

The NARROW GAUGE



No. 67

SPRING

1974

35p



NARROW GAUGE RAILWAY SOCIETY



NARROW GAUGE RAILWAY SOCIETY

(FOUNDED 1951)



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EDITORIAL

Can we use your pictures on our front covers ? We urgently require good quality colourful 2½" square transparencies of future issues of N.G.I. Offers to the Editorial office NOW please. [R.P.M. : 3/74]



*'Tamega Valley local' (Portugal) Metre gauge C.P. 0-4-4-0T
Mallet No. E. 151. at Chapa, 26/4/73 (Maurice Billington)*

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OUR FRONT COVER : *'In the red' 3ft gauge Isle of Man Railway 2-4-0T No. 13, KISSACK (Beyer Peacock 5382 of 1910) simmering outside Douglas shed in the days of 'the little red engines'.*

(P. B. Whitehouse)

BRITISH NARROW GAUGE LOCOMOTIVE REGISTER

(COMPILED BY THE SOCIETY HON.
RECORDS OFFICER – Pete Nicholson)

Part 9: The Avonside Engine Co. Ltd.

FISHPONDS, BRISTOL,
GLOS.

Avonside are best known for their industrial saddle tanks with very neat lines similar to those built by their neighbours Peckett, i.e. the "Bristol Look" but the Company was in fact formed to produce large locomotives for main line use. Founded as Henry Stothert & Co. in 1837 with premises in Avon Street, St. Phillips, Bristol, the name being changed to Stothert, Slaughter & Co. in 1841 when Edward Slaughter joined as a partner. The title 'Avonside Ironworks' was first used in 1844.

Initial production was broad gauge locos for the G.W.R. some being very large and ambitious for such a newly formed company. When the G.W.R. opened their own works at Swindon this important customer was lost – for a while, but the Bristol & Exeter Railway continued to be a profitable outlet.

The sphere of activity was increased in 1851 when a shipyard was opened at Hotwells but it was not long before this became a separate entity under the control of Henry Stothert. Edward Slaughter continued with the loco building side of the business trading as Slaughter, Grunning & Co. This title was finally changed to 'The Avonside Engine Co. Ltd' in 1864 the year in which the act authorising the incorporation of limited liability companies became law. Soon after this a further order was received from the G.W.R. for some 2-4-0's which became known as the "Avonside" class.

A large number of locos were built for overseas customers including many 'double Fairlie' locos for Australasia, South Africa, South America, Canada, Cuba, Mexico, Burma, India and Russia. Robert Fairlie's patent for articulated steam locos was granted in May 1864 and was used by several builders but it was Avonside who were to produce more of this type than any other British firm. The best known example built by Avonside was JAMES SPOONER an 0-4-4-0 for the Festiniog Railway in 1872. Avonside regarded these as true

'double' locos giving them two works numbers, in this case 929 and 930.

Another unusual type of loco built by Avonside was that utilising the Fell system which enabled a steam loco to negotiate inclines as steep as 1 in 10. A single double headed rail was laid between, but 8ins above, the running rails and this was 'gripped' by four horizontal wheels under heavy spring pressure. Four 0-4-2T's of 3ft 6in gauge were built in 1875 with this feature and these went to New Zealand. Three 2-6-4 tanks of 2ft 6in gauge were supplied to Chile in 1895-97 and were somewhat unusual for N.G. being 3-cylinder compounds.

After the death of Edward Slaughter the Company experienced financial difficulty and Edwin Walker joined the firm in 1881 in an attempt to save it from total collapse. Avonside had to be liquidated however and a new company was formed by Edwin Walker using the same title and the same premises. The change came in policy which was to concentrate in future on smaller locos and with Edwin Walker having come from Fox, Walker & Co. it is not surprising that there was a similarity between their industrial shunting locos and those of Peckett, successors to Fox, Walker & Co.

New premises had been taken up in 1905 on the outskirts of Bristol at Filwood Road, Fishponds. The first internal combustion loco built was a standard gauge machine as early as 1913 powered by a Parsons petrol/paraffin engine. Despite this early start i/c locos were never produced in large quantities and none of any gauge survive in Britain today. South Africa was always a good market and as well as a small batch of 3ft 6in gauge 4-8-2T's supplied in 1927 many 2ft gauge 0-4-0 and 0-6-0 tanks were shipped to the sugar estates of Natal which were to remain faithful to Avonside until the end.

Articulated steam locos were again produced but of an entirely different principle to the Fairlies. The flexible steam connection which was never completely free from trouble was now replaced by a flexible drive. A 2 or 4-cylinder engine unit was placed beneath the boiler barrel, drive being transmitted to the bogies through universally



No. 1748, WOOLWICH — the hardest worked Avonside in Britain and quite a 'monster' for only 1ft 6in gauge. It is now the only survivor of a class of 16 built during the First World War for the Royal Arsenal at Woolwich, London. It was purchased for use at Bicton in 1962 and fitted with a conventional chimney. This loco set a trend now being followed by several other railways today as it is oil-fired.
(Richard Tarr, Courtesy The Clinton Devon Estates)

jointed cardan shafts with worm drive and outside coupling rods. This proved a successful design but only four were built by Avonside before their demise. A further three built later by Hunslet had bevel gears replacing the worm drive.

The Depression of the '30's had a disastrous effect on Avonside which went into voluntary liquidation on 29/11/34. The goodwill, drawings and patterns were purchased by the Hunslet Engine Co. on 10/7/35 and the plant was disposed by auction on 24/7/35. The following year the premises were acquired by a paper manufacturer.

Until the advent of importation of locos for preservation the number of N.G. Avonsides in Britain had dwindled to only two — WOOLWICH and NANCY, but four others have subsequently arrived on the scene. The first was in 1969, RENISHAW No.4, one of the articulated locos from Crookes Brothers Ltd, Renishaw Sugar Estate, Natal. Unfortunately the repatriation of this very interesting machine has resulted in it becoming far less accessible to enthusiasts now that it resides in Surrey than when it languished in South Africa ! !

REMINDER

Members are invited to submit material-photos (not necessarily recent but good quality black & white) and/or technical data of locos for inclusion in future parts. Additional and corrective information on published items is also welcomed. The records are being compiled for ALL builders simultaneously — (it is proposed to ultimately publish the cumulative parts in one book suitably brought up to date with information subsequently received and illustrated with further photos and drawings).



No. 1547, NANCY was delivered new to Stanton Ironworks Co. Ltd for use on their Brewer's Grave Tramway serving Woolsthorpe Quarries, Leics. It spent all its working life in the Ironstone industry and then from 1961 until September 1972 was preserved at Watnall, Notts. It was subsequently acquired by Lord O'Neill for the Shane's Castle Railway (NGI. 63/9) and is here depicted en route to Antrim. Extensive restoration is now required following eleven years of open storage.

(Courtesy The Lord O'Neill)

(As far as is known classes were not named).

Class	(i)	(ii)	(iii)	(iv)
Type	0-6-0T	0-4-0T	0-4-0T	0-4-0+0-4-0T (Articulated; geared)
Length (overall)	19ft2in	16ft8in	15ft5in	—
Width	7ft	6ft2in	5ft4in	6ft8½in
Height	8ft11in	9ft1½in	8ft6in	9ft5½in
Weight (working order)	19T	9½T	11¼T	17T
Driving Wheels	2ft10½in	1ft8in	2ft1in	2ft
Wheelbase	9ft3in	4ft6in	3ft3in	16ft6in *
Cylinders	10x18in	—	8½x12in	6½x8in (2)
Tractive Effort @ 75% W.P.	6260lbs	—	—	8450lbs
* Wheelbase for each coupled bogie is 3ft6in.				

No.	YEAR	CLASS	GAUGE	OWNER, LOCATION & RUNNING IDENTITY (SEPTEMBER 1973)	
1547	1908	(i)	3ft	Shane's Castle Railway, Antrim.	[NANCY]
1720	1915	(ii)	2ft	J. Hirst & Son, St. Mary Bourne, Hants.	[SEZELA No. 2]
1738	1916	(ii)	2ft	Knebworth West Park & Wintergreen Railway, Knebworth, Herts.	[SEZELA No. 4]
1748	1916	(iii)	1ft6in	Bicton Woodland Railway, Bicton Gardens, East Budleigh, Devon.	[No.1, WOOLWICH]
1928	1923	(ii)	2ft	J. Hirst & Son, St. Mary Bourne, Hants	[SEZELA No. 6]
2057	1931	(iv)	2ft0½in	J. Britton & P. Rampton, Burgate Farm, Loxhill, Surrey.	[RENISHAW No. 4]

NOTES :

1738 (Identity not certain.) It is proposed to operate this as a tender loco, but the side tanks will be left in situ.

1748 Oil-fired.

FURTHER REFERENCES : 'N.G.' 42/17 – (Sezela Locos)

N.G.I. 63/9 – (NANCY)

The Bicton Woodland Railway (guide book) – (WOOLWICH)

A Hunslet Hundred (David & Charles).

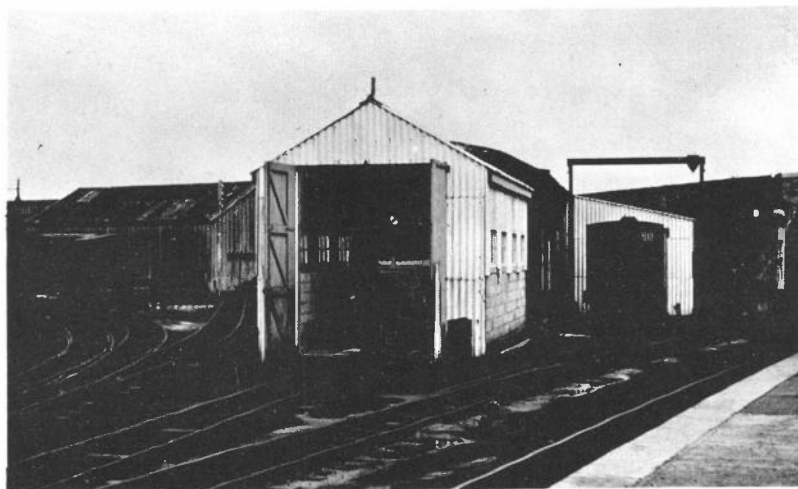
ACKNOWLEDGMENTS TO:

M. A. G. Jacob, N. D. G. James/The Clinton Devon Estates, The Lord O'Neill, D. H. Townsley/The Hunslet Engine Co. Ltd.

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RETROSPECT

CORAS IOMPAIR EIREANN (The Transport Company of Ireland)
WEST CLARE SECTION. 3ft gauge.



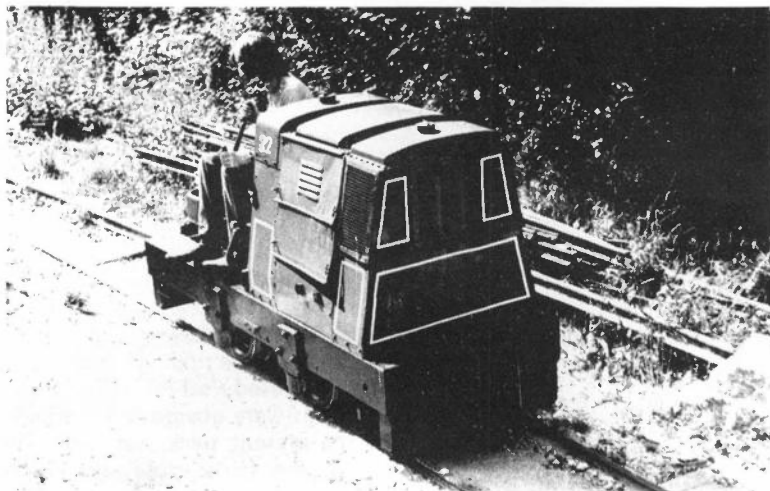
The scene at Ennis, Co. Clare in 1954. The modern railcar shed with a Walker Bros occupant plus 4-6-0T No. 7c (Hunslet 1433 of 1922) alongside.

(Courtesy :- Photomatic Ltd)



There is now steam on the RHEILFFORDD LLYN TEGID – BALA LAKE RAILWAY. Sporting a new dark 'royal' blue livery, No. 3. HELEN KATHRYN (Henschel 28035 of 1948, 'Riesa' class 0-4-0T) is seen here running round at Llangower before a return journey to Llanuwchllyn in the Summer of '73. (NGI. 59/9) (Dave Stanley)

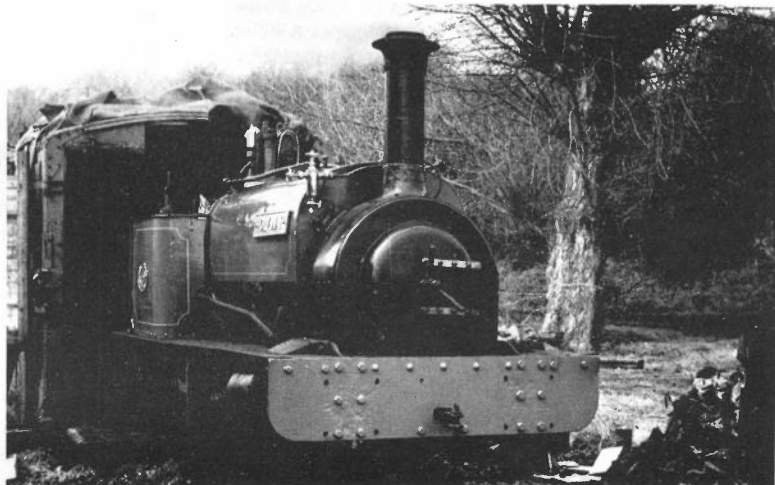
NEWS



Brockham Museum, Surrey (NGI. 64/2) had a new arrival on 11th August – and in working order ! This was Ruston 226302 of 1944, a 20DL class 4wDiesel and is shown here a few minutes after delivery in the hands of its proud owner John Crosskey. It was built for the Ministry of Supply but spent much of its working life at Penrhyn Slate Quarries, Caerns and is now restored in their maroon and black livery, lined white and numbered "22". (NGN 85/10)

(Pete Nicholson)

Quainton Railway Society, Quainton Road (ex G.C.R.) Station. On 21st April 1973 Quainton Road was treated to one of the infrequent steamings of HOLY WAR (Hunslet 779 of 1902 – 0-4-0ST, 1ft 10½in gauge) owned by our Member John Hutchings this loco was delivered ex-Dinorwic Slate Quarries 22/3/70. She is now shedded in a former B.R. container (!) in the station yard. (NGN83/12) (M.D. Hardy)



Motor Rail 123.U.123, the experimental remote controlled diesel loco visited Joseph Arnold & Sons (Sand) Ltd, Leighton Buzzard, Beds in June 1973 – for television filming. Rebuilt from 121.U.Mk2.117 (in 1972) it is intended for underground use – operated by means of magnetic impulses transmitted along an overhead wire. These are conveyed to the locos controls by means of the wire which can be seen about 1ft above the bonnet. It was photographed while on trials in July '72 at British Steel Corp., Blackdene Fluorspar (Drift) Mine, Ireshopeburn, Co. Durham. (NGN66/13; 76/12) (Pete Nicholson)

THE NARROW LINES OF INDUSTRY

Stoke on Trent Sewage Railways

Sydney A. Leleux

Stoke-on-Trent was once six separate towns, consequently there are a large number of small sewage works, many having narrow gauge railways. There is currently a modernisation scheme which, when completed in 1974 will result in the closure of some of these works. The lines are described going from North to South through the Potteries . .

The Northernmost works is at Tunstall, sandwiched between the Trent & Mersey Canal and a liquified petroleum gas depot at SJ 854505. The 2ft gauge line starts under the sludge presses in the press house, then turns left through a right angle immediately outside. A loop follows, and a little used siding to a screen branches off via a turntable. The main line continues along the edge of the works for about 150 yards and turns to finish at a tip bordering Westport Lake (a local 'water centre' recovered from a clay pit). At the edge of the tip the layout is a 'T' with a turntable at the centre.

There are two rakes of wagons in regular use, one with seven wagons and the other with nine. Each rake comprises a string of steel side Hudson tippers with a few (?) Allen wagons — and a solitary end tipper at the end nearest the tip. Wagons are hauled by a tractor which is coupled by a steel bar fitted with a universal joint at each end. At the tip, half the rake is shunted along each

arm of the 'T' and the end tipper is pushed just past the turntable on a short length of track supported by old oil drums which are gradually being buried. The end tipper is emptied first, then the others. Thus the whole length of the tip is used, although the line approaches at right angles to the face. End tippers (side tipping wagons with wheels and axles removed, set at right angles across a normal chassis) were obviously introduced some time after the present track was laid. The tracks at the loop are fairly close, and while ordinary wagons can pass, the end tippers are too wide. Thus when one rake has been emptied and put in the loop the end tipper has to be tilted over on two wheels so that the other rake can pass ! Before the tractor was introduced, wagons were hand trammed to the tip.

The next works South is at Burslem, between the canal and the main Stoke-Manchester railway, just at the North end of Shelton steelworks, at SJ 863486. Burslem works is now (1972) being modernised, and when finished Tunstall will close. At present Burslem has two independent 2ft gauge railways. The line from the presshouse has a turntable just by the entrance. Two tracks are sidings, one short and one long. The fourth track ascends a short incline to the tip, where temporary tracks lead to the faces. Hand tramming is used, with an electric winch for haulage up the incline.



BLITHE VALLEY WORKS, CHECKLEY. 4wheel Diesel (ex Petrol) Lister No. 39419 of 1953. Type 'R' ascending the tip 2/9/71.

(Sydney Leleux)



*NEWSTEAD WORKS 9/8/71
Rare 4wheel Petrol engined
Lister 26288 of 1944 discharging
skip contents into road
vehicle at the tip.
(Sydney Leleux)*

Rolling stock consists of ten side tipping and two end tipping one cubic yard 'Jubilee' V-skips. Because the presses are slightly longer than the wagons are wide, two tracks are laid in the press-house; the centrelines being about 6ins apart.

At the other end of the presshouse are screens. These are emptied by a 2ft gauge electric grab crane made by T. Smith, Rodley (No. 1059). This crane can be moved by a crank on the chassis frame which is geared to the wheels. The railway leaves the crane, passes the corrugated iron locomotive shed (which resembles an Anderson shelter on a brick base) and crosses a works road. A trailing junction follows, the main line continuing round settling tanks while the branch follows the road to a tip. The branch was lifted in mid-1972 to make way for the extensions.

Rolling stock comprises a couple of side tipping V-skips. The locomotive, which is used only about three times a week, is a petrol engined Lister, No. 3908. A canopy was once fitted to this loco but only the bases of the stanchions now remain.

South again, between Leek Road and the River Trent (and only a few hundred yards from the 'Roebuck' public house where the NGRS Stoke Area meetings are held) is Hanley Works, SJ 887460. Like Burslem it has two independent railways, but of different gauges — 1ft 11ins and 2ft ! The difference of but one inch makes it difficult at times to decide whether a wheel set is badly worn or a tight fit ! The presshouse contains two long parallel 1ft 11ins tracks which join outside, then divide to run either side of a works road to a covered tipping dock. Here the press cakes are loaded into lorries for disposal. Earlier, one line had continued across the river to a tip.

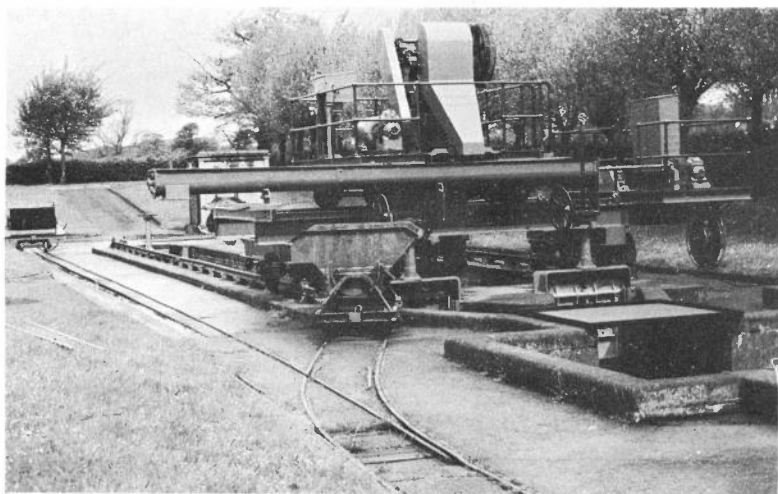
The original wagons were built locally in 1905, and were hand trammed. Locomotive haulage was introduced about 1946 and a set of 28 new wagons arrived in 1948. These were to the original design but with slight modifications. Numbers 1-6 were built by Insull & Pointon of Tunstall, and 7-28 by R. Evans of Hanley. They cost £75 — £100 each. In 1971 a new wagon was ordered from Fryers Engineering, Stoke-on-Trent to replace one with a badly corroded chassis, — and this cost £275 ! The wagons are unusual in that they have fixed open bodies so the load has to be shovelled out. They are of all steel construction, with sloping sides and ends, one side hinging downwards. (Running numbers are ½in steel rod, welded on !). There are also a couple of ordinary side tipplers used on a length of now isolated 1ft 11ins gauge track running from a screen to a tip.

The locomotive here is a Lister, type R, No. 11410 of 1939. Originally petrol engined, it now has a 6HP diesel engine-fitted at the works about 1970. There used to be a third track within the presshouse for the locomotive and the low bricked-up doorway can still be seen, (now the locomotive is kept on one of the press tracks). Wagons are pushed out of the presshouse by hand, then the locomotive takes over, pushing them two at a time, to the tip. For some reason the buffer beams on the locomotive often become badly bent and these have to be replaced at intervals.

A development is the introduction of a new wagon, — a loose body on a chassis, to work in conjunction with a Sheppard-Millar road vehicle and so obviate the shovelling. This system is to be introduced at Burslem also.

Close to the 1ft 11in gauge screen tracks is a 2ft gauge line, again serving a screen and its tip.

*STRONGFORD WORKS :
30/5/72. 2ft gauge skips &
plant in an otherwise (!)
picturesque corner of the
Works. (Sydney Leleux)*



There are three side tipping skips which are normally hand trammed. However, when I visited the works one day during the 1971 'Potters' Fortnight' the presshouse line was not in use for the duration of the holiday and the locomotive had been dragged round to work this line. The 1in. difference in gauge did not appear to have any ill effect, but then, industrial locomotive manufacturers usually provide generous treads on the wheels as some lines are not of constant gauge anyway !

At Hanford, on the Southern edge of the Potteries, just beside the A5006 motorway link road is Trent Vale pumping station at SJ 864425. This takes sewage from Newcastle and part of Stoke, and screens it before passing it to Strongford works for treatment. A short 2ft gauge line with three skips runs from the screens and the detritus tank dredger to a tip beside the road embankment. The tipping area was used up by 1971 so a higher level line was laid to re-use the site, a disadvantage was that it now needed three men to push a skip up the incline ! The Manager thought whistfully of the Burslem Lister, but now it appears more tipping space has been found near the river.

Newstead Works, Blurton, — near Hem Heath Colliery — at SJ 894405 is a large complex of drying beds (36 acres) for sludge pumped from Strongford. A 2ft gauge railway encircles the beds, with temporary tracks laid on to the beds when they are being emptied. A branch serves a concrete gantry for loading lorries and two other branches serve tips. There is also a plant for 'grinding' sludge to make fertilizer. The two locomotives here are kept in a locked brick shed near the entrance, and at night the 18 or so skips — all side tippers — are locked in the fertilizer shed, as vandalism is a problem. Trains consist only of

two wagons, and the locomotives work right on to the beds on the temporary track. The locomotives are both Listers, 26288 of 1945 and 39005 of 1952 both with diesel engines replacing their original JAP petrol engines. (They are fitted with all-over canopies).

The NGRS Stoke Area visited this works in May 1970 and 1971 and spent the evening driving round the system. Half a dozen or so bodies clung on to the canopy of each locomotive and we were away Some of the tracks were not often used, indeed at times there was a debate as to whether there were still rails beneath. The smell of newly crushed grass added to that of exhaust smoke. Curves were incredible — 12ft radius seemed to be the norm. From time to time the other green loco would be spotted buzzing along the far side of the beds with its band of intrepid explorers. It was a grand evening !

Strongford Works, near Wedgwoods, at SJ 878392, has a short line 100 yards long, very similar to Trent Vale, running from the detritus tank dredger to a tip. Rolling stock comprises only two wagons, one side tip and one end tip. Effluent is pumped to nearby Meaford Power Station for use as cooling water before discharge.

Trent Vale, Newstead and Strongford were all opened in 1936, and caused the closure of some smaller works. At the time of writing a new sewer is being laid from Hanley works to Strongford. When completed in 1974, Hanley works will be closed. The contractor C.V. Buchan of Swynnerton, is using 1ft 6ins gauge battery electric locomotives on the tunnel sections of the work, but they are not really part of this story.

There is one more sewage works with a railway — Blithe Valley Works, Dead Man's Green,

Checkley at SK 033373, 11 miles from Stoke and 4 from Uttoxeter. It treats sewage from the Eastern part of the Potteries, and also from Stone and Uttoxeter. The works opened in 1955 and were extended in 1971. The 2ft gauge railway serves the beds and tip, while a branch about 200 yards long leads to the grit channels. The

THE LOCOMOTIVES

R. A. Lister & Co. Ltd, 'R' type 4wheel locos.

3908	1931	Burslem Works
11410	1939	Leek Road Works.
26288	1944	Newstead Works.
39005	1952	Newstead Works.
39419	1953	Blithe Valley Works.

All these locos have now had their single cylinder J. A. P. petrol engines replaced with Lister diesel engines except No. 3908.

brick locomotive shed houses a diesel engined 'R' type Lister no. 39419, complete with canopy. Rolling stock comprises 14 side tip and 2 end tip skips. The normal load is two wagons. Sludge is loaded on the beds by a tractor shovel.

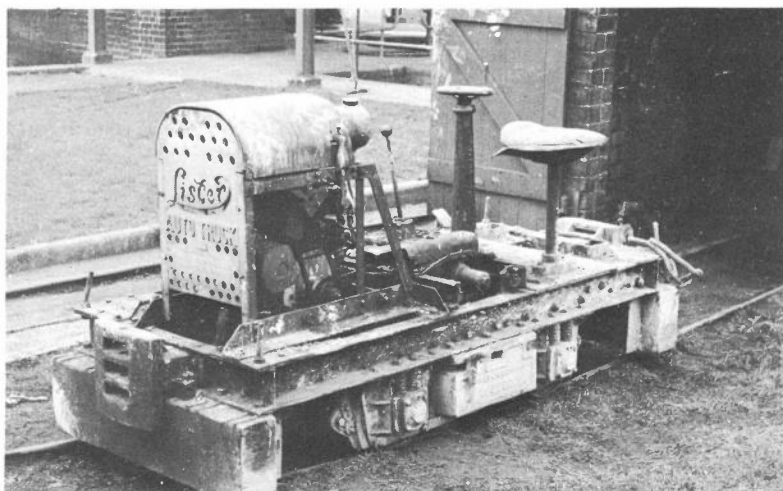
All the Corporation's locomotives are painted green and wagons are black, but on lines handling press cakes, stock soon becomes dirty white due to pottery waste in the sludge. Newstead and Blithe Valley locomotives work throughout the day, but the press house lines at Burslem, Hanley and Tunstall are usually only to be seen in use before mid-morning. The various hand worked lines see intermittent use.

I gratefully acknowledge Mr. W. C. Rock for facilities given and to the City of Stoke-on-Trent for permission to publish this article.

(*See also Supplementary Drawing Sheet No. 9. with this issue).

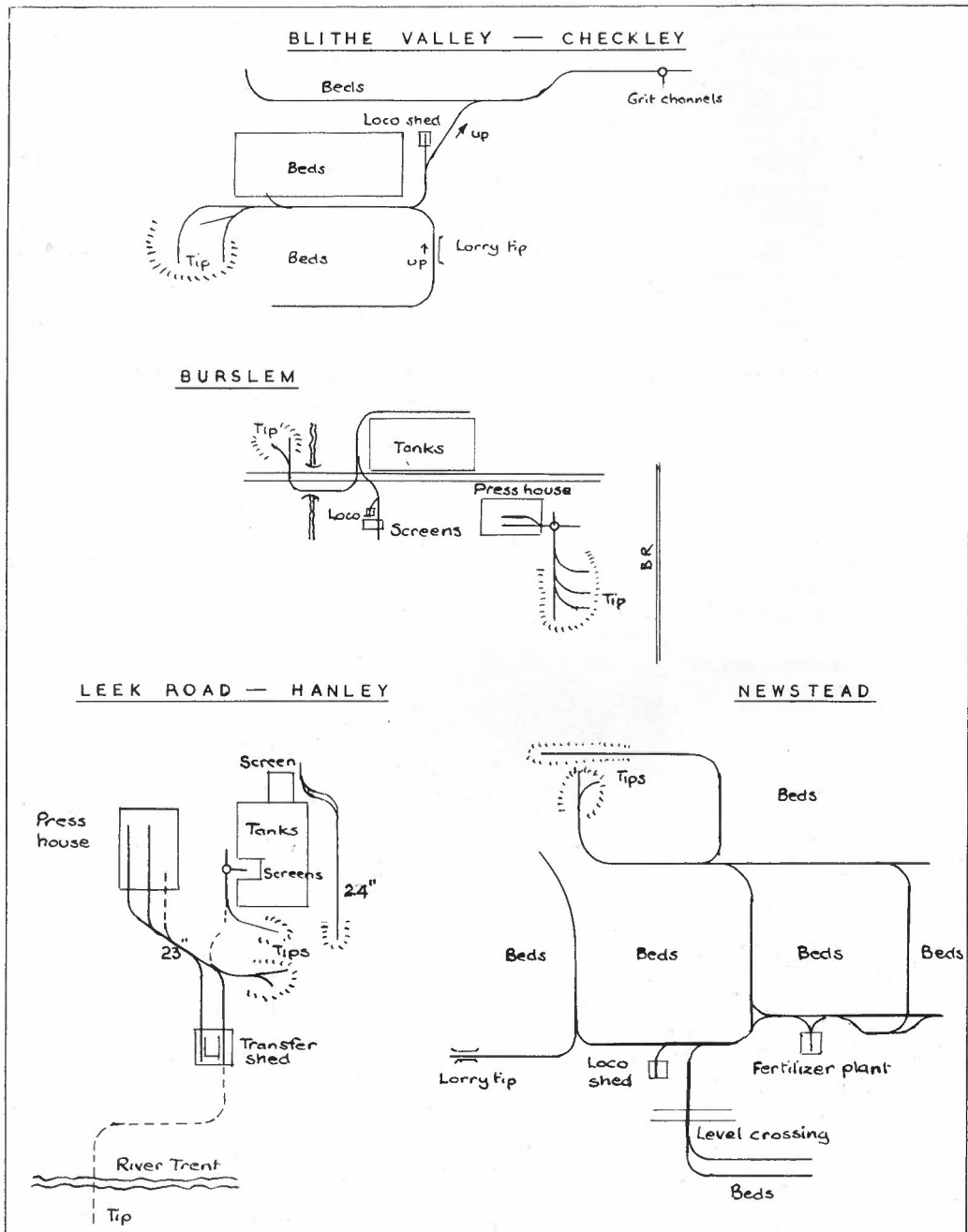
BURSLEM WORKS: a 'grotty' Lister in near original condition — No. 3908 of 1931 vintage poses outside the loco shed 26/2/71.

(Sydney Leleux)

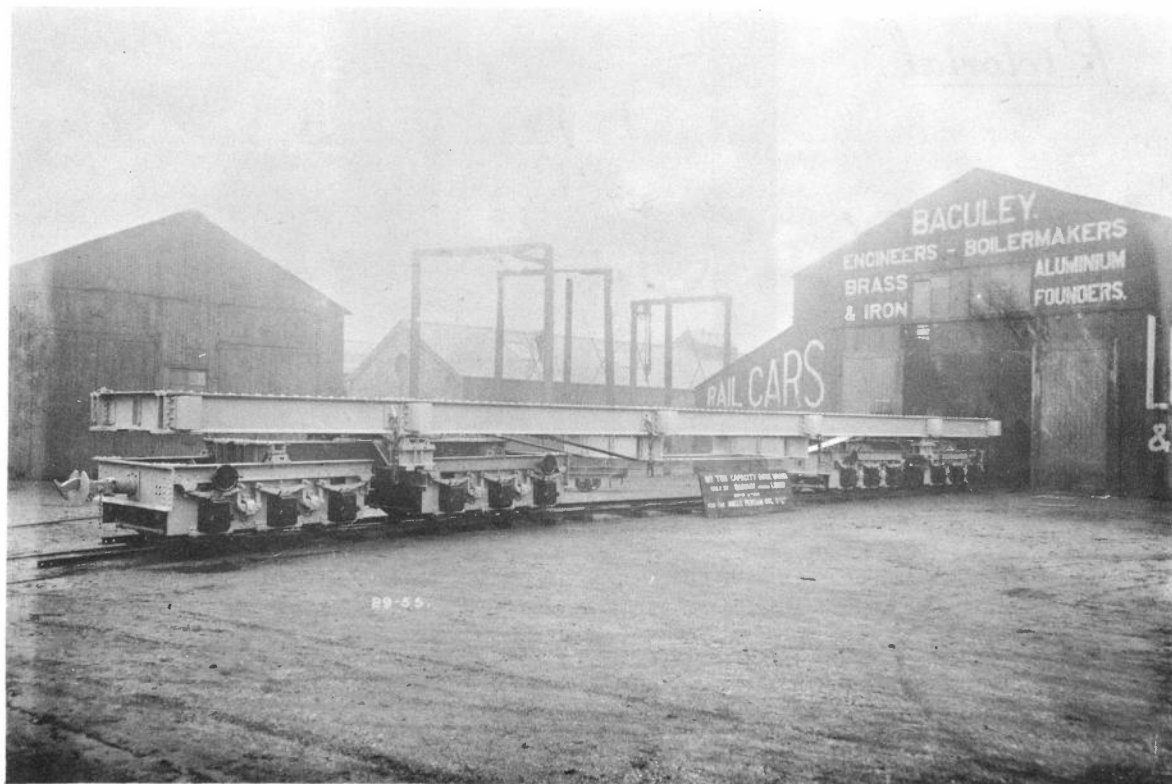


*TUNSTALL WORKS :
30/7/71 'Alternative style'
train — (ugh !) approaches the
tip. Press house in distance.
(Sydney Leleux)*

Sewage Works Railways



WAGONRY



(Photo supplied by the author, courtesy of Baguley-Drewry Ltd)

A Narrow Gauge Heavyweight

Rodney Weaver

Built by Baguley (Engineers) Ltd for the Anglo Persian Oil Company's 3ft gauge system at Abadan.

There were two of these giant wagons, both built in 1929. They must have been among the largest, if not the largest, vehicles ever built in Britain for a gauge of less than one metre and can have had few rivals anywhere. As will be seen from the illustration, the design was extremely simple and immensely strong, making extensive use of standard rolled steel sections. The platform was 63ft 6in long x 7ft wide and was carried on two pivotted sub-frames, each of which was in turn carried on a pair of six-wheeled bogies. The vehicles were designed to carry large, weighty objects such as pipeline sections or fractionating columns and each had a maximum capacity of 80 tons. In service at Abadan they may well have been hauled by the THERMOIL class petrol loco-

motives supplied by Baguley a few years earlier — a photograph of this combination would be worth seeing.

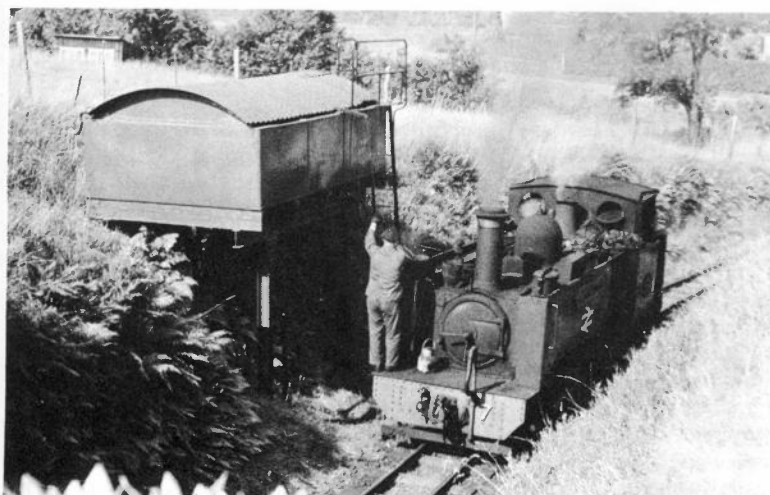
The photograph shows one of the wagons outside Baguley's little erecting shop at Shobnall Road, Burton-on-Trent. Comparison with other photographs taken at the same period reveals that the works yard has been specially cleared for the occasion, but even so there was barely enough room. There cannot have been much room inside the erecting shop while these monsters were being put together !

It would be interesting to hear from any Members who can throw light on the fate of these spectacular vehicles : should one still exist it would be an unusual challenge for our more adventurous preservationists !

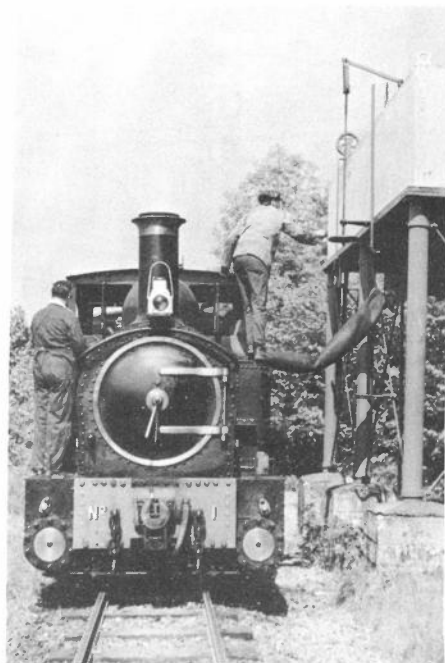
Narrow Gauge Pictorial

"THIRSTY ENGINES"

*Festiniog Railway EARL OF
MERIONETH /
IARLL MEIRIONYDD of
1885 at Tan-y-bwlch in April
1969 (C. M. Whitehouse)*



*British Rail — Vale of Rheidol
No.7, OWAIN GLYNDWR at
Devils Bridge water column
in 1971 (Rich Leithead)*



*Welshpool & Llanfair Light
Railway No.1, THE EARL
(Beyer Peacock 3496 of 1903)
in 1970. (Rich Leithead)*



*British Rail – Vale of Rheidol
No. 7 again – this time at the
other end of the line –
outside the M.P.D. at Aberystwyth.
(Rich Leithead)*



*Llanberis Lake Railway
DOLBADARN (Hunslet
0-4-0ST No. 1430 of 1922)
at Gilfach Ddu, Llanberis in
1971 (E. N. Kneale)*

N. G. PICTORIAL

Continued

*C.F.R. (Roumanian State
Railways) 760mm gauge,
0-8-0WT, No. 764.007,
(Schwartzkopff 8305 of
1923) pictured during heavy
rainfall at Agnita on 3/7/68.
(J. K. Williams)*



*South African Railways 2ft
gauge 2-6-2+2-6-2 garratt at
Lowrie on the Avontuur
Line in July 1971.
(C. M. Whitehouse)*

South African Railways 2ft gauge. Newly built 2-6-0+0-6-2 garratt at Esperanza shed in August 1971.

(C. M. Whitehouse)



and finally; Bord na Mona, Eire. The thirsty manipulators of this 3ft gauge hand pump trolley have obviously repaired to the nearest bar to replenish their 'tanks'!

(Pete Nicholson)



NARROW GAUGE International

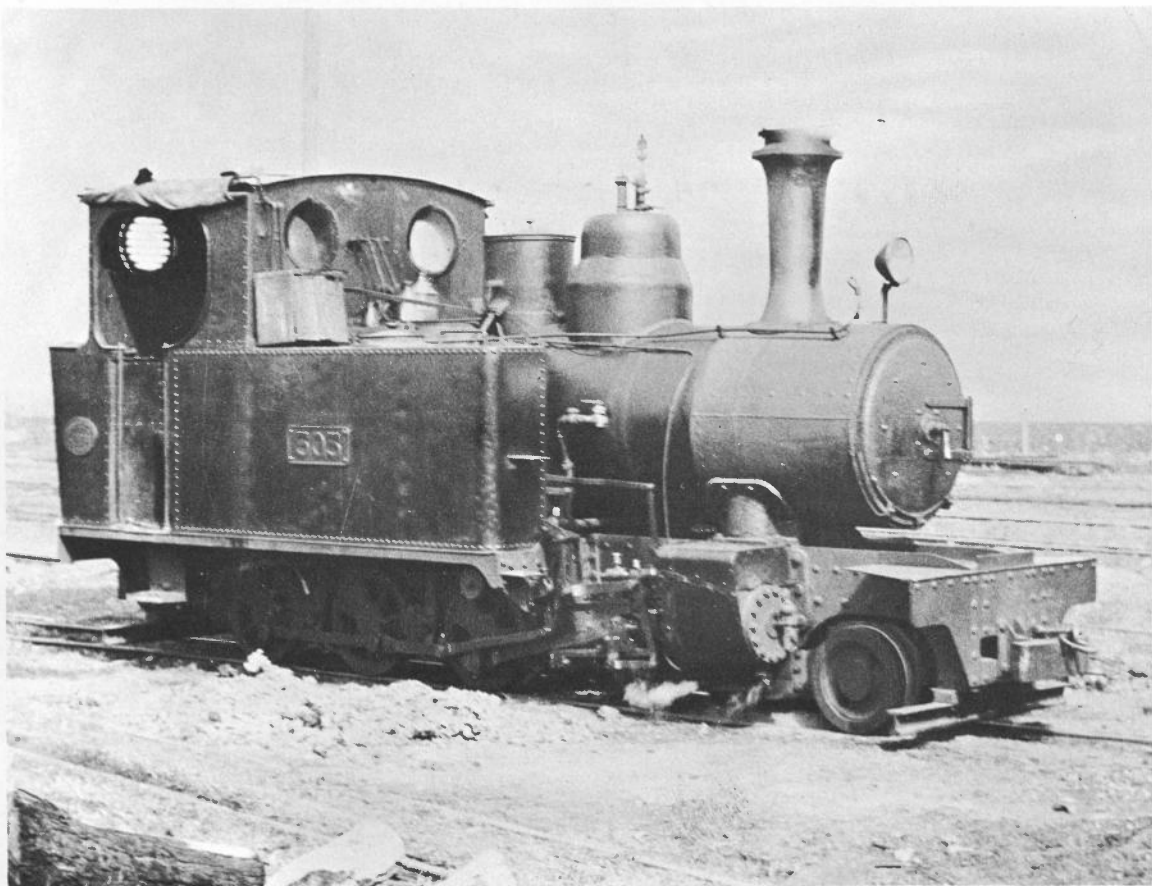
Australia

"CENTRE PAGE SPECTACULAR"

SPAIN : HULLERAS de
SABERO Y ANEXAS S.A.
SABERO, Nr. CISTIerna,
LEON. 600mm Gauge

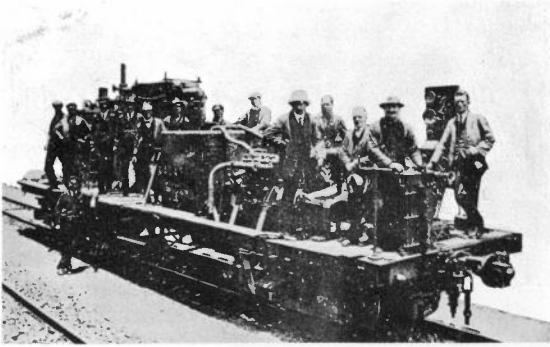
A rake of empty coal wagons are returned from the metre gauge exchange sidings at Cistierna to the screens at Sabero. Ample motive power is provided by No.7 SOTILLOS an 0-6-2T (Borsig 6022 of 1906). This loco, together with the seven other smaller locos at Sabero, was imported for preservation five years ago by J. Britton and P. Rampton of Loxhill, Surrey. (NGI.60/18)

[Acknowledgements to "Rails to the Setting Sun"] (C. S. Small)



"303" — ex W.D.L.R. Hunslet 4-6-0T 1215 of 1919 at Bingera Sugar Mill, Bingera, Queensland in October 1944.
(Photograph from J. L. Buckland collection; courtesy Peter L. Charrett)

South Africa



When the experimental chassis had passed its tests and before it was taken out on the main line for a reliability trial, it was brought through to Johannesburg, to be viewed by the Railway Board. Unfortunately, there is no record of what they thought when this contraption appeared!

Faced with the problem of operating traffic over unremunerative branch lines, the S.A.R. turned to the use of rail-cars wherever possible. At the time of "Gas-Electric No. 1," they were no new thing: the Cape Government Railways had operated rail-cars of various types — both steam and petrol — from the early 1900's, while the Central South African Railways had tried out several designs of steam car.

There was always the one problem . . if they were petrol-driven, though it did away with the consumption of fuel during idle periods, that fuel was both expensive and imported: if they were conventional steamers they suffered from all the drawbacks of a steam locomotive in partial employment. Finally, the Management of the South African Railways instructed its engineers to look into the matter of alternative forms of fuel . . and the result was "G.E. No. 1."

In October 1922 the task was placed in the hands of Mr. C. Lawson, the Superintendent (Mechanical) of the S.A.R., who, after considerable thought on the subject, settled for carbon monoxide. Alternative names for it are Mond Gas, Producer Gas, and Suction Gas, the latter term being coined during the experimental period. Whatever the name, the base is the same . . air and steam are blown through a carbonaceous fuel heated to incandescence, resulting in the generation of carbon monoxide gas.

The base was smoke-box 'char', a substance readily available in quantity at any large loco depot. The mechanism required for the production of the gas consisted of a generator and a scrubber, followed by an expansion chamber: the smoke-box of a scrapped Class 6 provided the first, the

The Monoxide Monster

3ft. 6ins. gauge — naturally

Born of a desire for a power-unit using a fuel less expensive than petrol, compounded of parts culled from a dozen scrap-heaps, fed on the refuse from its steam-powered brethren, it served on a sub-economic branch line.

second was a tank found on the scrap-heap at Pretoria shops, while an old loco chimney supplied the third.

The gas having been generated, it had to be used . . and in an i/c engine at that. The railways had nothing of the kind, but the Department of Defence was able to loan a pair of Tilling-Stevens high-speed petrol engines that had seen service in a 'Whippet' tank. So far, so good: but what about the transmission? The experimental engine would be a fairly low powered job, but it was hoped to build a 'proper' engine of about 200 h.p. once the general principles had been proved . . . would it be possible to transmit this power through a mechanical gear-box and lay-shafts? The driver would have to be a strong man, and at the end of a day on the suburban run would also be a tired man . . . electrical transmission seemed a better proposition.

So the De Beers Corporation was approached and loaned two tramway motors and the necessary controllers, while the British General Electric Co. handed over a dynamo for temporary use. The S.A.R. workshops in Salt River — nearly a thousand miles away — contributed a chassis from a wagon due for scrapping: Mr. Lawson afterwards commented wryly that all the braces and beams of the darn thing seemed in the wrong places, much cutting and fiddling being necessary before the various elements of the locomotive-to-be were finally in place.

The first trial on the track should have been an exciting event. It took place at seven in the evening, and one cannot help wondering whether the time was chosen because of the availability of tracks, or simply because the men concerned could not leave the thing alone once success seemed so near! It wasn't, though: when the gas flowed

and the dynamo whirled, all that happened when Mr. Lawson moved the controller was a series of strange noises from beneath the chassis. Inspection showed the motors to have been wired to move in opposite directions . . . once this fault had been corrected it was possible to move the locomotive out of the shed.

The unit . . . which so far had neither name nor number . . . deserved the dictionary definition of 'monster' at this stage, for it was definitely "an imaginary animal compounded of incongruous elements". There was no cab : the various bits and pieces of machinery had been strung out along the forty-foot deck with no regard to economy of space — a lot of the positioning was most likely dictated by the struts and girders of which Mr. Lawson complained — and the front was the end at which the driver happened to take his place.

Road trials commenced. From Germiston, the monster moved off to Volksrust, 167 miles away, and back to the sheds. Once there, several of the bits and pieces were removed, for temporary disconnection had showed them to be un-necessary refinements. The four-hundred-gallon circulating tank came off, and the dust-collector and the wet-scrubber followed.

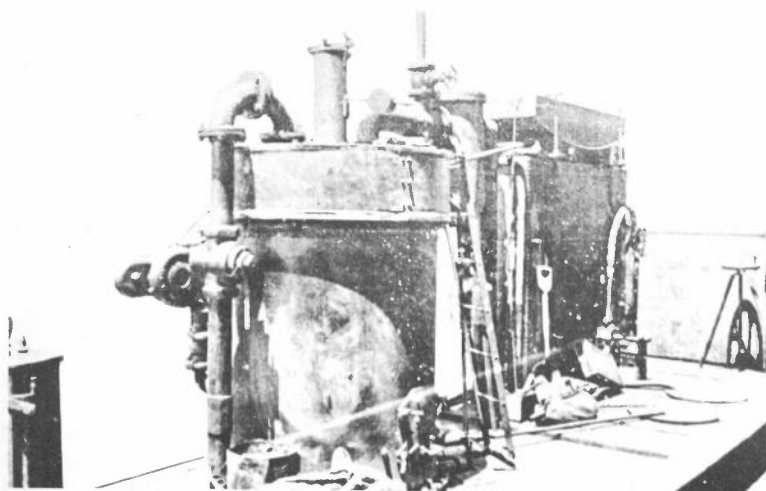
By now the generator was producing the maximum amount of gas, but the result of the increased power was that the tramway motors, already at the end of a long life, packed up. To replace them, the B.G.E.C. produced two 50h.p. Siemens traction motors . . . but these motors could deal with more current than the Tilling-Stevens engines could supply ! So off those came, and a Holt tractor engine of 120h.p. (which, incidentally, had been railed down from Bulawayo) was installed instead. Running at 750 r.p.m. the

dynamo was now turning out 150 amps at 500 volts . . . and began to suffer as a result of speeding it to a point where it would deliver current at a pressure of 600 volts. Obviously a new generator was required . . . everything else had been replaced !

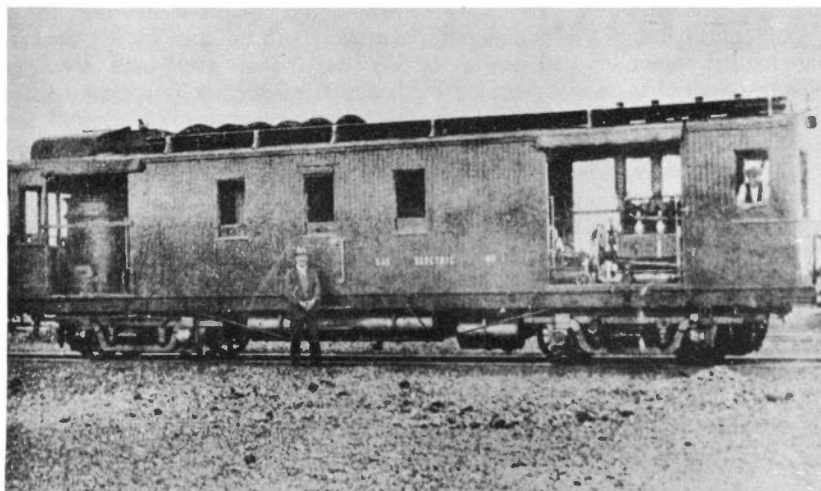
But the General Manager put a stop to an experiment seemingly destined to go on to bigger and better things by requesting that the unit be put to some use. In its final form the car weighed 32 tons and (owing to limitations imposed by the heterogeneous collection of motive equipment, no piece of which had been designed to work with any other piece) had a horse-power of 85. Apart from the tramway controllers, making use of the current through series-parallel connections, it was possible to vary the supply of volts and amps by opening or closing the throttle of the i/c engine : opening the throttle caused a greater suction (and hence the term suction gas) and so pulled more air and steam through the fire, producing a greater quantity of gas. Periodically more char had to be dropped from the containing hopper onto the fire, but apart from that the gas-producing unit was more-or-less self-operating.

By this time the locomotive had been fitted with a body, somewhat resembling a round-nosed baggage van, with windows in the ends. In this form it undertook its first real task . . . fighting locusts !

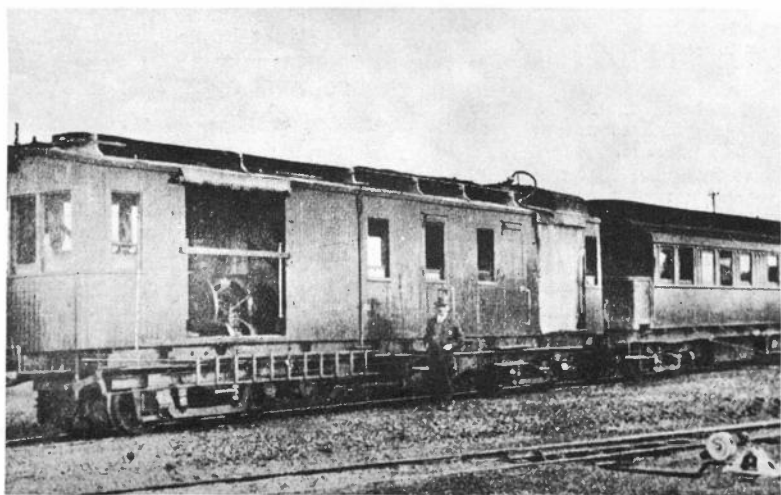
Swarming in the Kalahari, locusts form one of the plagues of South Africa, as they had of the biblical countries. Periodically, they came out from the Kalahari, stripping farms in their paths. The railways did everything in their power to halt the movements of swarms, spraying the insects with poison wherever they were found. Usually this was done while the locusts were still



The gas-producing plant. The gadget at the extreme left of the generator is strongly reminiscent of a hand-blown blacksmith's forge. It was most likely needed for starting up, when no suction would be available.



The two sides of "Gas Electric No.1". There seems no real reason for having the openings at either end . . especially as canvas curtains were fitted in order to close them . . and she would have looked much neater with louvred panels. To judge by the cat-walks and the ladder slung from the chassis frame, there must have been quite a series of hatches and fillers on that roof.



in the 'voetganger' stage, when, wingless, they were forced to crawl and hop.

So, on November 30th 1923, just over a year after experimenting had commenced, the crew of "G.E. No. 1" loaded up drums of poison, two 300-foot hoses and a portable telephone, coupled her up to a 1,600 gallon tank-truck, and set off for Welverdiend. This was the beginning of more than a week of spraying up and down the line and out along the Lichtenburg branch, leaving the main line at Coligny . . a week during which twenty-two swarms were destroyed.

Once this work had been completed, the question of usage again arose, and instructions

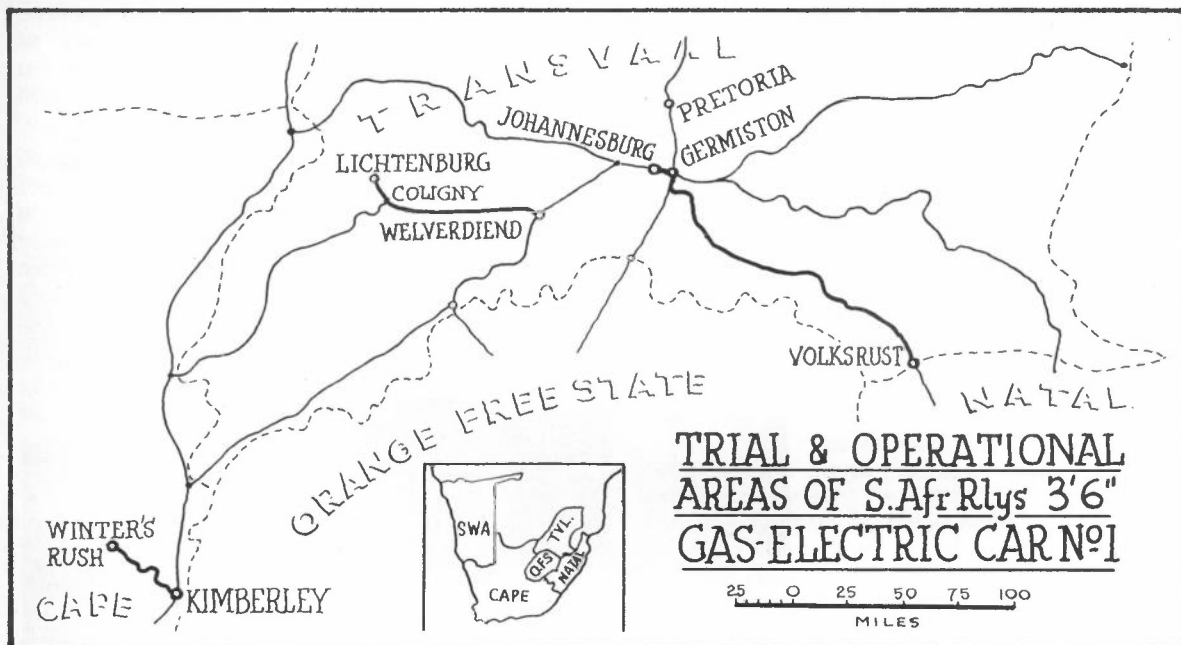
were given that the unit was to be modified to work as a rail-car on the Winter's Rush branch line, working out of Kimberley sheds. When she emerged from the shops, ready for traffic, it was with a different arrangement of machinery and a modified body, for space had been cleared along the deck for the provision of a passenger compartment seating twenty third-class passengers and a main-line saloon, hauled as a trailer, catered for the first and second class travellers.

The Kamfersdam — Winter's Rush section was formally opened in August 1923, and "G.E. No. 1" was officially accepted as part of the rolling stock of the S.A.R. under the G.M's Sanction No.27/7C

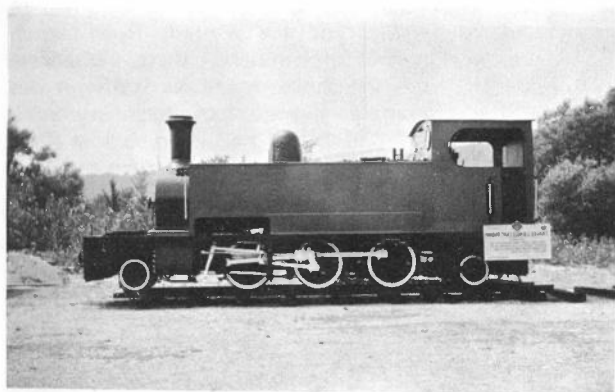
in January 1924. On the branch, she worked a daily, (except Sunday) service, this being augmented by a thrice-weekly steam-hauled mixed train. Traffic developing to a greater extent than had been officially estimated, it soon became necessary to withdraw "G.E. No. 1" on Saturdays, substituting a steam train with greater capacity. It is ironical to think that had Mr. Lawson been permitted to put in further work on the gas-producer, the generating, controlling and driving equipment and been given a sixty-five foot coach chassis, it could have been possible to produce a single unit car capable of doing the work required.

Despite its inability to handle all the traffic offered, "G.E. No. 1" was a success. Encouraged,

the S.A.R. then placed an order overseas for a gas-electric locomotive, to be built by the General Electric Co. The engine itself was specially designed by Harry Ricardo, the gas-engine expert of the day, working to the specifications of the Railway Administration. The 280 h.p. locomotive was delivered during 1925 : the trial trips proved it to be completely unreliable . . it broke down on several occasions and had to be towed home . . and it was never accepted for traffic. It was not a total loss, however, for the bogies, traction motors and main frame were afterwards used in the construction of an electric motor coach for use in Natal, but the S.A.R. never again experimented with suction-gas locomotives.

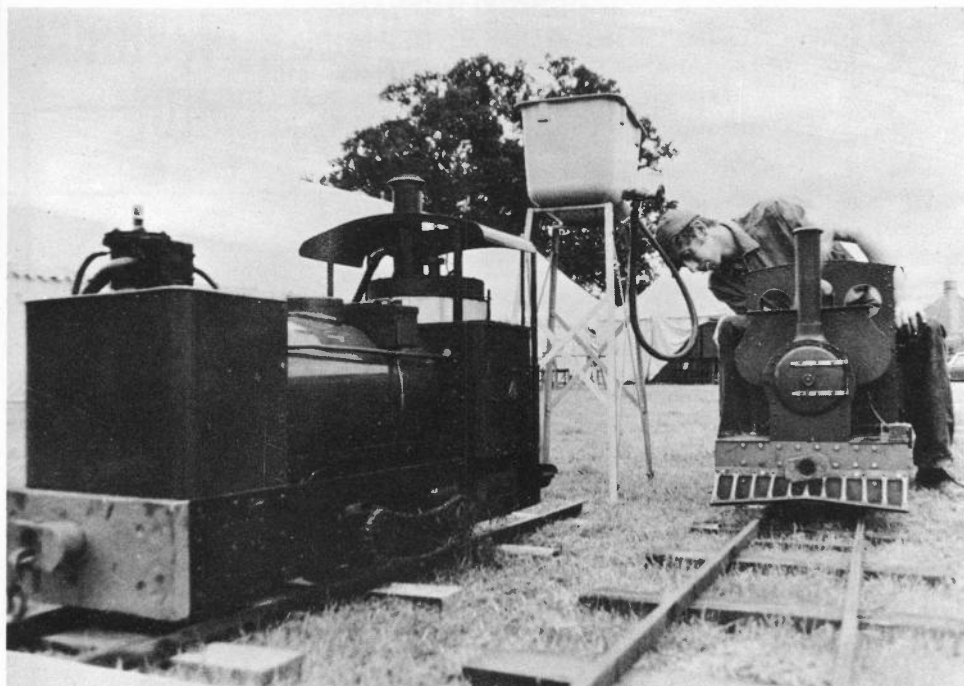


U.S.A.



*Another Irish machine 'far from home' —
TRALEE & DINGLE RLY 2-6-2T No. 5
(Hunslet 555 of 1892, class PN2) as pictured
on display at "Steamtown U.S.A." (Bellows
Falls, Vermont) (Lawrie Brown)*

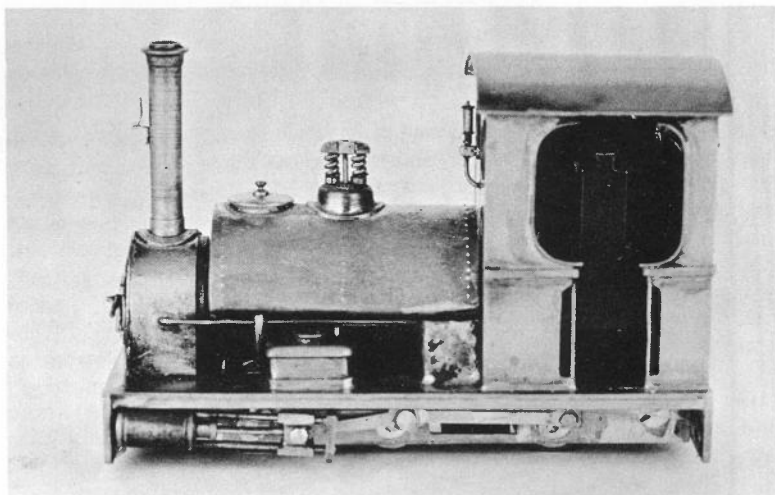
N. G. MODELLER



From the "7¼in GAUGE ASSOCIATION".....

A meeting was held in Birmingham on 20th October 1973 to set up the "7¼in Gauge Association": The Midlands has a growing circle of 7¼in gauge operators who prefer Narrow Gauge Prototypes and here are two on duty at the Brailes Show on 11th August 1973. Left is a reproduction of the Cliffe Hill Tramway Sentinel (6770 of 1926) TUG, built by D. Bates and now owned by D. Kempton who is seen in charge of BENDIGO a much altered 'Midge'; owner K. Blackham.

(Rodney Weaver)



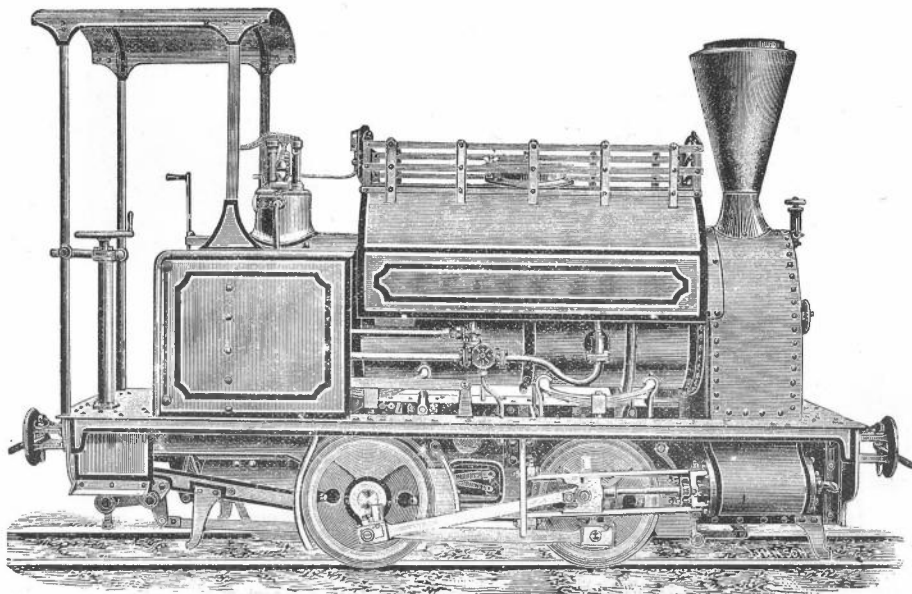
..... and another 'miniature masterpiece' from ROY C. LINK — a Peckett 'Jurassic' class 0-6-0ST, 7mm scale, 14mm gauge.

DUSTY CATALOGUES

JAMES & FREDERICK HOWARD
BRITANNIA IRON WORKS, BEDFORD.

Catalogue of Portable Railway & Rolling Stock, c1890.
(Courtesy of Iain Richardson)

LIGHT LOCOMOTIVES.



FOUR WHEELS COUPLED, TANK LOCOMOTIVE ENGINE.

The above illustration represents an outside cylinder, four wheels coupled, saddle tank, wood burning Locomotive for use in sugar plantations, mines, contractors works, factories and general shunting purposes.

The fire-box is of copper, the tubes of brass, boiler shell, tyres, axles and motion bars are of steel, and all the working parts in wrought iron are deeply case hardened. Boxes for fuel are provided at the sides of the boiler, and additional space for wood fuel is provided above the tank. Two injectors with necessary cocks and copper pipes are fitted to the engine, and generally the engine is very complete in all its parts. The qualities of materials and workmanship are of the highest class.

Cylinder.		Approximate weight when working.	Load on incline 1 in 100.
Diameter.	Stroke.		
in.	in.	tons.	tons.
4	8	4	15
5	10	5	20
6	10	6	35
7	12	9	50

CORRESPONDENCE JUNCTION

Sydney Leleux sends us this picture, taken on an N.G.R.S. visit to the Heywood 15in lines. Stone block rails at Duffield Bank, Derbys still in situ 16/5/73.



and from 'Monsieur' Rodney Weaver
NGI 65/11 — the Decauville article.

The equipment used for the Decauville railway at the Paris Exhibition of 1889 was in fact a complete range of Pechot-Bourdon artillery railway equipment, designed by Colonel Pechot and Professor Bourdon only a year previously. It is possible that the whole railway was intended primarily as a test bed for their concept of a light military railway, for this was the first occasion on which such equipment was ever put to serious use. This would explain the presence of the 48 ton gun carriage and other examples of Pechot-Bourdon rolling stock built up from a basic four- or six-wheeled wagon module. This also explains the reference to 12 ton Fairlie locomotives, which would have been the 12.3 tonne "Pechot-Bourdon" design that was later built in quantity by Baldwin

and North British during World War I. These were correctly described as Fairlies, as they conformed almost exactly to the earliest designs of Fairlie locomotive : subsequent attempts to claim that the "Pechot Bourdon" was an improved version of the type are without foundation. The lattice girder frames of the coaches were another Pechot-Bourdon characteristic — identical vehicles appear in illustrations of military lines and the same design was used for wagon chassis. The idea was of course to obtain maximum strength with minimum weight and hence the highest possible payload.

Lastly, I am surprised at the author's disbelief of the Girard hydraulic railway. Is 125mph on a film of water less credible than 250mph on a cushion of air or 300mph on a magnetic field of force ? I know which I would prefer. !

Rodney Weaver sends us this picture of the N.G.R.S. STAND at the TOWN & COUNTRY FESTIVAL, STONELEIGH, (See NGI.66/12) (25/26/27th August 1973)

This very enterprising layout was arranged by Gordon Webster (behind stand) and featured exhibits from 2ft gauge (at far end) through 7¼in to 16.5mm together with comprehensive sales lines. (Note distinctive 'N.G.I.' in foreground). Illustrations and drawings on the wall are of Baguley 2031.

A successful venture, both financially and membership wise !



W. A. PEARCE (Australia) says

I note that in NGI 62, (See also 66/24) in the caption to the prize winning photo in category 'A' of the Grand Annual Photo. Competition 1971-72, reference is made to the Van Staadens bridge as being the highest narrow gauge bridge in the World. This set me to thinking. Reference to Sydney Moir's book 'Twentyfour Inches Apart' gives the height of the decking of the Van Staadens bridge above the river level as 254 feet. However I see that the Mohaka Viaduct on the Hawkes Bay line of the New Zealand Government Railways is quoted as having a height of 318 feet. In the case of the New Zealand viaduct it is not clear as to whether this height is above river bed level or

water level, but it seems that in either case it would be higher than the South African one.

How I suspect the statement about the Van Staadens bridge has come about is that in his book Sydney Moir reckons that the South African gauge of 3ft 6ins 'standard' for South Africa, and anything below that is narrow gauge. Thus from this point of view, the claim for the Van Staadens bridge is correct. However, from the point of view of NGI, the New Zealand bridge would qualify as a narrow gauge bridge and thus beats the Van Staadens one.

(It would be of interest if one of our New Zealand readers could elucidate on the viaduct heights of the NZGR as to whether they are given with respect to river bed or water levels.)

From ALLAN BAKER

I am afraid Sydney Moir is 'off the rails' with his comments on the Bagnall articulated locomotives in his article, "Darnall Motley", in NGI. 63/27.

Bagnalls built a total of 6 locomotives of this design for use in South Africa together with one for use in this country. The dimensions Sydney quotes, presumably taken from a catalogue apply to the first, and only the first member. This was Bagnall number 2544 delivered in September 1936 to : Illovo Sugar Estates, Illovo, Natal, via A; and H. McNay Ltd; Bagnalls agents in that part of the World. She was laid aside after only 12 years work and has, I think since been scrapped.

All the remainder were somewhat bigger and the dimensions quoted below apply to them :-

Cylinders	9 x 12ins
Wheel Diameter	2ft 0ins
Bogie Wheelbase	3ft 3ins
Total Wheelbase	18ft 3ins
Working Pressure	180 p.s.i.
Heating Surface, (with superheater)	501.5 sq. ft.
Tractive Effort (85% working pressure)	12,400 lbs.
Weight in W.O.	28.5 tons

From the above it will be seen that they were quite a bit bigger than the original member.

Of these five, the first was for Cookes Bros, Renishaw Sugar Estates, again in Natal, she was

number 2545 and delivered in May 1936, (although a later number she was actually delivered before her predecessor). This locomotive has since returned to this country for private preservation.

The remainder were all for Sir John L. Hullett and Sons Ltd; and were to be used on their Darnall and Felixton Estates. All, including the one for Cookes were ordered via Bagnalls agents, A. and H. McNay. They were numbered and delivered as under :-

No.'s. 2830-1 delivered 1946.

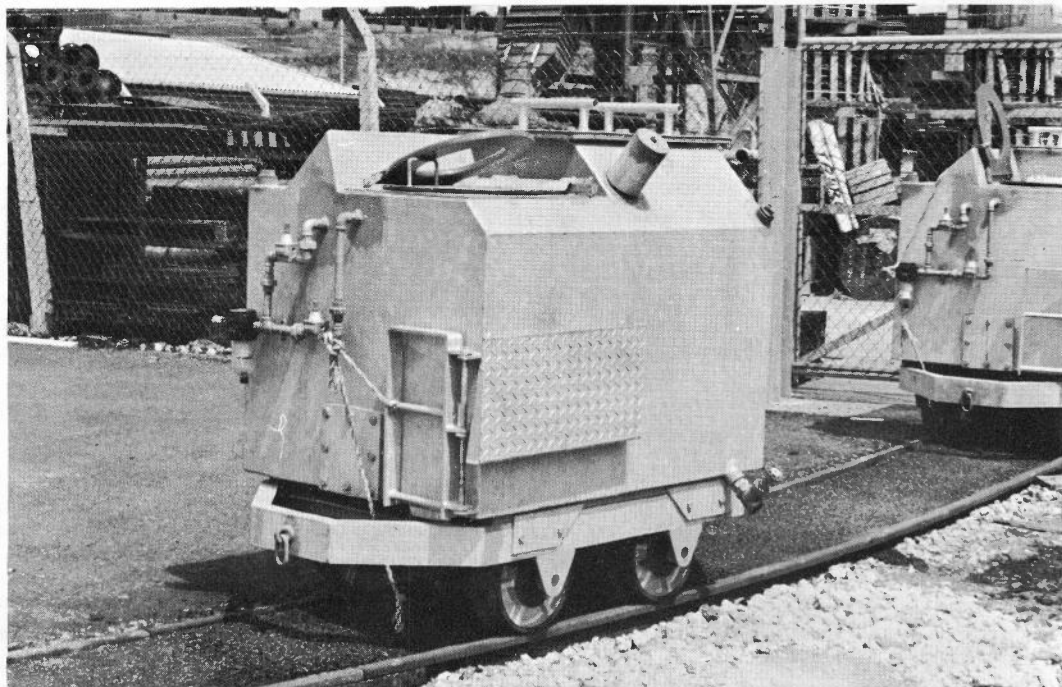
No.'s. 3014-5 delivered 30th June 1953.

Both the latter have, I think since been transferred to the Reynolds Bros. estates at Sezela.

While British Rail still request their passengers not to use the lavatory" when the train is in the station" this long standing problem has been overcome on narrow gauge industrial lines ! Normally used at the bottom of the shaft this vehicle was found conveniently placed on the surface at Wheal Jane Ltd, Clemow's Shaft, Baldhu, Cornwall (NGI.59/18, NGN.84/11). It is a 'Mobile Gester' built by G. D. Peters & Co. Ltd. (works no.MG/100/8/DP), Public Health Division, Windsor Works, Slough, Bucks and makes life in the mine a bit more comfortable.

They were first produced for use in South African gold mines - (Wheal Jane is a subsidiary of Consolidated Gold Fields Ltd) - by Wright, Anderson (South Africa) Ltd, who won the 'World Mining Blue Ribbon Equipment Award' for this design in 1966. Several variations are available ranging from the single seater depicted to a four seater with or without 'modesty' screens.

.....sent in by H. T. CAFFYNS



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N.G.R.S. PUBLICATIONS. WANTED : 'N.G.' Magazines (No.36 and prior), N.G. NEWS Nos. 1-22, 25 & 32. State your price ! 17 Crosslands Road, West Ewell, Epsom, Surrey. Tel 01-393 9520.

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The 'N.G. NEWS' Index, covering issues from 1957 to June 1972 (No.77) can be yours, 25p plus postage — 5p British Isles, (Overseas postage on quotation) : Pete Briddon, 30 Avenue South, Surbiton, Surrey, KT5 8PJ.

WANTED : Information, or photographs for copying, depicting standard gauge privately owned wagons of all types including N.C.B. and ex B.R. vehicles. Information on the Pensnett Railway would also be most welcome — Greg Martin, White, 43 Widney Lane, Solihull, Warwickshire.

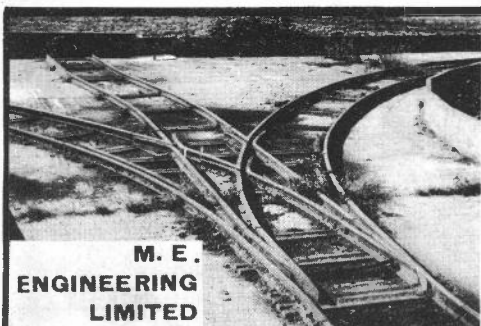
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[Nos.59/60/61 now out of print]

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The Isle of Man Railway

by J. I. C. Boyd

This Centenary Edition represents almost an entirely new publication on the Isle of Man Railway. Previous access to the Company's records has been limited, but with a change in policy the use of the Company's archives has been granted on a scale which discloses that almost all records have survived the century with the exception of certain Manx Northern Railway papers. J. M. Lloyd has prepared an entirely new set of layout diagrams based on the Author's searches through the Company's Plans. Some new photographs have been added, and seldom has a railway celebrated its centenary with such a complete record of its past history. £4.50 post 22p.

Cement Railways of Kent

By B. D. Stoyel and R. W. Kidner

Both along the Thames and the Medway, the mid-Victorian cement works faced the problem of getting their products to the market by way of the water, and built tramways down to the river on all manner of weird gauges. Later many were connected to the South Eastern Railway, requiring 4ft. 8½in. equipment, and the locomotive history of undertakings which operated on two or three gauges at once is highly complex. This remarkable book traces the history of some thirty undertakings over a period of over 100 years, and lists all known locomotives. The large photographic section depicts every type of locomotive except some of the earliest, with rare photographs of the geared engines amongst them. Track layouts of most of the systems are included. £1.20 post 7p.

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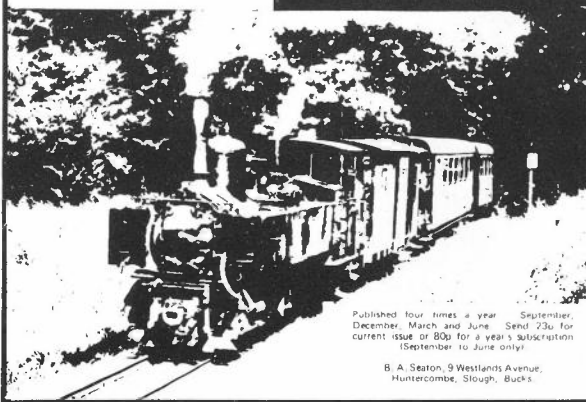
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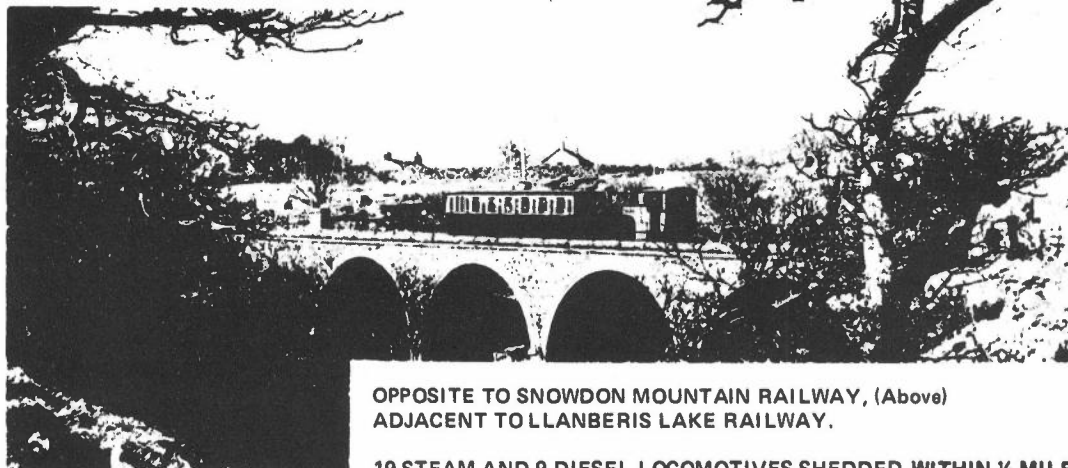
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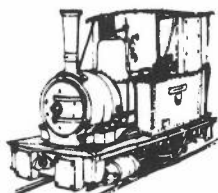
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Open days are held on the third Sunday in each month from April until the end of September (also third Sunday in November, January and March — weather permitting), when trains will be running from 11.00 to 17.30hrs. Visitors are also welcome on working party days which are held each Saturday and Sunday throughout the year. Club visits to the Museum are welcome but Secretaries should write well in advance of the day they wish to come, so that trips along the line can be arranged.

For further details write to the Exhibition Secretary, J. R. Fennell, 131 Harbut Road, Battersea, London, SW11 2RD.

MESSAGE FROM WEST CORNWALL

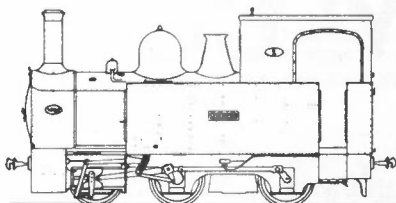
We are some of the most 'Way out West' N.G.R.S. Members, being over 120 miles from our Branch Secretary at Exeter.

We have some locos (Steam and Diesel) and stock, and more are promised on varying terms of loan. We also at last have a site and 1974 will see the beginning of our long-planned line.

We would very much like to hear from Members and other enthusiasts who may be within regular travelling distance of our part of this lovely County.

Any type of interest will be welcomed and we promise to answer every single letter we get — even the funny ones !

P. J. Webb, 29 St. Peter's Hill, Newlyn,
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WELSHPOOL & LLANFAIR LIGHT RAILWAY

THE 'FRIENDLY LINE' NEEDS YOUR HELP !

This classic British N.G. line is being offered for sale for £8,000 to the Preservation Company. The bulk of this must come from the sympathetic N.G. fraternity. Can YOU help to save this line — with its 10 years of successful volunteer operation — for posterity ?

All donations should be sent to Alan G. Doig, Appeal Director, 6 South Street, DERBY. who will individually acknowledge them.

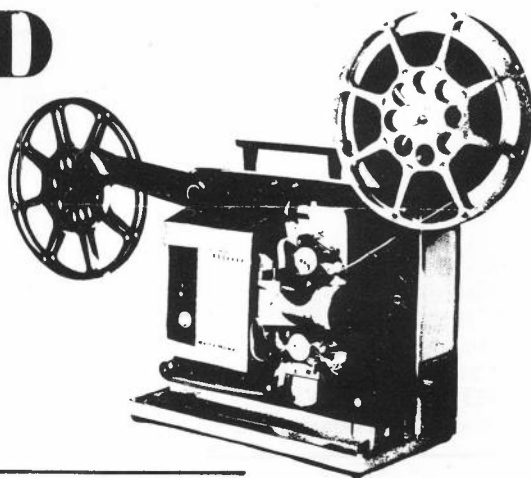
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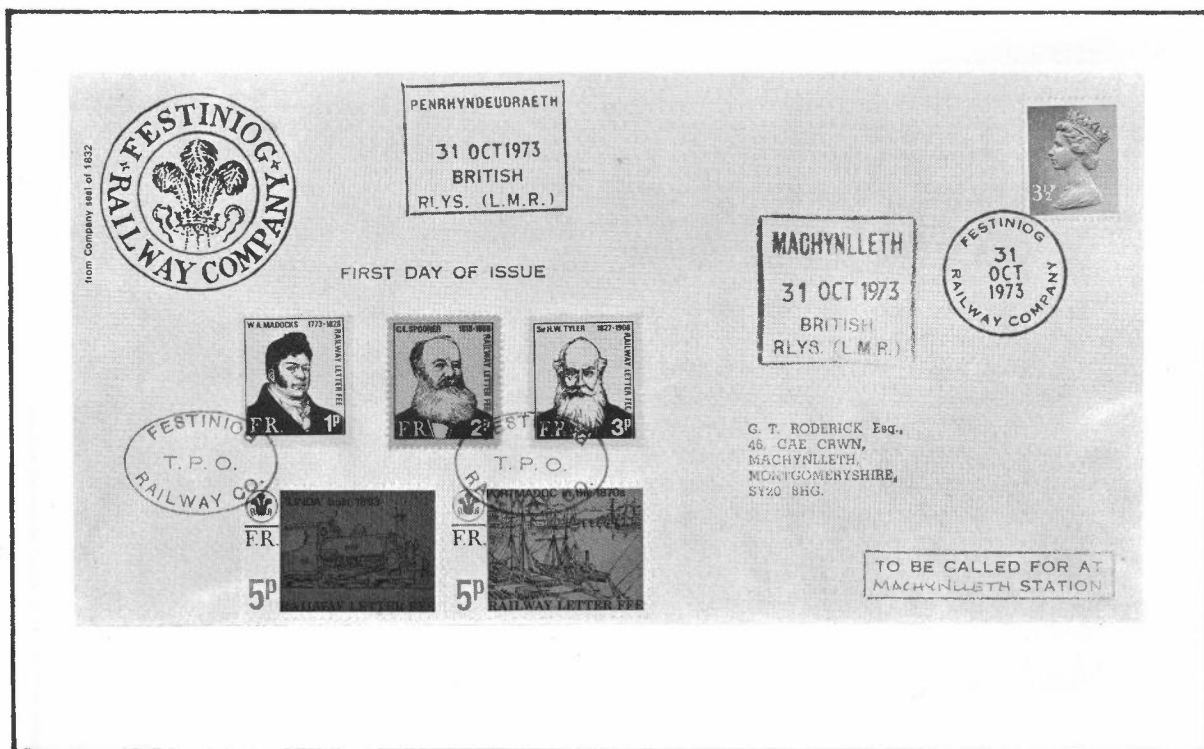
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New Railway Letter Stamps

On 31st October 1973 three low value definitive stamps were issued, having as their theme famous men in the history of the Festiniog Railway. These were 1p. featuring William Alexander Maddocks who was responsible for building the famous long embankment (The Cob) between 1807 and 1812, 2p. depicting Charles Easton Spooner, Manager of the line during the second half of the nineteenth century and 3p. with Sir Henry Whatley Tyler. He was the Inspecting Officer of Railways who gave permission for the Railway to carry passengers in 1865, the first time that this had been granted to a narrow gauge line.

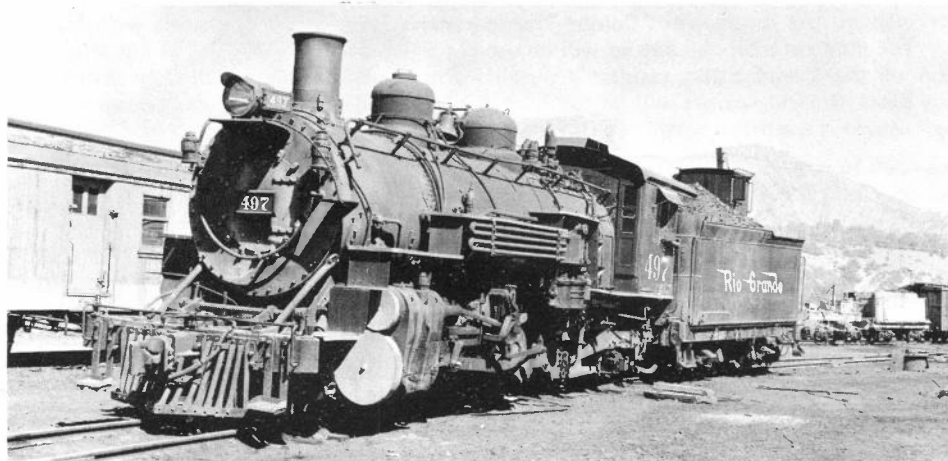
The new stamps have been designed by Michael Seymour (who was responsible for previous Festiniog Railway designs) and printed in sheets of twenty by T. Stephenson & Sons Ltd., of Prescot.



In addition to this Magazine, Members receive our specialist News Journal

NARROW GAUGE NEWS

Edited by Ivan Stephenson and including material compiled by the Hon. Records Officer, Pete Nicholson, Accuracy is the envied reputation of 'NGN' — A fact today's writers of literature on N.G. railways cannot ignore! Our Members read the facts! — and read them FIRST in 'NGN'; always ahead, with news direct from our roving reporters — 'in the field'.



No.497 at DURANGO, Colorado.

(Ron Cox Collection)

Whenever there is news from the 'DENVER & RIO GRANDE' you will always find it first in N.G.N.

"The recognised news centre of N.G. railways" — regularly published the first week in February, April, June, August, October and December. Each issue has at least 18 pages, crammed with news from a World of 'great little trains'.

Our RECORDS DEPARTMENT exists to supply Members with information and to accept news from Members for 'feeding' to both N.G.I. and N.G.N. editors. It is vital that these records (and thus Society publications) be kept right up to date. This is wholly dependent on Members incoming reports, so please do not leave it to 'the other chap' and never assume 'we know already' — we would rather hear six times than not at all!

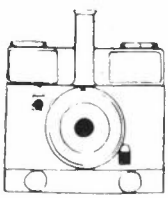
Free NEWS REPORT FORMS are always available from the H.R.O. on receipt of a foolscap S.A.E. These pro-formas are specially designed to assist both Members and Society officers — does away with the need for letter writing when you want to send us some news quickly . . . or . . . perhaps you simply do not like writing at all!? If so, the H.R.O. will be pleased to accept **ANY** news by telephone. You can now ring the '**NEWS-DESK HOTLINE**' 01-393 9520 any evening 19.00 — 22.00hrs (ask for Pete). Make a note of his number now!

"Let us **ALL** share **YOUR** news and views"

There are still gaps in the **N.G.R.S. LIBRARY** shelves — perhaps you can help to fill some of them? Hundreds upon hundreds of files, books, drawings, photos etc, have been maintained for the benefit of us all by our Librarian Peter Lee — since the earliest days of the Society. Peter is dependent on Members regularly sending in relevant published works-books, newspaper cuttings, Society magazines etc, etc, (photostat copies are just as acceptable if you wish to retain originals!). In order to keep this unique collection as complete and up to date as possible **ABSOLUTELY ANY REFERENCE WHATSOEVER** to N.G. should be included, so that future authors and researchers need look no further for published information on narrow gauge subjects.

A reminder that all items in the Library are available on loan — to Members only — for a period of one month. Outward payment, plus a small packing charge, to be paid when returning the parcel.

HON. LIBRARIAN : Peter Lee, The Sycamores, Golcar, Nr. Huddersfield, Yorks. HD7 4AJ.



N. G. R. S. Grand Annual Photographic Competition

1973-74 COMPETITION

BLACK & WHITE & *COLOUR SECTIONS

All entries submitted must be : **Black & White Glossy Prints** (ideally of at least postcard size and fully captioned on the reverse) or ***Colour Transparencies [slides]** (accompanied with full captions and S.A.E. for their return). All entries will be subject to inclusion in "N.G.I." at any time following declaration of the Competition results *Colour Transparencies will be promptly returned to the sender but Black & White prints will be retained for inclusion in the Society's Photographic Library unless their return is specifically requested.

Categories open to entries *

- *A) Scene depicting N.G. Steam
 - *B) Scene depicting N.G. I/C (Diesel, petrol, etc . . .)
 - *C) Scene depicting N.G. Electric (inc N.G. Tramcars.)
 - D) Scene depicting an item of N.G. Rolling Stock.
 - E) Scene depicting a 'permanent fixture' of N.G. interest. (Building/Trackwork/Signalling, etc . . .)
- (All pictures must have been taken personally by the **Member** submitting the entries)

— British or Overseas —

— Current or Historical —

— In use, out of use, or even derelict!

Black & White : — No limit on No. of entries

***Colour : — Limited to 2 entries per category**

We would particularly like to hear from any Member, Group, Society or Company willing to sponsor any prizes for the above categories.

Judging will be a highlight of the 23rd Society A.G.M. to be held in May 1974. Winning entries will be selected by those Members present, and the presentation of prizes will be by a well known N.G. personality — by invitation.

Competition Organiser :

MICHAEL JACOB, 77 PARKHILL ROAD, BEXLEY, KENT, DA5 1JB

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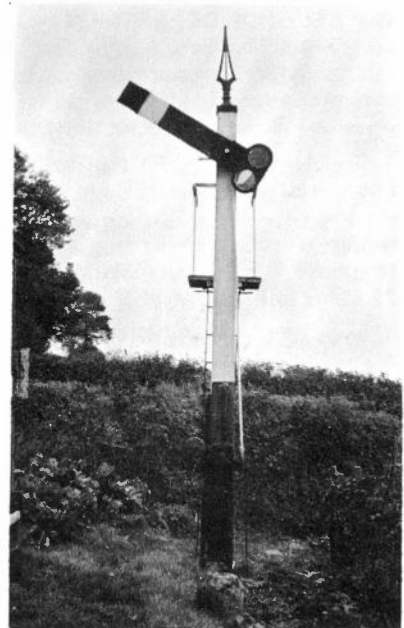
"K.Y.K.G." N.G.I. 66

The Answer : *Barclay 'Modified E' class (incorp. modified Walschaerts valve gear) 0-4-0WT (NGI.65/7). Loco depicted is Bord na Mona's LM43/No.1 (Barclay 2263 of 1949)*
(H. Richards)

"K.Y.K.G." N.G.I. 67

Of what origin ? ➡

(Answer next time)



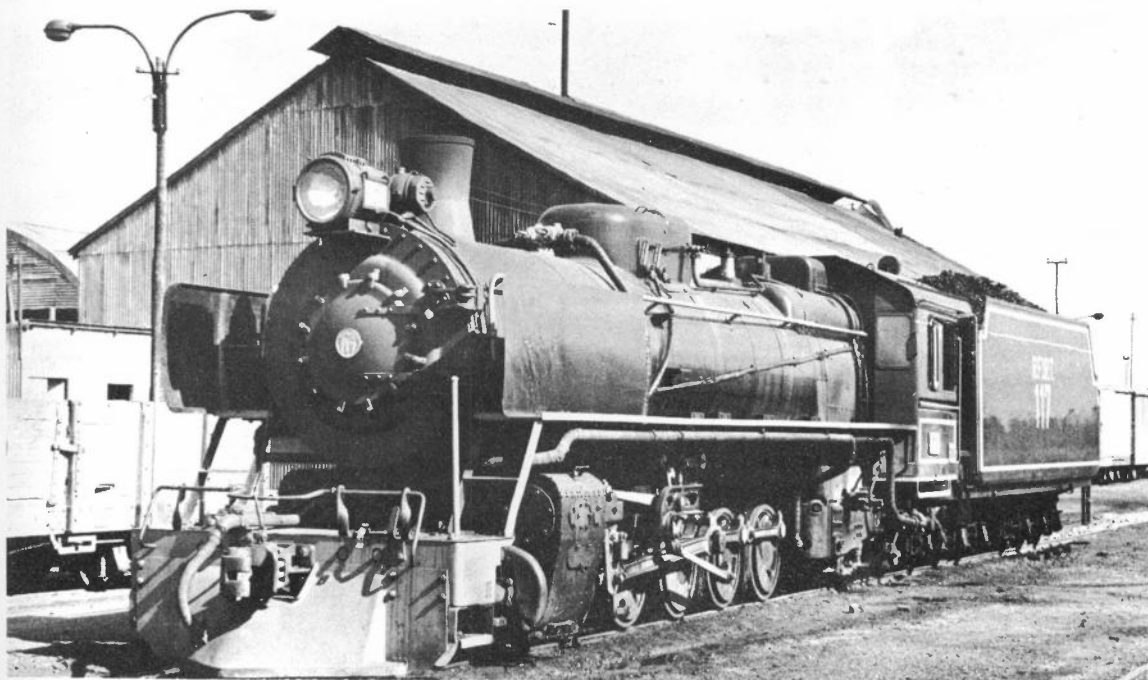


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