (Allanwood Press of Stanningley), our Typists (Enid Taylor of Harrogate), and our Platemakers who do exceedingly well to reproduce some of the old photos we pass over to them. Its still a TEAM effort and we can't publish material unless you write it, draw it, or photograph it for us!!

From H. T. Caffyns, Birmingham.

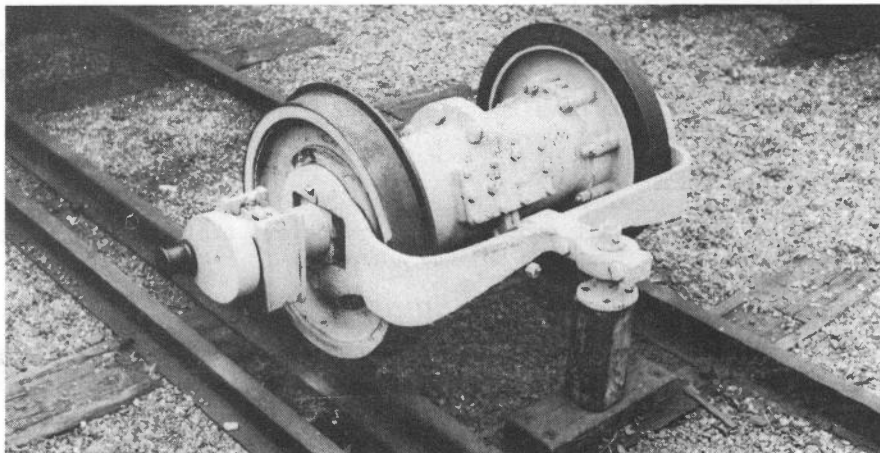
The remarks for Gordon Hatherill on Rough Pup being such a 'rare bird' are somewhat surprising as I know of no less than 34 Hunslets of this basic 0-4-0 ST design existing in the U.K. today, more than any other design. Does Pup differ from the others perhaps?

From M. J. Cruttenden, Haywards Heath.

.....The similarity between the flexible wheelbase of the Feldbahn and the Heywood Duffield Bank arrangement which is almost identical, Heywood never patented the design but went to a lot of trouble to publicise his work so perhaps there is a connection somewhere..... Thank you once again for a very interesting Journal.....

Editor's Notebook.

A photograph taken in April 69 at the Dutch Railway Museum at Utrecht showing what we believe to be a Feldbahn truck arrangement.



From Roger Marsh, Coventry.

LETTERS to the EDITOR

// Tinkerbell //

Although a miniature I think my loco is sufficiently narrow gauge to warrant inclusion in these pages. The track gauge is $7\frac{1}{4}$ " and the scale half full size. The engine is fitted with Heywood valve gear, which I have never seen used on a model before. Why I do not know as its construction only took two evenings which seems a pretty good recommendation to me.

Other "Heywoodisms" include rubber springing, lever hand brake, variable blast pipe and marine boiler.

I also have two Heywood type wagons with lift off bodies. At present these are on a contracting job outside Worcester. The tub in the picture is ex-John Knowles re-gauged.

Photo by Ken Blackham.

Engine details:

Length over buffer beams	63".	Width $26\frac{1}{2}$ ".	Height 45".
Cylinders	$2\frac{1}{2}$ " x 4".		
Wheels - driving	$8\frac{1}{2}$ "	trailing $5\frac{1}{2}$ ".	
Wheel - base fixed	$17\frac{1}{2}$ ".		
Wheelbase total	$41\frac{1}{2}$ ".		
Boiler - $12\frac{1}{2}$ " O.D. x 24" with 48 tubes $\frac{5}{8}$ " O.D.			
Fire box - 8" dia. x 13" long. Grate 8" x 11".			
Weight about 7 cwt.			



I was very interested to see, in Mag. No. 48, Mr. M. Pitts' letter and photograph of the short 2'6" railway on the island of Yell, as I spent 12 months in Shetland during 1940-41, when serving with the Royal Engineers.

Stationed in Lerwick, with a detachment at Sumburgh, our job was mainly working on construction of camp sites, the airfield and, later, some of the island roads.

To get the necessary stone, we worked several quarries, mostly very small. The main one, known as "Turntable Quarry", was situated some miles out of Lerwick, near the junction of "North" and "South" roads, and we had the usual portable Air Compressor and pneumatic drills, but, at first, no means of moving "waste", etc., from the working face.

After a short time, however, our O.C. procured some 2'0" gauge steel portable track, and two or three "Jubilee" tippers, of German origin. I think this equipment had formerly been used in the chromate workings which had once operated in other parts of the island.

I suppose we had about 50-60 yards of track, and the metals normally ran parallel to the quarry face. Sections were removed, as necessary, when blasting was being carried out. A short branch led out of the quarry, across the nearby roadway, and terminated just after, at the edge of a bank, over which all the "spoil" was tipped. The rails over the actual roadway were, of course, removed at the end of each day's work. When in position, they were flanked on each side (and between the rails) by planks, for the benefit of local road traffic - which was not very frequent, luckily. The gradient was slightly in favour of loaded "skips" and, once on the move, they could not be stopped until across the road.

One of the local 'buses was a venerable Ford "Tonner" ("T" Model, of course) - not noteworthy for its speed - the makers' indeed, recommended "Not more than 15 m.p.h.", in their descriptive leaflet!

On one occasion, it gave us rather a thrill, for it hove in sight just as two of us had got a full "skip" nicely moving towards the tip! It was impossible for us to stop, and it seemed inevitable that we should catch the 'bus "amidship" - but "Henry" just managed to lurch over the track a split second before us, and we shot past his rear panels with mere inches to spare! I don't think the driver ever realised how near he'd been to disaster - but had our "Jubilee" hit the 'bus it would have knocked it about pretty considerably - possibly off the road altogether.

Operation of this very short line - plus some "gen" on the Lister Rail Truck - made me have thoughts about a possible 2'0" gauge "Shetland Light Rly.", but after studying the terrain, scattered habitations, and likely paucity of traffic, I came to the conclusion that such a line would never be built. Not even in "00" gauge!

I reckon "The Mag." is the most consistently interesting railway periodical that comes my way, and I look forward to each successive issue. The drawings alone are a treat, let alone the wide variety of separate articles (and letters!).

LETTERS to the EDITOR

From Sydney Moir, Transvaal, South Africa.

The pictures and captions I supplied on "Midget Malletts" (No. 49) brought a comment in a letter from one of my correspondents. Jeff Lanham wrote:

"The two photos of Mallett tank and tender engines are very interesting, since they are both of the same class of loco. The French Government had quite a lot of the Decauville-built 0-6-6-0 Malletts originally built for the C.F. de Militaire du Maroc, though a few were believed used on the Western Front during the first World War. The tank loco was modified most likely by the Tramway Toury-Pitheviers, after purchase about 1920. It is most unlikely that the Military carried out the modification. The T.T.P. went so far as turning the standard Baldwin-built 4-6-OT into tender engines by mounting the tanks on a bogie wagon in order to reduce the axle load."

As I have seen pictures of the British-built 4-6-OT of W.W.I. at work in the 20's on a 'potato' railway in the Argentine after a similar conversion, it could then possibly have been a common dodge on the part of new owners. Have any of the readers something to add to this, in the way of pictures, diagrams or data?

Jeff then went on to refer to "Ephraim's Solution", chiding me over my ignorance, for he claims that there is a three-truck 67 ton Shay of the Oregon Lumber Co. in existence still. His next statement really shook me, for quite apart from saying that Shays were working until recently on the 2'6" gauge in Formosa, he calmly announced that the Insular Lumber Co. of the Phillipines is reputed to have built a 3'6" gauge Shay in its own shops...since W.W.II.

Once again, does anyone know anything about this loco? Maybe, if the information is forthcoming, we can stretch a point about the gauge (which is that of the South African Railways mainlines) and see the details published in the magazine.

From Mr. R. Goss, Portmadoc.

.....I find the magazine very readable but not big enough.....!!! ???..... I enclose a leaflet on the RC & BT (see back cover) a preservation line in Colorado using Shays and Climax locomotives, a spectacular wooden trestle crosses the line in a spiral between the trees, perhaps some American friend can fill us in with photos and details of the stock.

Regarding Mr. Behn's query on the Mexican No. 2 Mallet (No. 50) a friend reports a similar loco on the Cripple Creek and Victor NG Railway, Colorado, stored when seen last Autumn it seemed in good order, but painted blue with gold motion!! A Porter side tank and one carriage runs the service at the moment, again information would be appreciated. Our friend fired the Porter for the local radio station Disc Jockey driver, he was astonished that the loco was blowing off, apparently its not the done thing out there.

From Andrew Wilson, Nottingham.

LETTERS to the EDITOR

A Unique Lister.

Mr. Terence Boddy of M.E. Engineering Ltd. has given us some further details of Lister 52971, as supplied to J. and J. Dyson Ltd. in 1962.

"The length over buffers is 8'9", wheelbase 3'3", height 5'0". The cab has a well floor, the clutch and throttle are operated by hand levers and the brake column is a special short one. The engine is a Lister type SL, 3 cylinder air cooled diesel developing about 14 horsepower, and equipped with electric starter. An exhaust conditioner and electric lights are also provided."

The locomotive is therefore non-standard in several respects - normally Lister cabs stand 6'6½" high and the footplate is level with the top of the frame but in this case the reduced height and well footplate have necessitated rearranged controls. The low seating position is unsuitable for the use of the normal foot pedal controls so the clutch and throttle are operated by hand levers instead. The overall length is 5½" greater than standard and the wheelbase 9" longer, doubtless owing to the rearranged footplate.

The use of locomotives in fireclay mines is subject to the provisions of the Coal and Other Mines (Locomotives) Order, 1956, and one of these regulations requires a cab roof to be provided (with a vertical clearance of one foot, from the top of the tunnel) on locomotives which can work on any tracks where there is insufficient room for the driver to stand upright on the footplate. Other regulations forbid the emission of flame or sparks and require the exhaust to be cooled and diluted. Standards are laid down for the composition of the exhaust gases. (Thus, Doug's "crab-eyed gremlin" driver would have been breaking the law in several ways if operating as suggested, and the loco could hardly have been obtained for use at the Wheatsheaf Mine unless the idea was to reorganise the underground transport facilities very considerably).

Curiously, these regulations only apply to mines of coal, shale, stratified ironstone or fireclay, so that locomotives may be (and are) used underground in the winning of other minerals free of special restrictions.

From Don Boreham, Northolt.

.....how much I appreciate the continued high quality of "The N.G.", and you have surpassed yourself with this issue. I look forward to every issue with keenest pleasure and this time I finished reading it with a good deal of admiration for an excellent job well done.

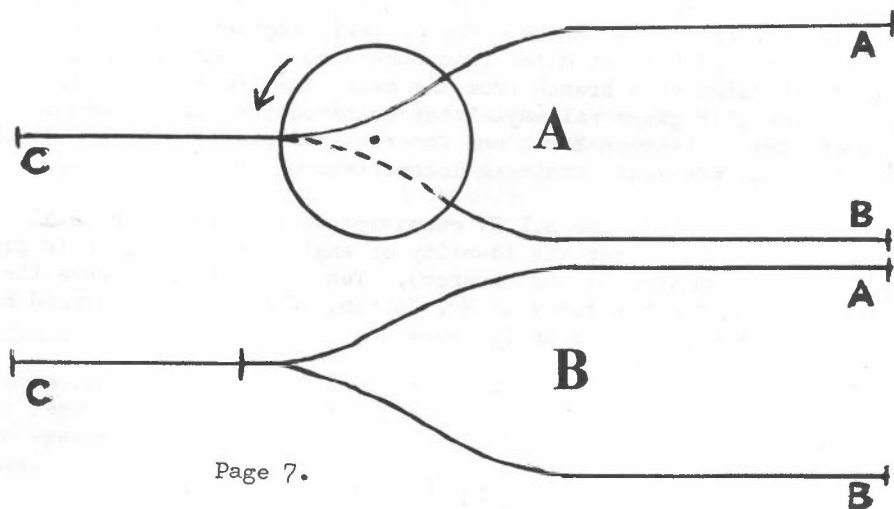
I was sorry to see the otherwise excellent notes on the Listowel and Ballyunion line marred by the old slander that shunting was slow because the turntable arrangement used to shunt rolling-stock into sidings could carry only the loco and a single coach or wagon.

This is a complete fallacy; the assumption that this curved mechanism was a turntable is completely mistaken. It was merely the monorail equivalent of a point and was never turned with stock on it (this is why the normal turntable circle of rail was not used here), and a glance at the accompanying diagram should make this clear. Figures A and B represent the same track formation, A being a Lartigue monorail and B normal track.

Taking B first, to shunt a train from (a) to (b) all you do is to run it to (c) then back to (b), changing the point between movements. So it should cause no surprise to learn that the monorail, fig. A., does the same. The train at (a) is shunted to (c), then the point is reversed - by turning the "turntable" so that it takes up the position shown in the dotted line - and the train is shunted back to (b). It's as simple as that! So don't believe those who tell you that monorail shunting was very involved and slow. The monorail had many disadvantages; but slow shunting was not one of them.

Having said this I should add that the line did have turntables - straight ones. There were two, one at each end of the line and their purpose was the usual one of turning the locomotives. Do not confuse these with the curved ones (which are confusingly called turntables only for want of a more accurate term) which, let me repeat, were never, never used for turning stock, and were merely the equivalent of points - and you wouldn't move a point under a train, would you? Well, then!!

I hope that some modellers will take advantage of Adrian Garner's excellent drawings to model this ugly but fascinating line. The original drawings produced by Adrian are to 16 mm. scale and I am using these myself to produce a model. I'll let you have a photo of it when finished - in about 18 months' time. This is not an easy model to make but I find the problems involved quite fascinating and entirely different from those which face the modeller of any "duorail".



THE BAUCHI LIGHT RAILWAY

Some further notes by Arthur G. Wells.

The 2'6" gauge Bauchi Light Railway, mentioned in 'The Narrow Gauge', issue No. 50, was opened in 1912. It was not the first railway of that gauge in Nigeria, however, as a line of the same gauge had been opened in 1901 between Zungeru and Wushishi, on the right bank of the River Kaduna. This line was known as the Wushishi Tramway. It was later extended downstream to Bari-Juko. At that time, communication between Zungeru, the capital of the province, and the rest of the world was by means of the tramway to Wushishi or Bari-Juko and thence by river.

In 1910 the new 3'6" gauge line of the Lagos Government Railway through Zungeru was opened. This provided continuous rail connection to the sea, by way of Jebba and Ibadan to Lagos, and the Wushishi Tramway became redundant. It was therefore closed, and the rails and equipment sent to Zaria for use on the Bauchi Light Railway, then under construction. The stock included two locomotives.

The Lagos Government Railway became part of the Nigerian Railway in 1912.

The Bauchi Light Railway was opened from Zaria to Bukuru in stages between 1912 and 1914, a total of 143 miles. The two W.T. engines were used in its construction. In 1927 the ten miles from Bukuru to Jos were widened to 3'6" gauge, as an extension of a branch from the main line from Kuru. Further extensions of the 3'6" gauge railways later rendered the B.L.R. redundant. The last passenger trains between Zaria and Jos ran in September, 1957, and the line was demolished, and the last remaining locomotives withdrawn, in 1960.

According to my notes, the B.L.R. owned 15 locomotives (or possibly 16 - I have conflicting notes about the identity of engine No. 1, and it is possible that there were two engines of that number). Ten of the engines were the 0-6-2 tender locomotives mentioned by Mr. Halton. Some of them carried names. My version of the stock list is as follows:

BLR1	O-6-2T	Hunslet	789	1902	
BLR2	"	"	787	"	
3	O-6-OT	"	1413	1921	
4	"	"	1414	"	
5	"	"	1415	"	
51	O-6-2	Kitson	4849	1911	MADAIKI
52	"	"	4850	"	GALADIMA
53	"	"	4851	"	MAGAJI
54	"	"	4852	"	WOMBA
55	"	"	5035	1913	NARAGUTA
56	O-6-2	"	5131	1914	
57	"	"	5326	1921	MADAIKI
58	"	"	5327	"	
59	"	"	5328	"	
60	"	"	5329	"	

However, in an article in 'The Railway Magazine' for July, 1964, Mr. G.S. Moore states that No. 1 was O-6-OT, Hunslet 762 of 1901, formerly of the Wushishi Tramway. It became No. 55 on the B.L.R., but was renumbered 1 about 1916, and withdrawn in July, 1924. It is "now preserved under a canopy at Minna station".

No. 2 was the second W.T. engine. It was renumbered 56 on the B.L.R., but reverted to No. 2 in 1916, and withdrawn in July, 1924.

It would appear that, for a few years, the numbers 55 and 56 were each carried by two different engines. Perhaps some reader could elucidate, and at the same time throw some light on the apparent double identity of engine No. 1?

O-6-2 No. 57 acquired the name plates from No. 51 after that engine was withdrawn in November, 1940.

Nos. 3-5 and 51-60 were all withdrawn at various dates between 1940 and 1960.

Although the B.L.R. stock was Nigerian Railway property, and lettered "N R" on the tenders, the engines were always numbered in a completely separate list, in the same way as the Southern Railway numbered its Isle of Wight engines separately. In most cases the numbers carried by B.L.R. engines were duplicated on 3'6" gauge N.R. locomotives.

Editor's Note

John Forsham of Kyle also commented as above and colour photos which we cannot reproduce from C. J. Tallents, Brighton show No. 4 O-6-OT and the O-6-2 No. 56 preserved at Jos along with various old road vehicles and traction engines.

PIEL & WALNEY GRAVEL Co. Ltd.

DUMB BUFFERS AND CORRUGATED IRON

By Peter Holmes.

The Walney gravel pit of the Piel and Walney Sand and Gravel Co. Ltd.

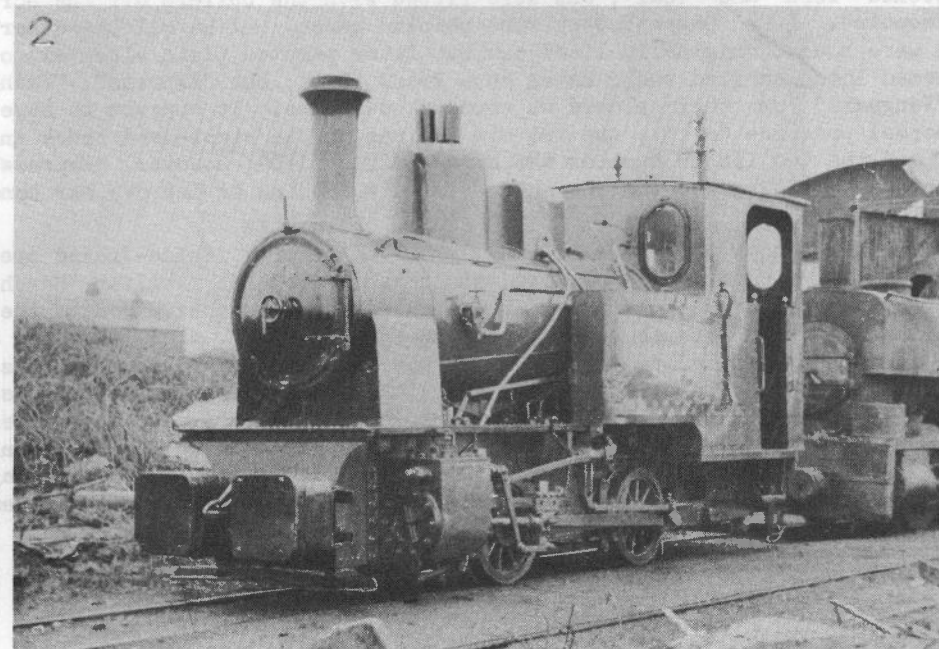
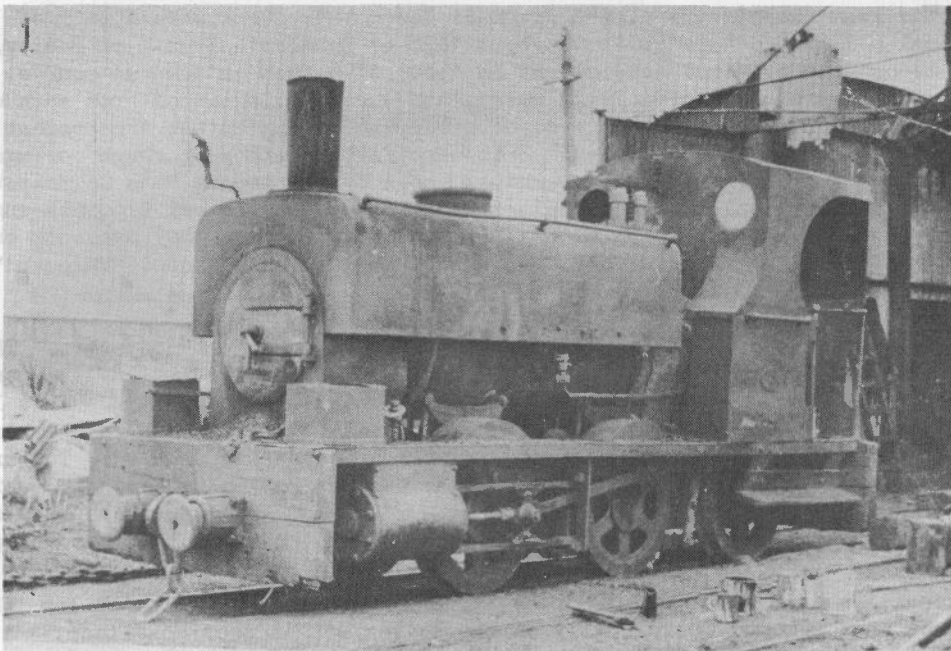
The 3 ft. gauge railway at the Walney gravel pits was originally built in about 1880, to serve the Barrow salt works. Although large deposits of salt lie beneath Walney, the Company found itself unable to compete with the Cheshire salt interests. As a result, the salt extraction plant was removed at about the time of the First World War, and a new firm, the Piel and Walney Sand and Gravel Co. Ltd., was formed. It appears that a certain amount of gravel was worked under Salt Co. ownership, as the 25" map of 1913 shows both gravel pit and salt plant.

The railway was about half a mile long, from pit to pier. It began at a dead-end in the pit, and ran for a distance on a bank between old flooded workings. The line passed behind a row of workmens' cottages, and turned sharply to the left, across the road to Walney lighthouse. The single track then branched to form a group of sidings. A double track, later singled, continued from the sidings onto the pier. A siding trailed in from the left from the engine shed, which in salt works days was a three-road structure near the pier. This shed was later replaced by a two-road one further south. A large balloon loop, apparently used for turning vehicles, was lifted in about 1930.

The track, of 3 ft. gauge throughout, initially consisted of double-headed rail of about 50 lb. per yard, chaired to wooden sleepers. This was gradually replaced by flat-bottom rail of various weights, spiked down. At the closure of the railway in 1963, a few short lengths of chaired rail were still in use, mainly on the pier. The points were operated by weighted levers supplied by White of Widnes, although in later years a few home-made levers were used.

There were in all, eight locomotives on the railway, not at the same time however. Probably the first of these was "Vanguard", a small 0-4-OST with outside cylinders, built at some unknown date by Falcon or Hughes of Loughborough. Since "Vanguard" was scrapped at the relatively early date of 1923, one can assume that it was worn out before the others, through being the first. Although scrapped in 1923, the frames and a few odd bits and pieces lay around until about 1960.

"Vanguard" was followed in 1886 by "Express", a Grant Ritchie 0-6-OST of typical Kilmarnock design, with square tank and "piano" cab with front bunkers and shunter's steps. "Express" was the main working loco until 1903, when "Wadham" was supplied, again by Grant Ritchie of Kilmarnock. The two Grant Ritchie locos, known as the "big engines" were substantially similar, except that "Wadham" had a larger cab than "Express", with a flush front.



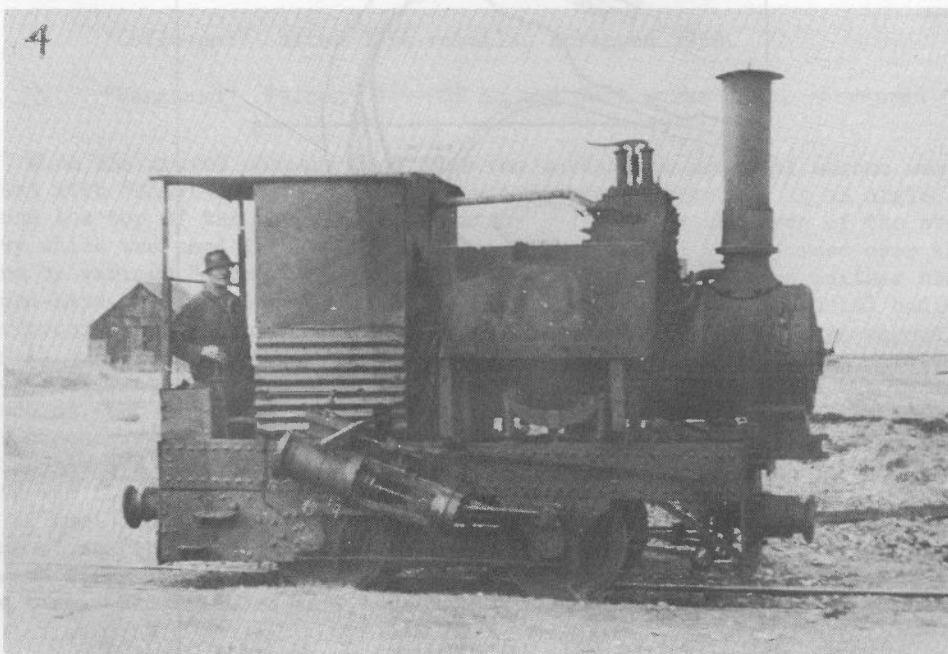
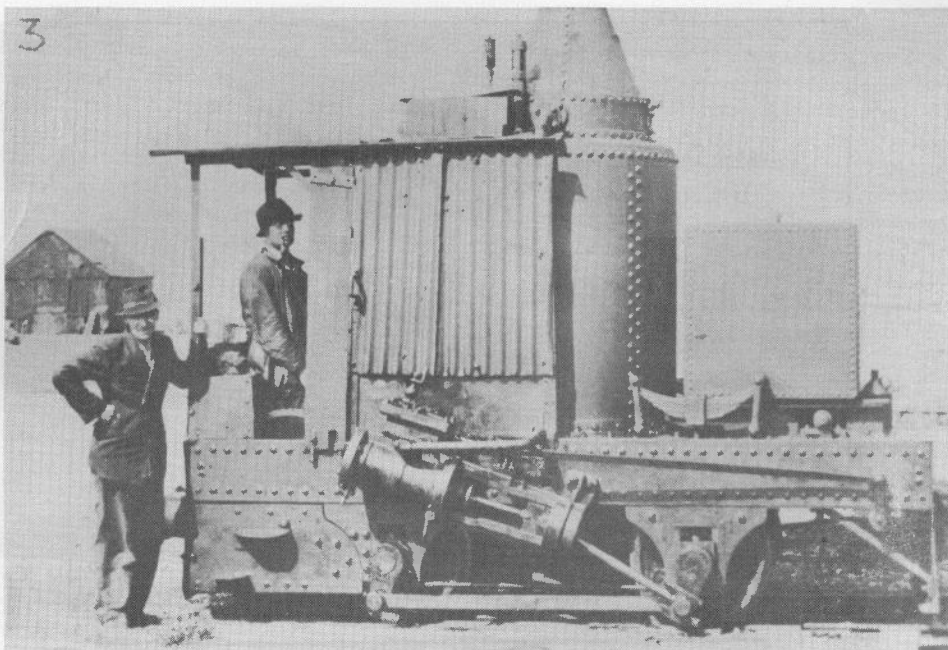
In 1950, shortly after the death of "John" and the "College", two
 Hudson Clark diesels were obtained second-hand from Rayburn Garage, York,
 Manchester, to which they had been supplied now in December 1950. These were
 christened "John" and "Lion", and were fitted with the engines and
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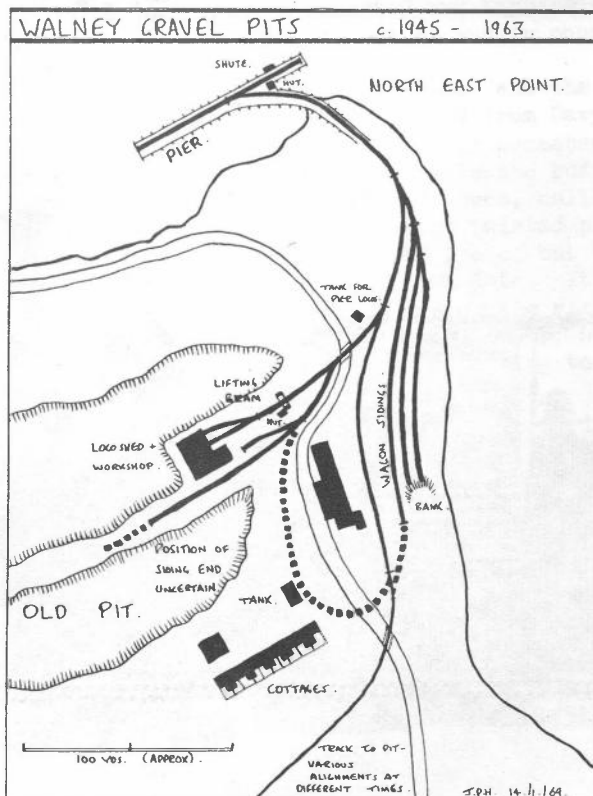
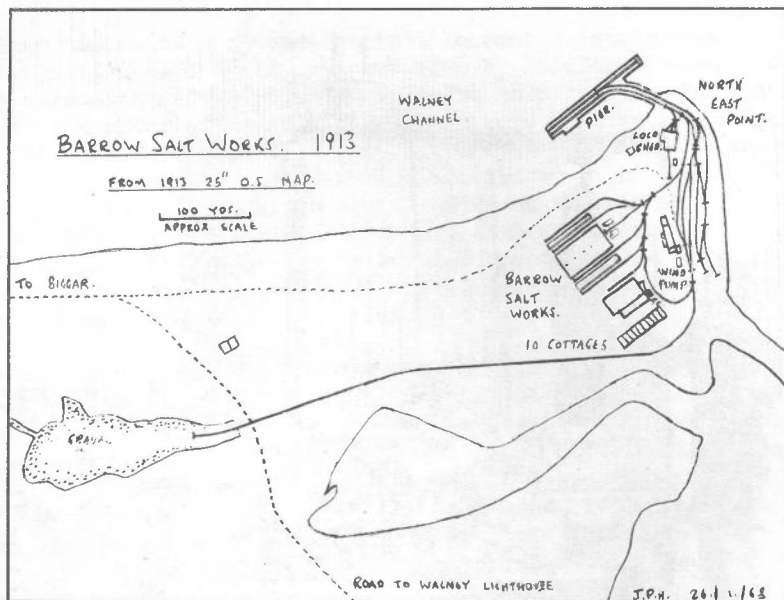
The last two members of the original locomotive stock were a pair of vertical-boilered O-4-Os built in about 1876 by Balmforth Bros., of Rodley. Both locos were obtained second-hand in about 1896 from an unknown source. These locos were never officially named, and were distinguished from each other by minor detail differences, the major difference being in the arrangement of the steam pipes to the cylinders. Both were fitted with very rough corrugated iron cabs, and were, inevitably perhaps, known by the men as "the Coffeepots". In 1956, the original vertical boilers were replaced by normal traction engine boilers, which gave the locos a very strange appearance as they overhung the front bufferbeam by about a foot. All the original locos except "Vanguard" had small sprung side buffers.

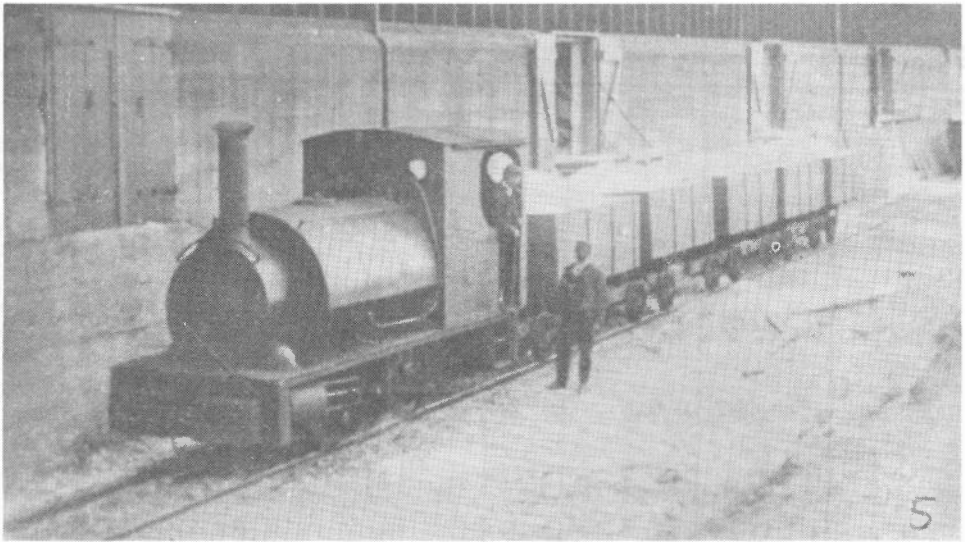
In 1958, the opportunity was taken to purchase another locomotive. This was an Orenstein and Koppel O-4-OWT of typical OK design, built in 1930, and carrying the name "Vyrnwy". It was renamed "Gannet" in about 1959. This loco had previously worked with Balfour Beatty and Co. Ltd., North Burray, Orkneys; Lehan Mackenzie and Shand, Orkneys; and J. C. Staton and Co. Ltd., Tutbury, Staffordshire. "Gannet" was used as the main loco, replacing "Wadham", which was banished, together with the "Coffeepots", to a siding near the engine shed, all three being scrapped in 1959. It seems strange that "Wadham" was scrapped and not "Express", as the former was in much better condition and had had a boiler renewal in about the 1930s. "Express" was kept as a standby for "Gannet" and was only steamed occasionally as the boiler was in poor condition.

In 1959, shortly after the demise of "Wadham" and the "Coffeepots", two Hudswell Clarke diesels were obtained second-hand from Davyhulme Sewage Works, Manchester, to which they had been supplied new in December 1934. These were christened "Tern" and "Teal", and were fitted with the buffers off the scrapped "Coffeepots". Like "Gannet" they were painted green, unlike all the other locos which were black, originally lined out but later painted plain black all over. The named locos carried their names on a brass plate, but "Express", "Wadham" and "Vanguard" lost their plates at some unknown date. It appears to have been the normal practice to have the two big engines on the right-hand track in the shed, and the two little ones on the other. After 1959, however, "Express" was left on a siding outside the shed which did nothing to improve her condition.

The wagon stock consisted originally of about forty inside-framed opens, tipping to one side only and of five tons capacity, of the familiar "Manchester Ship Canal" or "contractors" type. The inside frames were extended at the ends to form small dumb buffers, and the wheels, of 1 ft. 9 in. diameter, were at three foot wheelbase. The overall length was eight feet, and coupling was by the usual hook-and-three-links. The wheel patterns varied - most were discs with five or six holes, while a few had about six curly spokes. The bodies tipped by means of curved trunnions on the underside, rocking on cast-iron tipping blocks on the chassis. The door on one side consisted, on most wagons, of two sections which were hinged independently and locked by a catch at each end. These wagons were numbered on small metal plates on the frame.







Photographs

- 1 "Express" Grant Ritchie O-6-OST 164/86. Scrapped 1963.
- 2 "Vyrnwy" OK O-4-OWT 12242/30. Scrapped 1963.
- 3 "Coffeepot" (e. 1876) taken 1950.
- 4 "Coffeepot" after 1956 rebuild, scrapped 1959.
- 5 "Vanguard" Falcon O-4-OST in the Salt works days. Scrapped 1923.

When the gravel company took over the works, the original wagons were fitted with "shirt-necks", which were wooden boards arranged at an angle around the top of the body, to catch stray gravel from the grab of the steam navvy which was used for loading. The original wagons were joined over the years by various "oddment" wagons obtained from various places, either new or second-hand. These were all of the M.S.C. type, and a few had metal bodies as opposed to the usual pitch-pine ones. In addition to the above wagons, and a small number of home-made ones, there were about twenty u-shaped side-tippers which came from Davyhulme with the diesels in 1959. These could tip in either direction, but were very rarely used owing to their limited capacity and the poor discharge qualities of the u-shaped body. They were never fitted with "shirt-necks". During the later years of the railway, a small maintenance bogie was flung together on a spare pair of wheels. Many wagons lay out of use or semi-dismantled, and a few chassis were used for transporting grabs and items of machinery to and from the pit. The maximum number of wagons owned was between fifty and sixty, although these were probably not all railworthy at the same time. Repairs were carried out in a workshop adjoining the loco shed.

Locomotives:

<u>Name</u>	<u>Type</u>	<u>Maker</u>	<u>Date</u>	<u>No.</u>	<u>Cyls/H.P.</u>	<u>Date Scr.</u>	<u>Remarks</u>
VANGUARD	O-4-OST	Falcon	?	?	o.c.	1923	No further information.
EXPRESS	O-6-OST	Grant-Ritchie	1886	164	o.c. about 8" x 14"	1963	Delivered new.
WADHAM	O-6-OST	Grant-Ritchie	1903	435	o.c. about 9" x 16"	1959	As above.
GANNET	O-4-OWT	O & K.	1930	12242	o.c. about 9" x 16"	1963	Various former owners.
	O-4-OVB	Balmforth	1876	?	o.c. 8" x 14"	1959	Former owner unknown.
	O-4-OVB	Balmforth	1876	?	o.c. about 8" x 14"	1959	Former owner unknown.
TERN	4w D	Hudswell Clarke	1934	D584	40 h.p.	1963	Former owner - see text.
TEAL	4w D	Hudswell Clarke	1934	D585	40 h.p.	1963	As above.

All locos ran chimney-first to the pier, in order to keep the crown sheets covered when running up the steep incline out of the pit. In the case of the "Coffee pots", "forwards" is assumed to mean tank-first, (see photograph). The balloon loop on the old layout was probably used for turning wagons rather than engines, so that they could tip either way when two boats were in, one on each side of the pier.

The normal method of operation was to have one of the "big engines" at the pit with about eight wagons (carrying about forty tons of gravel), the loading being carried out by a steam navvy. The loaded wagons were taken as far as the wagon sidings, where one of the smaller engines took over and pulled the train onto the pier. This change of engines was necessary, because "Express" and "Wadham" could not traverse the sharp curve leading onto the pier. The small engine would then reverse its train onto the small "spur pier", pushing all the wagons past the shute. The wagons were then pulled back one by one, and tipped into the hold of the ship. If the gravel was good, it would slide right out, but if it was sticky, digging would have to be resorted to, and this would greatly slow down the loading of the ship.

Each time a train arrived on the pier, a long chain was threaded through eyes on the wagon bodies and attached to the pier decking at each end, to prevent the wagon bodies rocking right off the chassis. Apparently this happened occasionally, despite the chain. One or two trains were kept ready-loaded on the sidings, so that the loading of a ship could be maintained when good gravel was proving hard to find, or when the pit track was being slewed across to a new working face. No doubt many of these wagons sported a good head of grass by the time they eventually got unloaded!

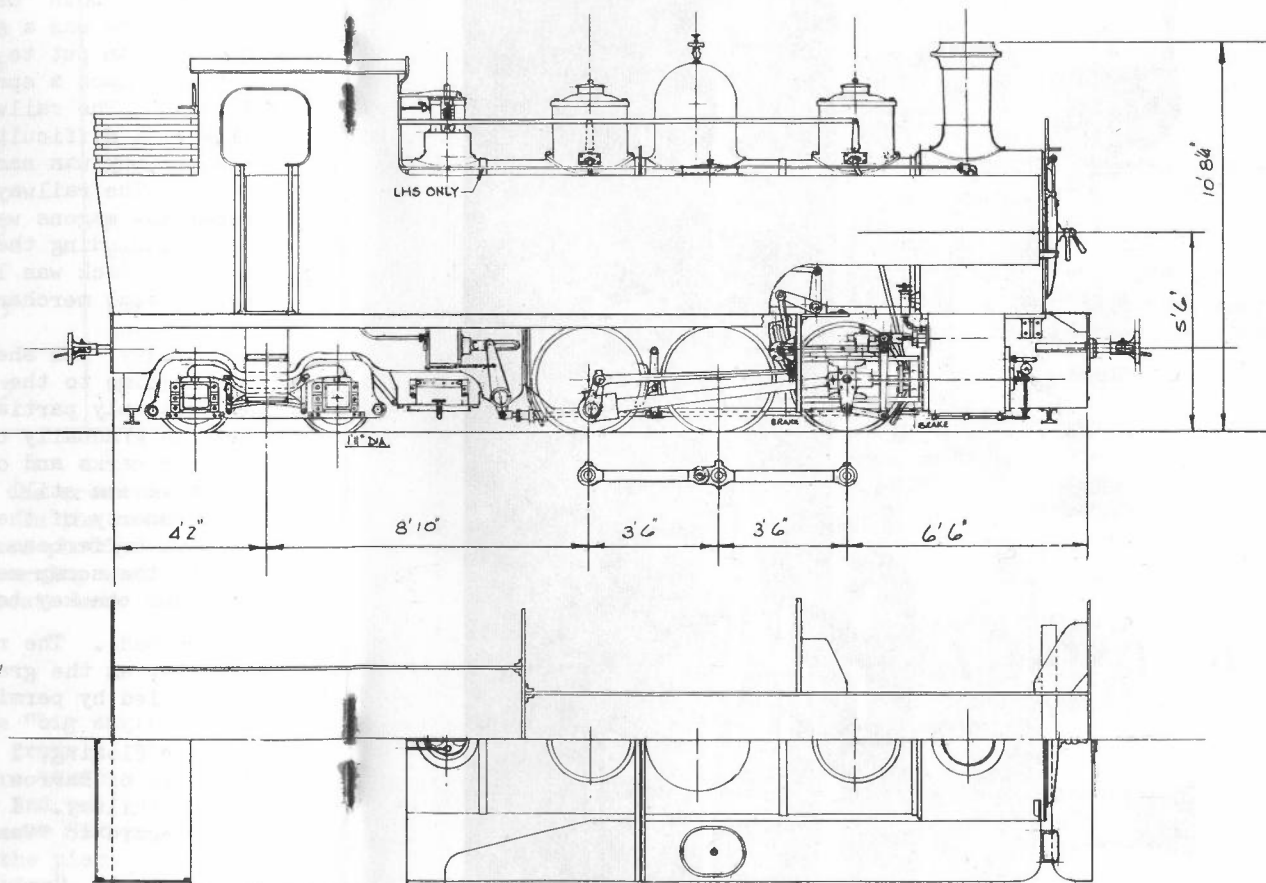
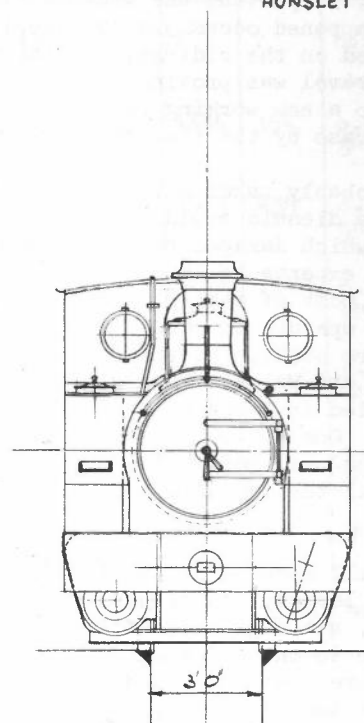
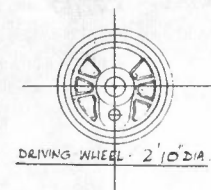
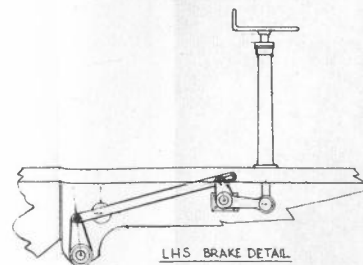
After 1959, trains were probably taken straight onto the pier by the same engine, as both "Gannet" and the diesels could traverse the curve. About this time, there was a severe storm which damaged the pier considerably and the company was put to considerable expense to have it repaired. By 1962, "Express" was very much a spare loco, and most of the train working was done by the diesels. The railway ceased to operate in late 1962 when the company got into financial difficulties. The firm sold up to the Roose Gravel Co. Ltd., and the new company was named the Roose and Walney Gravel Co. Ltd., which still operates today. The railway was dismantled in March - April 1963, and the locos and remaining wagons were scrapped. One or two bits and pieces off "Gannet" were sold, including the injectors, and the nameplates were kept by the company. All the track was lifted, and all the ironwork was removed by some very thorough scrap metal merchant.

Today, the shed area is still much as it was in 1962, although the course of the line to the pit has been largely obliterated by new workings. The loco shed is only partially standing, although the lifting beam still exists. The pier is gradually collapsing due to the absence of the rails to hold it together. Sleeper marks and old sleepers are plentiful, and a few small bits of rail and point levers still exist. About twenty wagon frames lie around, these being the property of the bird warden, who is gradually chopping them up for firewood. The two bufferbeams off "Express" still survive, as being wooden they were no use to the scrap merchant. These bufferbeams have been measured up and have provided the key to certain measurements of "Express", in due course a drawing may be made. The remains of the line will probably stay in this state for quite a while, as the gravel pit is situated within a seabird reserve and access is controlled by permits.

In closing, I would like to thank Messrs. W. Shepherd, W. Lauderdale, and H. Leece of Barrow for lending me the photographs and answering my questions on the railway. I may in due course carry out some more research, especially with regard to "Vanguard" and the early history of the "Coffee pots".

O-6-AT. No3

HUNSLET 1027/10.



WIDTH OVER LAB 7'8 1/2"

CYLS - STROKE 1'3"

CYLS - DIA. 1'6"

CYL. CENTRES 4'11"

WIDTH OVER FOOTPLATE 7'9"

COUPLER HEIGHT 2'3 1/2"

NOTE:- WHISTLE POSITION AS SHOWN ON PLAN: NO WHISTLE SHOWN ON WORKS PHOTOGRAPH.

FOR KISHTIM - SOLOMONOVSK RAILWAY

RUSSIA

(8 OF THIS TYPE BUILT 1910-1916)

RUS. I.



Drawn P. Heltan 1/65.



SOME OF THE NARROW GAUGE LOCOMOTIVES OF HUNSLET ENGINE CO. LTD.

Geoffrey Horsman

Photos by courtesy of Hunslet Engine Co.

Part 2

PART II. (Continued from page 61, Mag. No. 50).

- Photo 10. "KVR No. 108" Works No. 729 of 1901.
KELANI VALLEY RAILWAY, CEYLON GOV'T. RAILWAYS. Despatched 29.3.01.
11½" x 18" OC. 2'6" gauge. (One of the batch was used to film
"Bridge on the River Kwai").
- Photo 11. "NATAL No. 2" Works No. 893 of 1906.
NATAL NARROW GAUGE, ESTCOURT to WEENEN RAILWAY No. 2. 2' gauge.
11½" x 18" OC. The second of two 4-6-2T built for the opening of
this railway 9.3.06.
- Photo 12. "EVA" Works No. 904 of 1906.
HOWRAH AMTA LIGHT RAILWAY No. 17. 8½" x 14" OC. 2' gauge.
Supplied to T.A. MARTIN & CO., Calcutta, agents for the railway,
this is one of their E class locomotive, latest examples being
supplied as recently as 1955.
- Photo 13. "NONUS" No. 992 of 1909.
GROBY GRANITE CO. LTD. 8" x 10" OC. 2' gauge. Official photo-
graph is works grey without plates.
- Photo 14. "KELANI" No. 1082 of 1912.
KELANI VALLEY, CEYLON. Despatched 14.2.1912. 14" x 20" OC.
2'6" gauge. Weight 46 ton 15 cwt. in working order.

||—————||



HUNSLET 1027/1910

Drawing — Peter Halton

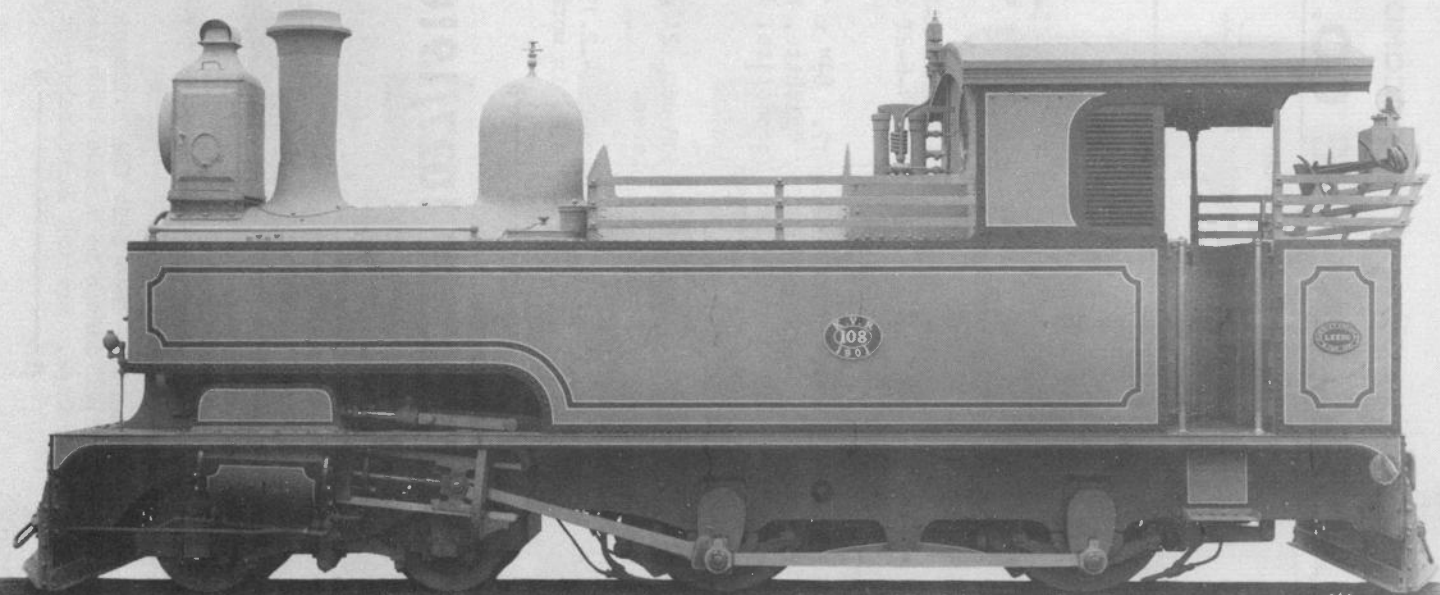
A 3' gauge loco for Russia. There were eight of this type along with an 0-4-0 saddle tank built between January 1910 and 1916. A similar type of loco to the Antofagasta's (Chile). Sold to Eric Byrom for KISHTIN - SOLOMONOVSK RAILWAY.

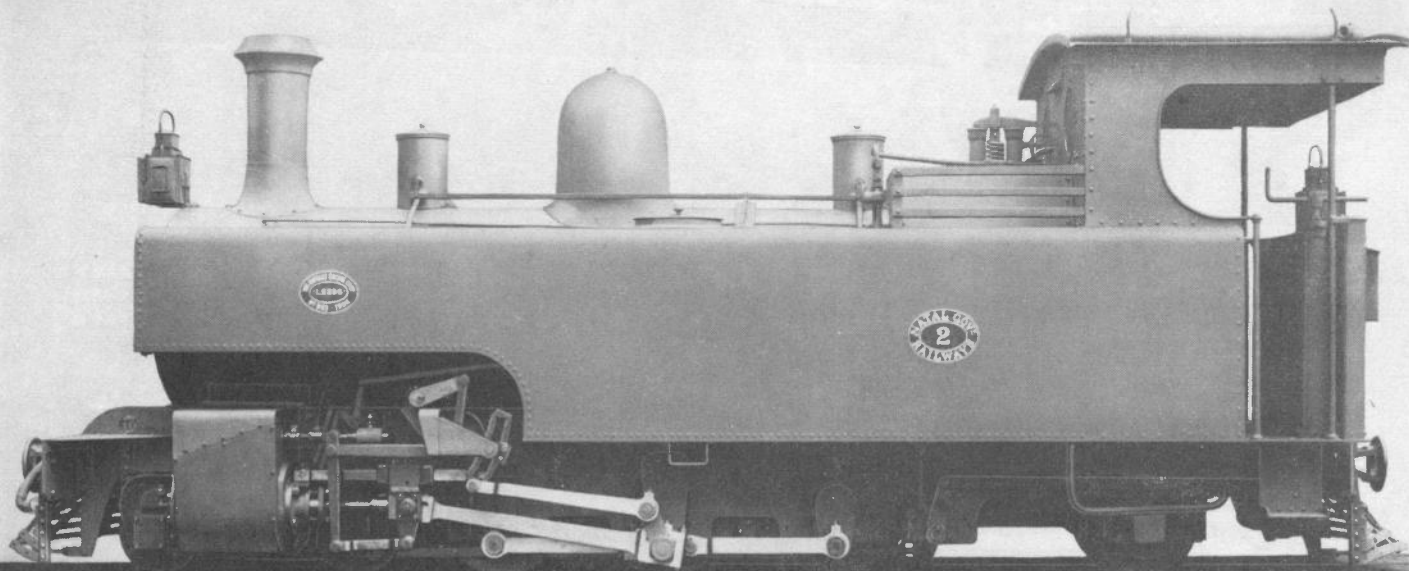
The locomotives were fired on birch and spruce wood, using six to eight cu. ft. per mile.

It is understood that one loco left the rails on a 300' radius curve at 50 m.p.h. Apart from slight damage to a side tank the loco was rerailed and immediately returned to work. British workmanship at its best!

||—————||

Page 21.



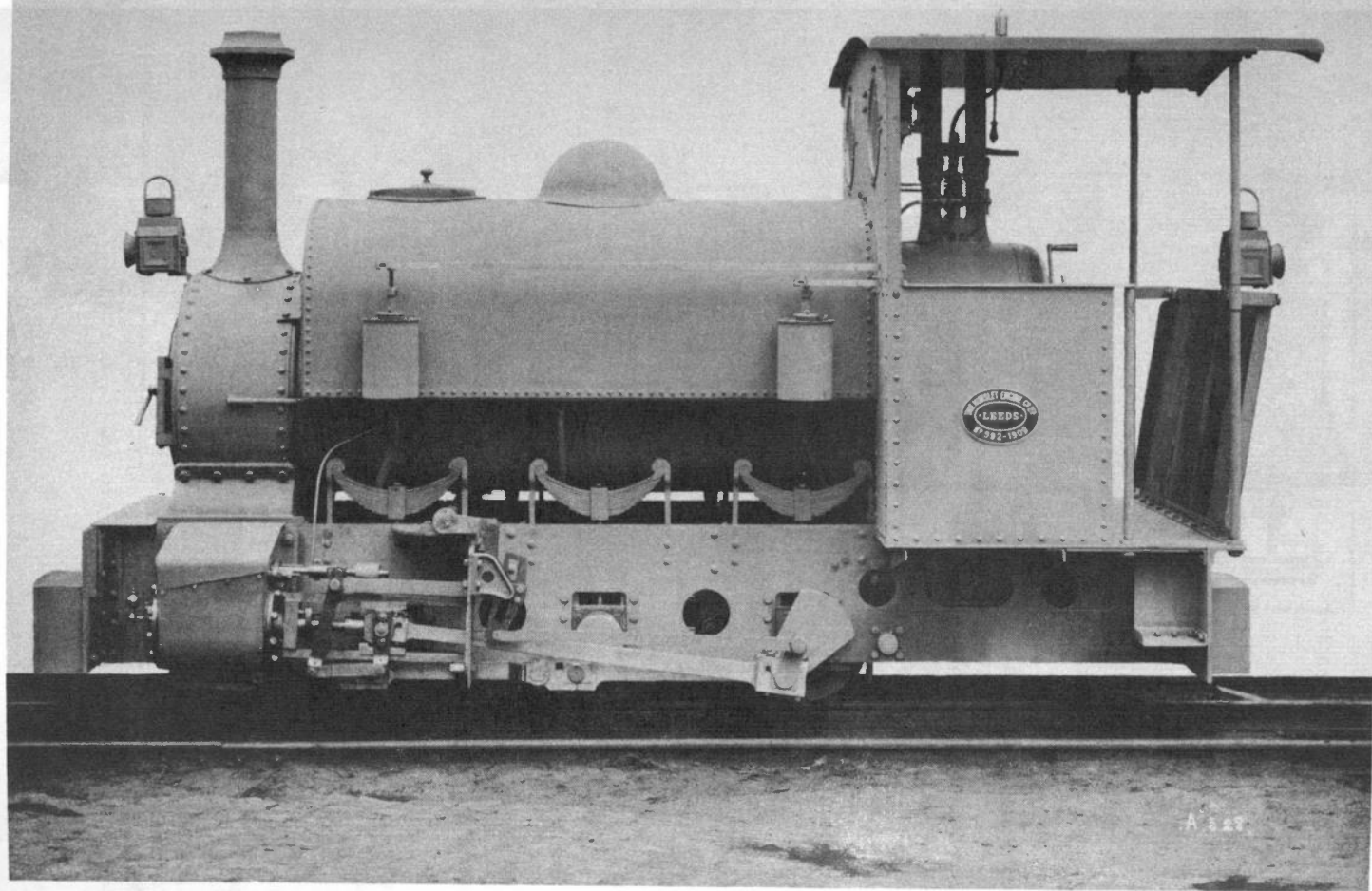


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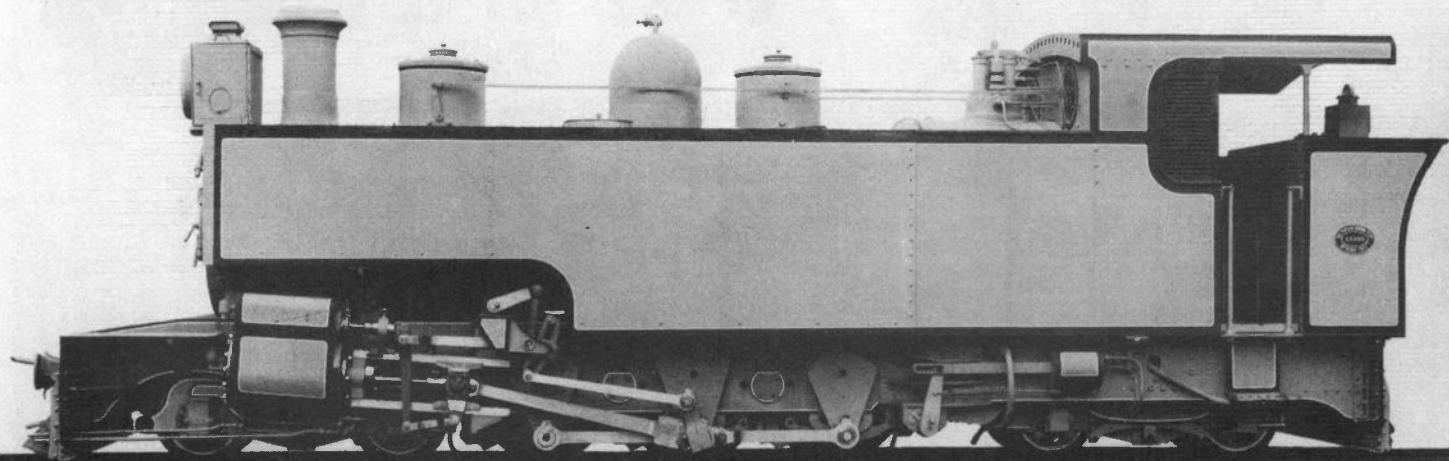


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A 523



SOUTHWOLD IN MEMORIAM

By Barrie McFarlane and Dick Ninnis.

Forty years ago, on Thursday, 11th April, 1929, the last passenger train from Southwold to Halesworth departed at 5.23 p.m. Despite the very cold weather, a large crowd had gathered at the station to bid farewell. The train comprised four coaches with 150 passengers aboard, hauled by No. 4 "Wenhaston" (Manning, Wardle & Co., 1845 of 1914). At every station there were sightseers to watch the train pass by.

A few days before the closure, Mr. Barrett Jenkins, a Southwold business man made a short film of the railway, and it is on record that Pathe News filmed the railway about the same time. Unfortunately, the latter film no longer exists, but surprisingly, another national newsreel company, Gaumont Mirror made a short documentary film which includes shots of the last train leaving Southwold. Mr. Barrett Jenkins discovered this film in a shed at the back of the Southwold cinema. The cinema had retained a number of films of local interest; most of them had been damaged by damp with the fortunate exception of the railway film. Copies of this film and that made by Mr. Barrett Jenkins can be purchased from the British Film Institute, 81 Dean Street, London W.1.

The railway opened on the 24th September, 1879, and had an uneventful history of nearly fifty years. In April, 1928, Southwold Corporation licensed buses to operate within the Borough boundary, and in consequence, the railway lost the bulk of its passenger traffic and became the first narrow gauge passenger line to surrender to road competition.

For fuller details of the history of the line, one is recommended to read "The Southwold Railway" by E. S. Tonks and A. R. Taylor, published by Ian Allan, and "Memories of the Southwold Railway" by A. Barrett Jenkins, published by F. Jenkins, 94 High Street, Southwold, Suffolk.

The company is still in existence and in the process of being wound up. It still owns most of the land forming the track bed, although the station yard at Southwold has been sold. In October, 1963, the Suffolk and Ipswich Fire Authority promoted the Southwold Fire Station Site Compulsory Purchase Order, 1963, in order to acquire half the area of the station yard. The remainder of the yard has been acquired by the Suffolk Police Authority for the erection of a new police station and police houses. The old station building has now been demolished.

By Dick Ninnis.

In August 1967, I was touring Suffolk, a county with a beauty of its own, renowned for its stately trees and magnificent churches, and alas more recently marred by closed railway branch lines and derelict stations. In some cases tracks are only discernable by the keen railway archaeologist. For instance, short walls each side of a road will denote a former railway under bridge, long since buried by the railway cutting having been filled in.

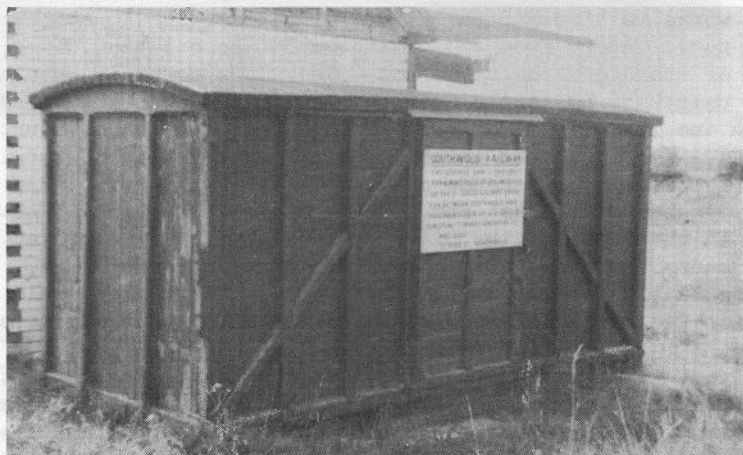
During the tour, one or two glimpses were obtained of the site of the Southwold Railway, the only narrow gauge public passenger carrying railway in the Eastern Counties. My first contact with the line was at Blythburgh where the bridge under the main Ipswich Lowestoft road was totally obliterated when this important thoroughfare was widened. However, the site of the former track bed, fenced by hedges, was still clearly visible on each side of the embankment, although the station had completely disappeared. It was impossible to detect on which side of the road it had stood. On the west side of the road, the track bed appeared to be used as a footpath, and I was told it was quite a pretty walk to Wenhaston.

Approaching Southwold from the north and on the west side of the road, I was very pleased to see Southwold station, although very derelict, still standing complete with platform awning. The building consisted of a wooden framework filled in with bricks and covered with a very rusty corrugated iron roof. The doors and window frames appeared to have been painted grey, but whether the fragments of paint remained from railway days or a later date is debatable. A large time table or poster display board is still on the platform side wall of the building. The window at the western end was boarded up and had been for many years. All the other windows were without glass. Judging by the various objects within, the last occupiers had apparently been the local scout troop. There is still a canopy above the main doors from the booking hall to the yard. The station yard itself was overgrown and the low platform had disappeared. The public conveniences had been at the eastern end of the building. There demolition had caused the white glazed tiles to be exposed. Along side this wall stood the body of a van, maroon in colour, with a notice affixed - "Southwold Railwat - This luggage van is the only remaining piece of rolling stock of the 3' gauge railway which ran between Southwold and Halesworth from September 1879 to April 1929. Donations towards renovating to:- Mrs. Oddy, 71 High Street, Southwold."

At Halesworth, the bridge over the main road near the Southwold Railway station has been removed, but the bank at the east side of the road is still in position.

Footnote. The van body is still on the Southwold station site but has been moved to a position beyond the new police houses. Mr. Barrett Jenkins told me that unless a permanent site can be found for it, it may be allowed to deteriorate through lack of interest.

(Barrie McFarlane).



BOOTHBY PEAT CO. LTD.

PETE NICHOLSON

The Boothby Peat Co. Ltd. is an independent company which extracts peat from Bolton Fell Moss about 10 miles north-east of Carlisle. Although it is a fairly small firm it is the British agent for a West German company who produce peat milling equipment and have supplied several other well known firms, including Cumberland Moss Litter. Until a few years ago there was a works at Naworth Castle near the village of Boothby. Now there is only the one works where many of the mainstay of the employees, including the foreman, are Dutch, having worked until the war at peat works in Holland.

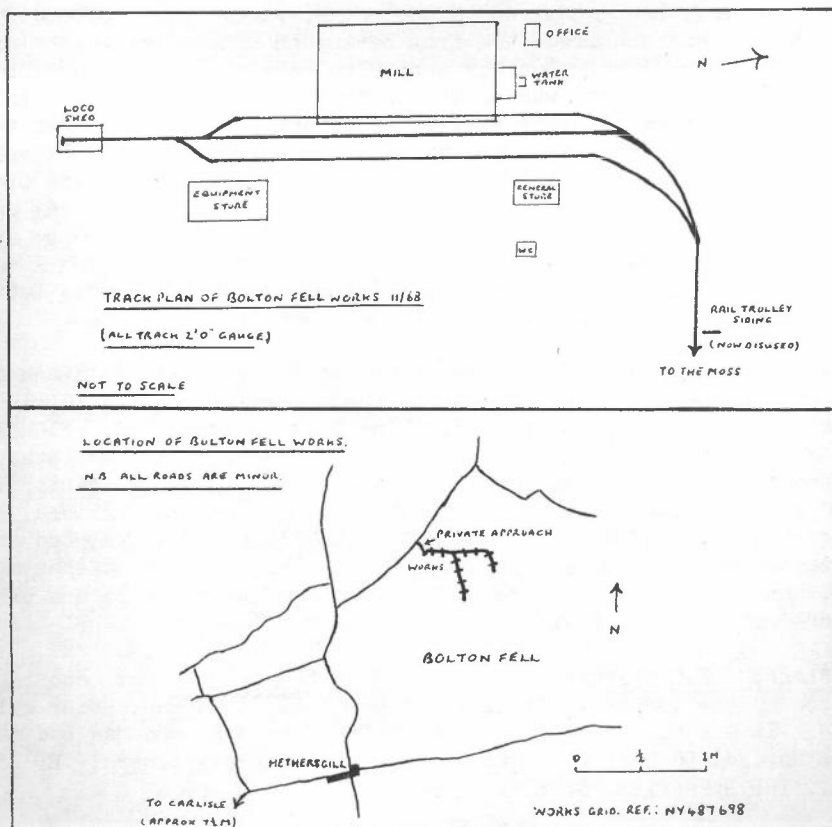
The works is a very straight forward affair and is at the end of a long approach road. Apart from the milling shed the only buildings are a small office, a couple of storage sheds and a loco shed. The track layout in the works area has also been kept as simple as possible, as the accompanying sketch shows. If more than one loco is out of use, as is usually the case, shunting movements are restricted. The loco shed which is at the extreme end of the line, by the boundary fence, can only house one loco. It is primarily used as a repair shed, there always being at least one loco requiring attention. The working locos are kept out in the open and the bitter cold nights experienced at this very exposed location cause serious starting difficulties in the mornings. It is therefore surprising that the line passing through the mill, which would offer some protection for the locos, is occupied by a string of peat wagons every night!

The peat wagons have open wooden slatted sides and are fitted with Jones or Hudson running gear. The wooden frames are extended to form dumb buffers. There does not appear to be any variation in design and no other type of wagon has been noted. The recently arrived Motor Rails haul trains of eight loaded wagons from the moss to the works.

Like most peat works a large and interesting collection of locos has been built up over the years and only one loco had ever been disposed of up to the end of last year. Most locos have been acquired from M.E. Engineering Ltd., Cricklewood (here after 'M.E.'), either as second hand or new, the latter firm acting as agents. All locos with one exception have been four wheel diesels, painted green and are fitted with rectangular side buffers.

Hunslet 2457, built 1941 was acquired from the War Department but was scrapped about 1962 as it was found to be too heavy for the lightly laid track.

Lister 37366, built 1951 was purchased on 9th August, 1966 from M.E. who had converted it from 1'6" gauge having been one of a pair acquired from the Burgess Hill Works, Sussex of Maidenhead Brick & Tile Co. Ltd. This is an 'R' type loco and was originally built with a single cylinder JAP petrol engine but is now fitted with a Lister 7 HP, SL2 (twin cylinder) diesel engine. This is the only one of the three Listers here which is not cab fitted and therefore is presumably not so popular with the drivers!



Lister Blackstone 52726 was the first new loco acquired by the Company, in October 1961 being purchased through M.E. It has a twin cylinder Lister diesel engine and extra heavy ballast weights as is denoted by its type being a 'RM2X' and is fitted with a genuine Lister cab - something of a rarity.

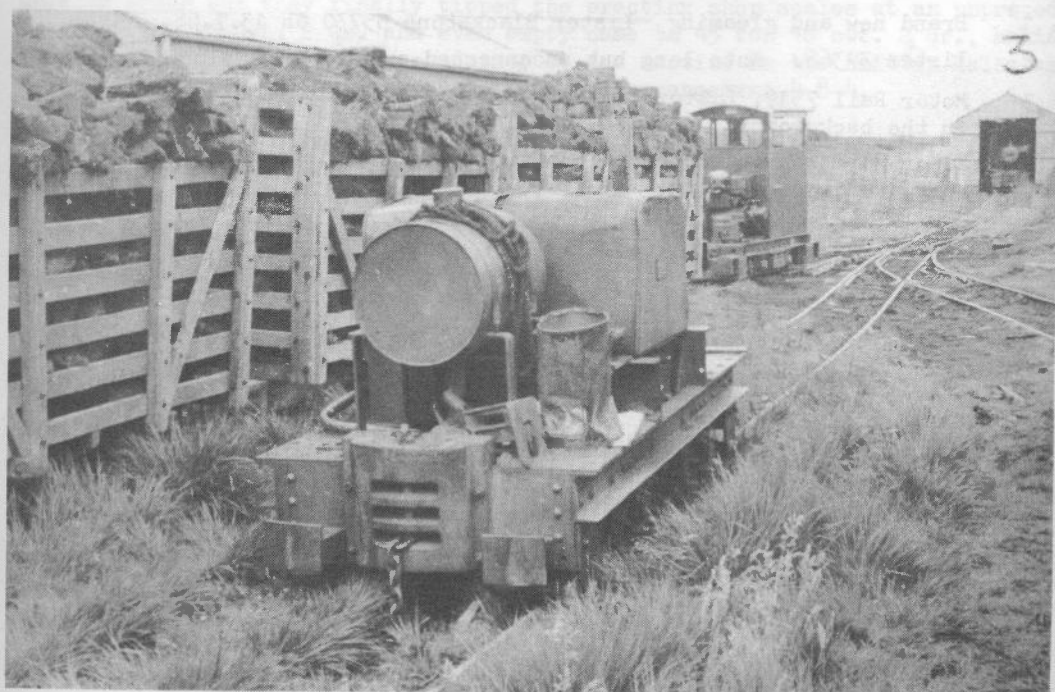
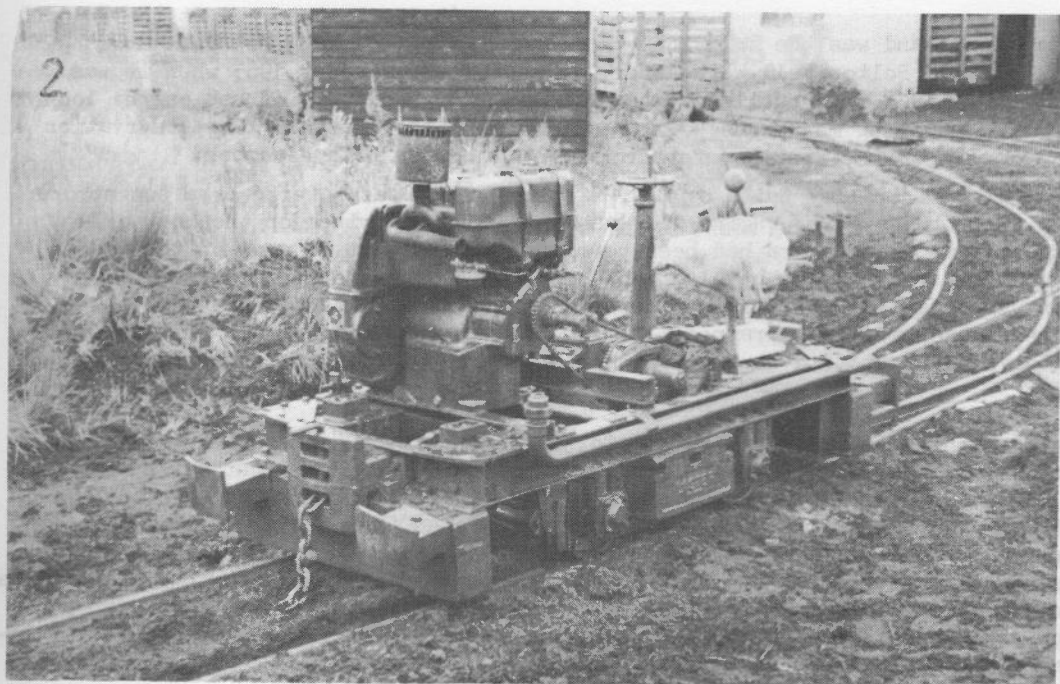
Lister Blackstone 55730 although not the most recent arrival at the works is the newest loco and is in fact the most recently built Lister known to be working in the British Isles. It was delivered new last year via the agents Marsh Plant Ltd. of Birtley, Co. Durham who also fitted it with a cab of their own manufacture, but similar to the genuine article. It is a type 'RM3' and therefore has a Lister three cylinder diesel engine which is completely exposed as on the other cabbed Lister.

The fitter said he has a full time job keeping sufficient motive power in operation due mainly to inexperienced handling by the young drivers. An example he gave was that to get additional adhesion while climbing the long incline out onto the moss a mixture of oil and sand (!) is dropped onto the driving chains. Consequently on our visit in July 55730 was out of use with transmission trouble and in November the gearbox had been removed for repairs.

Motor Rails have been acquired in two pairs, the first, 7507 and 7519 second-hand from M.E. who had acquired them from Bovingdon Brickworks (Cabbalont) Ltd., Herts., 19th December, 1964. Boothby appear to have shown some caution in purchasing these as the first was bought in 1965 and the other not until 1967. This is a very rare type of Motor Rail as is evident by the fact that these two, though only twelve numbers apart were built in 1937 and 1947 respectively. They are lightweight machines fitted with single cylinder 11HP Ailsa Craig engines. A distinctive feature of them is that they have cylindrical water tanks in place of the conventional radiator giving them a WW1 Baguley appearance! These two have now been retired since the arrival of the two locos described below and because of the shortage of space have been removed from the track. They now stand on a concrete apron behind the milling shed.

I have a personal interest in the other two Motor Rails, 8638 and 8655, because it was in the course of correspondence regarding the acquisition of the "Planet" that I mentioned that Steel Breaking & Dismantling Ltd. of Chesterfield had locos available at a reasonable price. To my surprise Boothby acted instantly upon receipt of my letter and when we paid our return visit a fortnight later found that two locos had been purchased and had already arrived. 8655 was working on the day of our visit and still had 'Lot No. 9' painted on the bonnet as it had been purchased by S.B. & D. at a Ministry of Defence auction at Liphook, Hants. 8638 was in the shed for some adjustments to the exhaust system before entering service.

The "Planet", F.C. Hibberd 1830 of 1933 is the only petrol loco to have been operated by the company. It is a 'Y' model loco and has a four cylinder Ford engine. It was purchased in December 1957 from M.E. who had had it in stock since March 1956 having bought it from the original owners; E. Rochford & Sons Ltd., The Nurseries, Stanstead, Essex.



At first it worked at the Naworth Castle Works and was the only loco to ever be at this location. It was transferred to the Bolton Fell Works where it worked until about 1965 when it was withdrawn. From then until November 1968 it was stored out of use on the loop hindering shunting movements. It was purchased by the author for preservation and left the works, destined for Brockham Museum, on 30th November.

The rail trolley built by C.R. Little in 1965 was powered by a two stroke $2\frac{1}{2}$ h.p. Villiers mower engine and was a 2-2-0 being driven on the rear axle only. Since the workers had been permitted to ride out to work on the trains it had laid out of use but also left on 30th November for 'preservation', having been purchased by Rich Morris. However since then it has been acquired by Andrew Wilson who has scrapped it!! The reason for this was that it was completely 'worn out' and the mechanical parts are now being incorporated in a new unit.

Returning to The Boothby Peat Co. Ltd., it can be seen that in recent months two locos have been acquired, two sold and two others put out of use due to the intervention of members of the NGRS! Like all other peat works its future as a rail worked location is very secure as there is no real alternative. During our last visit in November the track was being strengthened to take the two newly acquired and heavier Motor Rails. With five fairly new or reconditioned locos available and only three or four ever required at a time, apart perhaps from the disposal of 7507 and 7519, the situation is unlikely to change for some time - but with a peat works you never know!

CAPTIONS

- No. 1 Brand new and gleaming Lister Blackstone 55730 on 13.7.68.
- 2 Lister 37366. Note long but unconnected exhaust pipe along frame.
- 3 Motor Rail 7519, Lister Blackstone 55730 and Motor Rail 7507 in shed in the background. 13.7.68.
- 4 Motor Rail 8655 hauls a train of loaded wagons into the works aided by some judicious sanding. 30.11.68.



The Narrow Gauge Locomotives of Hudswell Clarke & Co. Ltd.

Part 8

R. N. Redman

When the Londonderry & Lough Swilly Railway opened its extension to Burtonport for traffic on March 9th, 1903 the total length of the system was $99\frac{1}{2}$ miles making it the second longest narrow gauge line in Ireland. The magnitude of the undertaking soon called for motive power to assist the 4-8-0 tender locomotives described in Part 3 of this series (issue No. 38, May 65), particularly for tackling the $49\frac{3}{4}$ miles of windswept 3'0" gauge rails of the Burtonport line.

Ingham Sutcliffe became Locomotive Superintendant of the line in 1911 and soon prepared a design and specification for a 4-8-4 tank engine with 16" x 20" cylinders capable of lifting a train of 150 tons up a continuous grade of 1 in 50 at 20 m.p.h. for a distance of four miles from a standing start at the bottom, and in normal service capable of 35 m.p.h. a speed often to be exceeded on the line. After accepting Hudswell's quotation for the construction of two of these mighty machines in 1912, detailed drawings were produced and after regular inspection at various stages were completed by September of that year and carried works numbers 985-6.

The proposed design called for 51 tons then 54 tons 16 cwt. 3 qr. in full working order but they finally tipped the erecting shop scales at an unprecedented 58 ton 15 cwt. 2 qr. and even empty came to 45 ton 16 cwt. 2 qr., making them the heaviest narrow gauge engines to see service in the British Isles as well as being the only examples of the wheel arrangement 4-8-4.

On entering service they had to give 3,000 miles of trouble-free running prior to complete payment being made. This, of course, presented no problems at all, and they were well liked by the crews, being a complete success and lasted in good condition to the untimely end of the line on August 10th, 1953 only to be cut up by McConnell Metals for scrap with many years of hard work left in them.

Details

Works Numbers 985-6.

Left the Works September 14th, 1912.

4-8-4 tanks, 3'0" gauge, 16" x 20" cylinders.

Wheels:- Driving 3'9", leading and trailing 2'2" (original spec. 2'1").

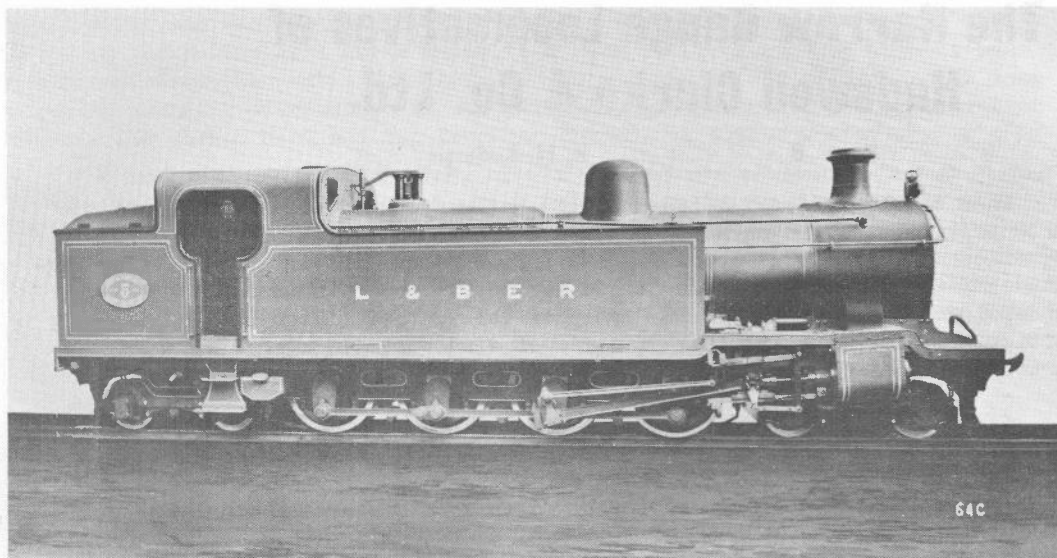
Working Pressure 165 lb./sq.in.

Tractive effort @ 75% working pressure - 14,080 lbs.

Cost each £2,765.

Running numbers 5 and 6.

Due to the size the specification called for the sets of tools to include a 20 ton traversing screw jack; some job putting that lot back on the line in the middle of an Irish bog!!



Painting Details as new.

Boiler cab and tanks - pea green with three coats of varnish.

Frames chocolate, outside. Inside yellow. Beams vermillion with 6" gold letters.

Wheel centres, green.

Smoke box and chimney - dull black (two coats).

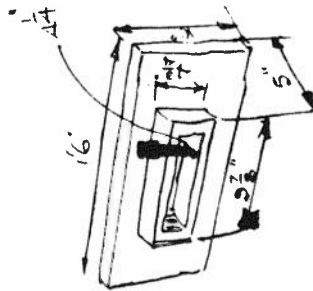
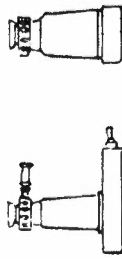
LONDONDERRY & LOUGH SWILLY RLY.

4-8-4T No 5

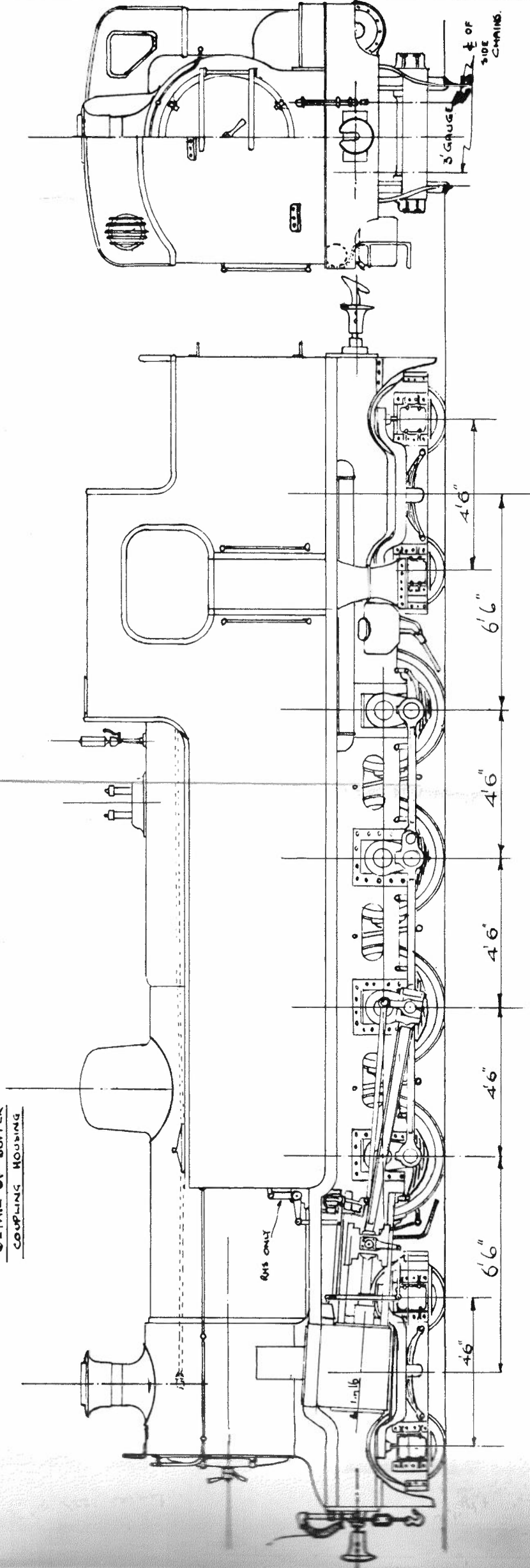
BUILT HUDSWELL CLARKE 1912.



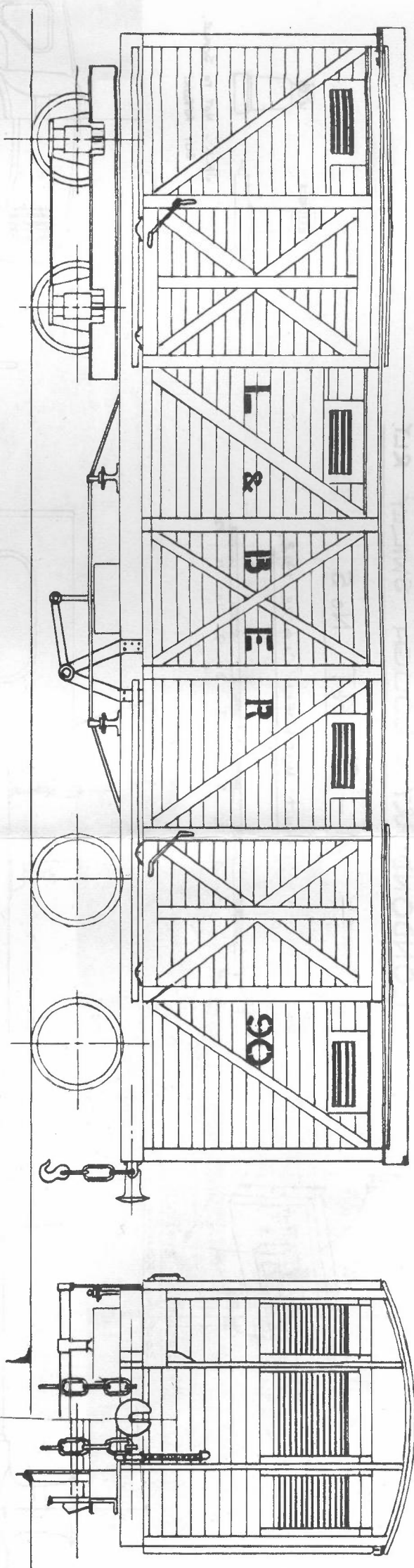
JACK - NOT TO SCALE.
BUT APPROX.



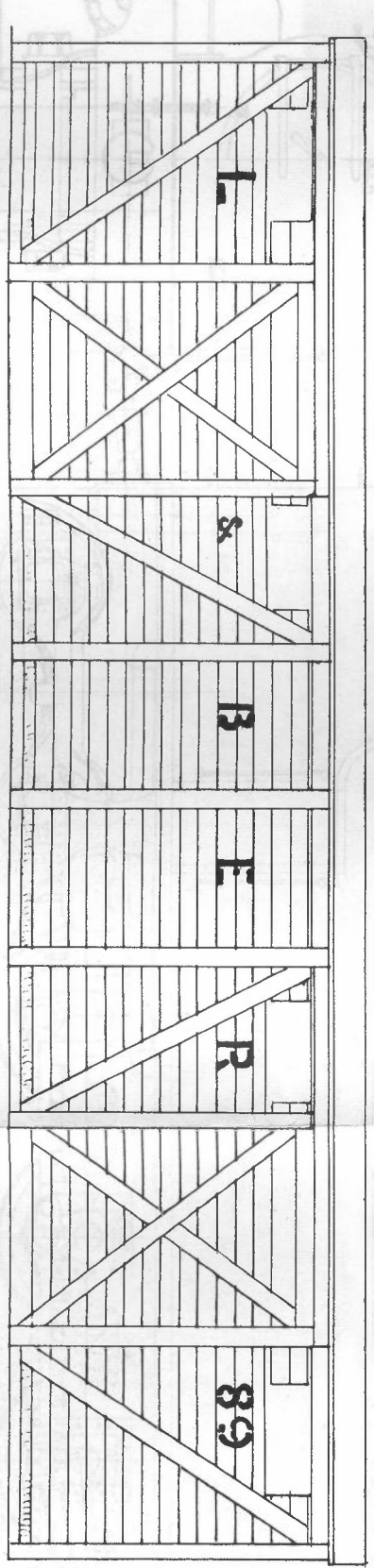
DETAIL OF BUFFER
COUPLING HOUSING



NB: ONE JACK CARRIED ON
EACH SIDE OF SMOKEBOX



NOTE: WHEELS ARE 2'6" Dia
AND NOT 2' 1/2" Dia AS SHOWN.



LIST OF DETAILS AS FOR VAN NO 90

DWG No. W.9

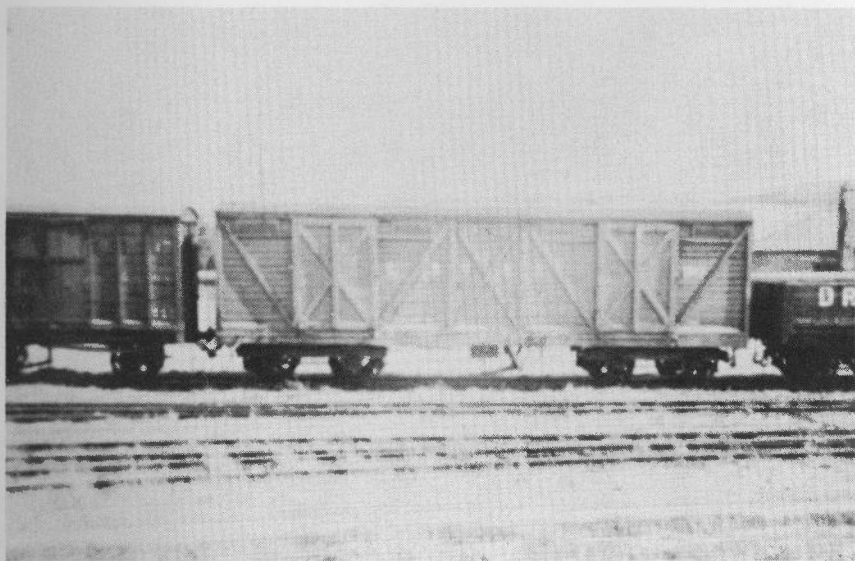
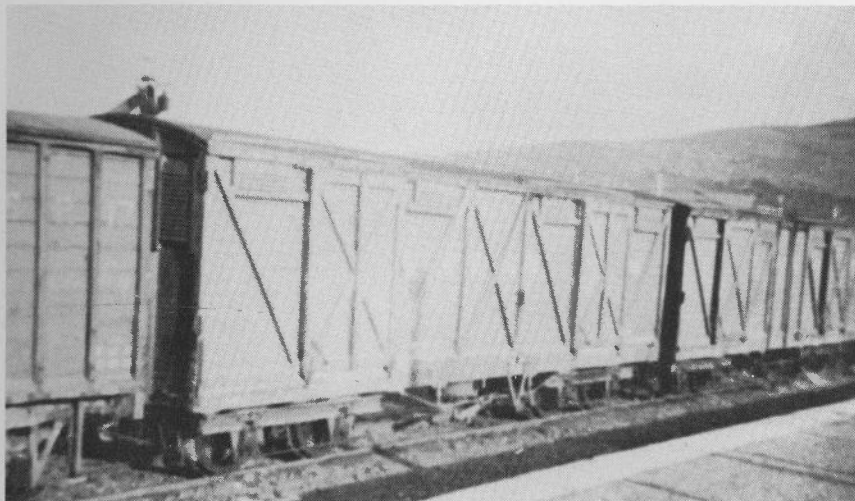
L & B E R 8w VENTILATED VANS Nos 89/90

Signature

LETTERKENNY FISH VAN

Drawings Peter Halton

LETTERKENNY & BURTONPORT EXTENSION RAILWAY



 Travelers and Sightseers Take Note:

PASSENGER TRAINS

of the

ROARING CAMP & BIG TREES NARROW-GAUGE RAILROAD



ARE NOW RUNNING

between

ROARING CAMP, HENRY COWELL REDWOODS STATE PARK, BIG TREES & BEAR MOUNTAIN

——
RIDE CALIFORNIA'S SCENIC TRIP TO YESTERYEAR

serving the

MAGNIFICENT REDWOOD FORESTS OF SANTA CRUZ COUNTY

STEAM POWERED


SCHEDULE

Effective June 8, 1968

STEAM PASSENGER TRAINS DAILY*

Steam Passenger Trains depart Roaring Camp Depot
at 11 A.M., 12 Noon, 1, 2, 3 and 4 o'clock P.M.

*Consult Ticket Agent for schedule and days of operation after September 15th.

 This colorful trip can be made in one hour and at a reasonable fare of nominal proportions. **FULL FARE ROUNDTRIP: \$2.80. HALF FARE (\$5-15 years) ROUNDTRIP: \$1.40. FREE:** Under 5 years of age. Special Excursion Fares for groups comprising 25 or more cash fares. Tickets include stopover privileges at Bear Mountain for picnicking and hiking. At Roaring Camp (entrance-way to Henry Cowell Redwoods State Park) passengers may visit the adjoining State Park, the Red Caboose Saloon (serving sandwiches, soft drinks and old-fashioned ice creams), the 1880 Roaring Camp General Store or picnic beside picturesque Roaring Camp pond. Bring your picnic lunch and ride the narrow-gauge for an afternoon of old-time steam railroading among the Big Trees!



For Further Information Apply To

C. C. Elliott

General Passenger & Ticket Agent

Roaring Camp & Big Trees Narrow-Gauge Railroad

FELTON, SANTA CRUZ COUNTY, CALIFORNIA

Telephone: (408) 335-4484