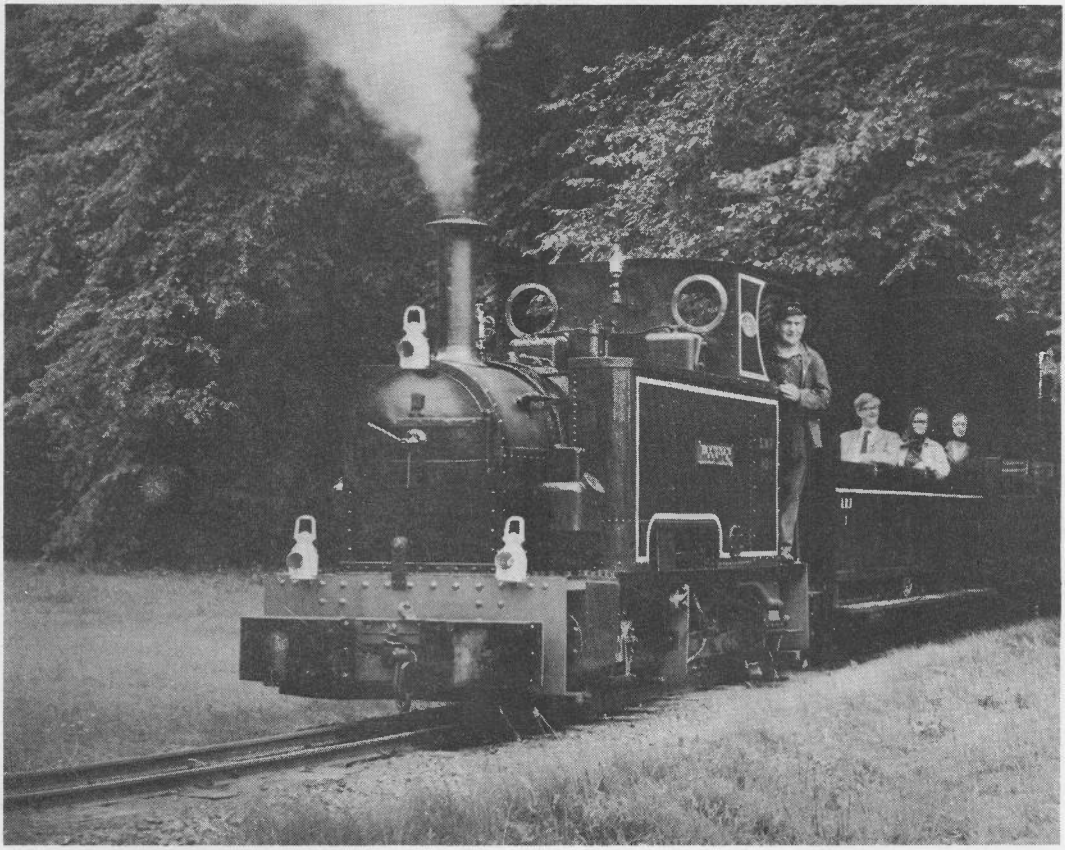
THE NARROW GAUGE



No. 57 • JUNE 1971

THE NARROW GAUGE RAILWAY SOCIETY

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KINDLY NOTE NEW SUBSCRIPTION RATE IS £1.50 PER YEAR EARLY RENEWAL WOULD HELP RALPH MARTIN.

Cover Photo

Another shot from the camera of IVO PETERS showing the BICTON GARDEN RAILWAY

Loco No.1 "WOOLWICH" 1'6" 0.4. OT.
Avonside 1748 of 1916 ex Royal Arsenal Railway Woolwich

FACING PAGE

An interesting photograph from a children's book sent in by Sydney Leleux showing 'Typhoon' from the Romney Hythe and Dymchurch Railway alongside 'Flying Scotsman', LNER No. 4472.

Contents

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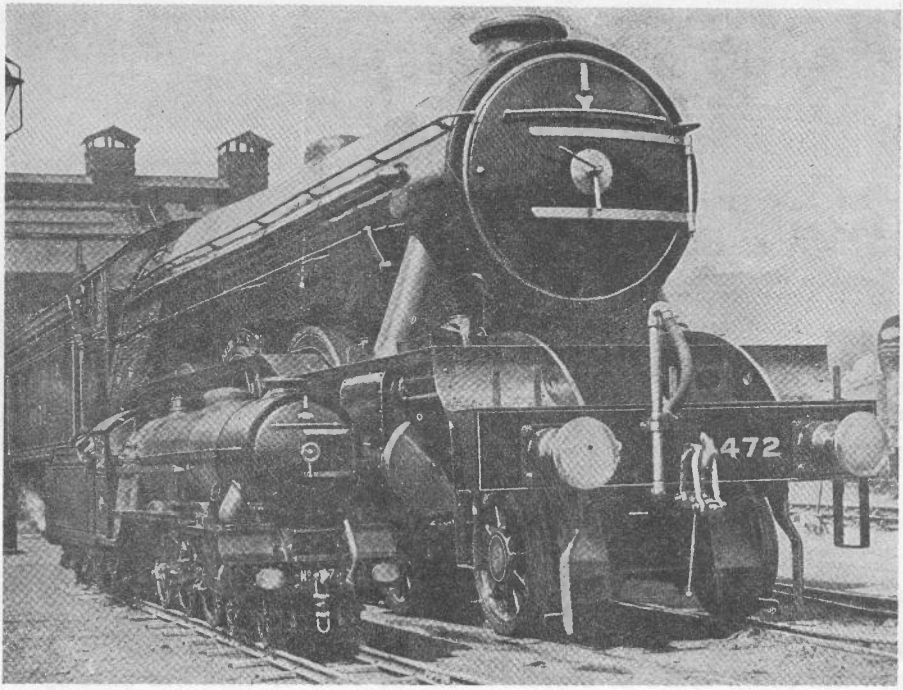
Letters to the Editor

From Ivor Gotheridge, London, S.E.12.

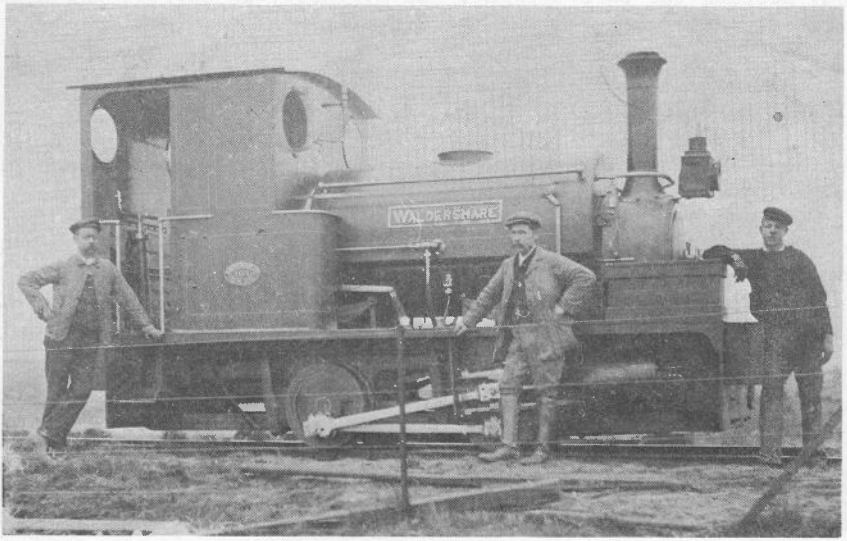
An old photograph showing Hunslet Engine Co. No. 1611 built 1903 scrapped 1950 used by Sandwich Bay Estate Co. Traces of track can still be seen by the toll gate, the 3'6" line ran from an hotel by the sea to a wharf on the River Stour.



Courtesy] [*L.N.E.R.*

A CHIP OF THE OLD BLOCK.

This tiny engine, called "Typhoon," runs on the Romney, Hythe, and Dymchurch Railway. It is built exactly like its giant neighbour, the "Flying Scotsman," which is three times as big.



Letters to the Editor

From: PETE NICHOLSON - EPSOM.

Enclosed are a couple of other items, there being two close-up shots of 'Dougal' at Longleat and the other a greater rarity. It is a photo of 'Cardiff', Kerr Stuart 3084 of 1918, 'Haigh' class 0-6-0T on a contract at Gorple Reservoir, Nr. Hebden Bridge, Yorkshire in 1927. Although not a very good print it nevertheless shows one of the locos mentioned in Alistair Parsons interesting but unillustrated article on the Fernilee Reservoir contract, The Narrow Gauge No. 49, page 23. It is of interest how I came by this photo. My mother mentioned my railway interest to her dentist one 'session' and he promptly produced the enclosed, or rather a smaller print. He was of course very interested to read Alistair's articles and he never thought that he would ever hear of the loco or its fate that he had 'snapped' working near his home as a boy!

* * * * * * * * * * *

From: RODNEY WEAVER - KENILWORTH.

A pure shot in the dark on that Wallis & Stevens sent in by R.G. Pratt which may or may not set someone off on the right track. I understand that a form of monorail comprising a single rail at ground level on which cars were balanced by poles on one side, operated in India in the state of Patalia, I think. The poles would be supported on the back of oxen (or held by a native "pusher") and provided not only a means of balancing the car but also of propelling it. If you wanted to mechanise such a line, possibly to get up a steep gradient, then a monorail tractor like the one illustrated would be ideal. This would provide the tractive force and the "pushers" would only have to worry about keeping the cars upright. If my theory is correct the order would almost certainly have come through the Crown Agents.

* * * * * * * * * * *

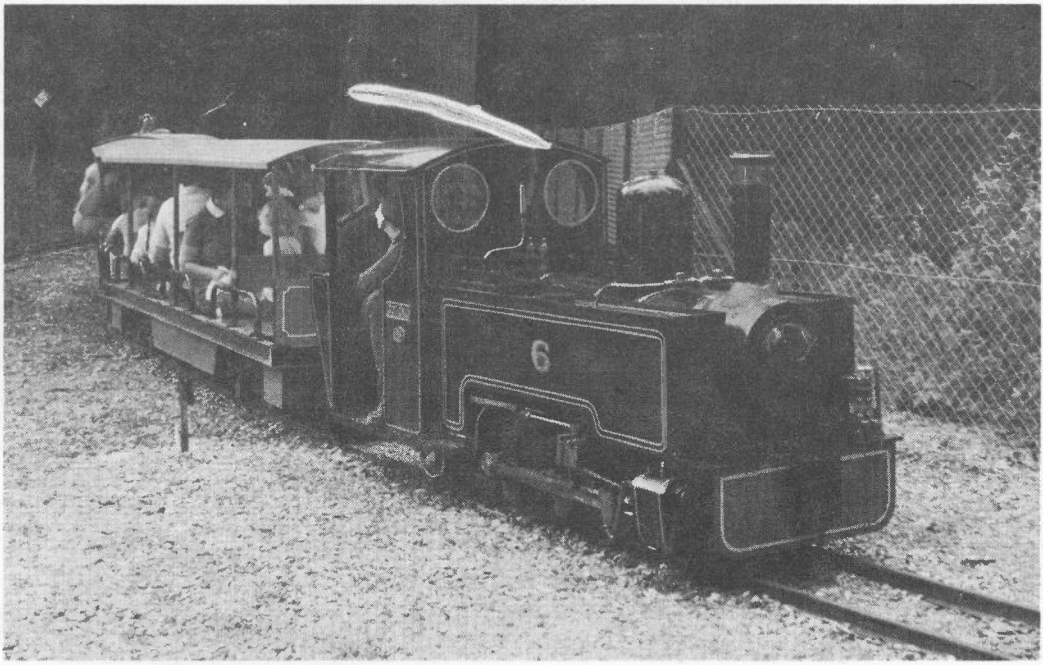
From: MICHAEL G. SATON - CALCUTTA 16.

I was most interested in the reference in Narrow Gauge 55, page 2, to experiments conducted in India in 1919.

I have just unearthed a reference to a Monorail at Khambhalia called the Guideways (India) Jamnagar-Khambhalia. Apparently it operated on the Skelton Guideway principle designed by A.W.C. Skelton, Chief Engineer of the then J & D Railway. Skelton died in 1952. The Monorail was apparently opened to traffic on 27th May, 1946 and operated till July 1952 over 11 miles of track from Khambhalia to Bhanvad.

Rolling stock consisted of two passenger coaches and two wagons with one 33 h.p. petrol locomotive. All aspects have now disappeared, and the whereabouts of the promoters and staff are unknown.

Can any of your readers throw any light on Skelton and his Guideway system?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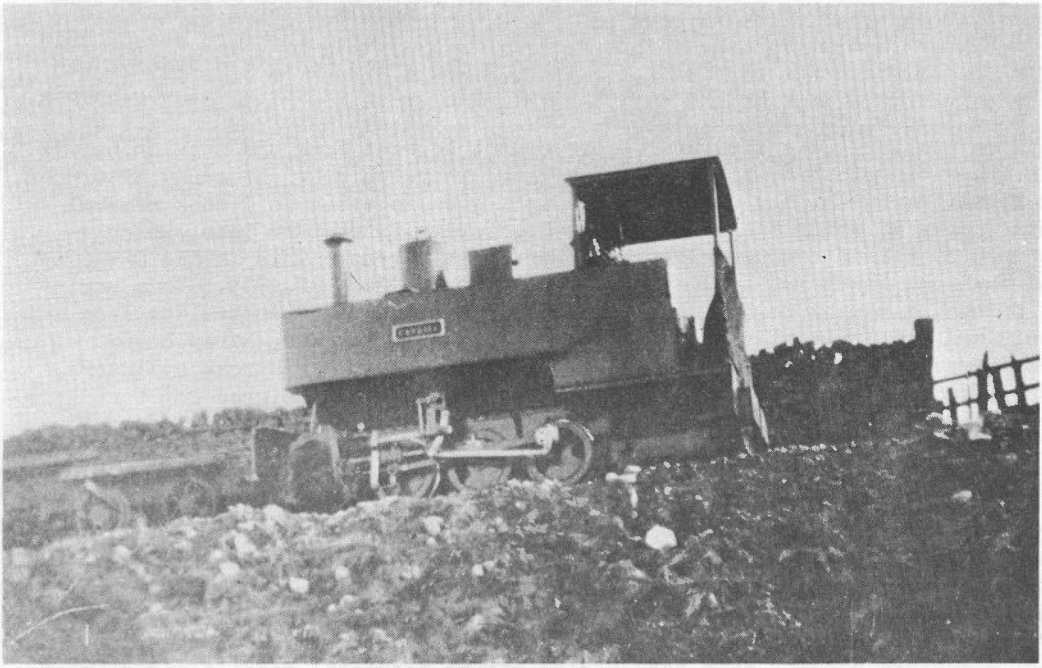
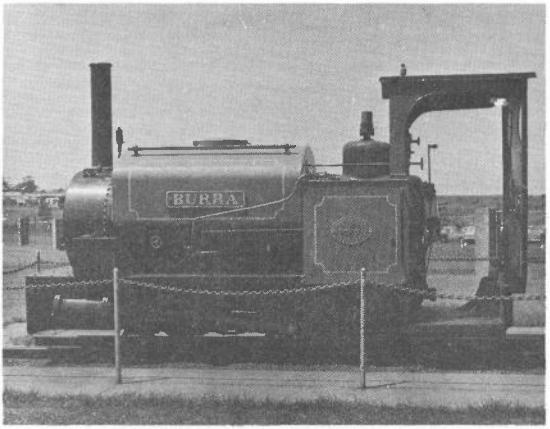




From: W.A. PEARCE - VICTORIA, AUSTRALIA.

Issue No. 55 of 'The Narrow Gauge' is just to hand and I was interested to see the note about 'Burra'. Some further information about this loco may be of interest to you.

At the start of this year I was on holiday in N.S.W. and determined to have a look at this engine in its preserved state. The usual location quoted for this loco is Port Kembla, at the Visitors Centre of Australian Iron and Steel, so I journeyed to this town. I had been to Port Kembla several times before and never seen this Visitors Centre but determined to make a thorough search this time. I did not find the Centre but found a map which indicated that it was located at Coniston, a suburb of the other large city in the area, Woolongong, and some five miles from Pt. Kembla. So, into the railmotor and alight at Coniston station. The Visitors Centre cannot be seen from the station but is only about ten minutes walk away. I arrived there on a bright sunny afternoon and found 'Burra' nicely displayed and in a good location so I took several photos, some of which I enclose. Also on display is another loco, which although of standard gauge might be of interest to you. This is the 0-4-0 ST 'Wallaby', by Hawthorn, Leslie & Co., builders No. 2988 of 1913. This engine was purchased new by D. & C. Hoskins Ltd., fore-runners of Australian Iron and Steel, and was originally used at the steelworks at Lithgow, later being transferred to Port Kembla. This loco has 14" dia. by 22" stroke cylinders, 3'5" dia. driving wheels, 140 p.s.i. boiler pressure and weighed 28½ tons in working order, with 1½ tons of coal and 1000 gallons of water. It was withdrawn from service in 1963.

Both locos are in good condition, the restoration work done has been of a high standard and they don't seem to have suffered any vandalism. 'Wallaby' does not have a builders plate but has a circular plate with the initials AIS. Its livery was a maroon with yellow lining but the maroon has chalked up to a pinky brown now, a fate that often befalls the darker red shades in the harsh Australian sun, however there is no signs of rust or cracking of the paintwork. Metal signs are erected near each engine giving technical details and a brief history.

From: ALISTAIR PARSONS - BOSTON.

Further to references to the Schull & Skibbereen rolling stock in No. 54 and 55, coach No. 5 never had end balconies as the doors were three windows in from each end, there being six windows to each compartment. It was a 1st/3rd composite coach being 35'0" long whereas 6 and 7 were but 32'2" long thirds. There was therefore considerable difference between coach No. 5 and the other two bogie coaches (6 and 7).

Mr. Kidner quotes in his Narrow Gauge Railways of Ireland that the Schull and Skibbereen had four four-wheel and four bogie coaches, two brake vans.

From photographic evidence it appears that was indeed another bogie coach (No. ?) which decidedly was not 5, 6 or 7 as it was different from all three, though it had open balconies and resembled somewhat Nos. 6 and 7. This coach appears in a few very well known photos of the line taken in the early years of this century.

Furthermore, the brake vans appear to have been of different designs. One had a passenger compartment as well as guard's portion, whereas the other appeared to be just for the Guard and luggage.

Also, for the record, the Schull and Skibbereen was finally closed to all traffic in 1947; the line then lay derelict until 1952-3, when it was legally abandoned and the lines ripped up and effects disposed of.

What was No. 65 doing in steam on 3rd July, 1950? At the time the then Chairman of Coras Tompair Eireann, Mr. T.C. Courtney, knowing that Mr. C.L. Fry was building in model form a history of Irish Rail Transport, trams, etc., very kindly had loco 65 put in steam specially for Mr. Fry and his wife on 3.7.50, long after the S.& S.R. had been closed, for the purpose of moving the vehicles into photographic positions and for measuring up for construction of models of S & SR. These S & SR models were completed in 1950 and run on Mr. C.L. Fry's Irish International Railway and Tramway System.

I.A.CUTTER - HORNBY * * * * * * * * * * *

On page 3 of issue no.55 of "The Narrow Gauge" there was a request for information about an "American 0-4-OST (?) "Sandfly" shown working near Darwin". I hope this results in a detailed letter from some reader, but just in case it doesn't I give a few details below.

"Sandfly" is a 3'6" gauge Baldwin 0-4-OST. It was used by the contractors for the Palmerston and Pine Creek Railway, and passed into the hands of the South Australian Railways when they began to operate the line. When the line was taken over by the Commonwealth Railways "Sandfly" became their sole "NA" class locomotive.

The Bulletin of the Australian Railway Historical Society for August 1970 has a broadside photograph of this locomotive carrying a gigantic headlamp at each end.

"Sandfly" is now preserved in good condition on Port Augusta Railway Station in South Australia.

JOHN FOWLER & CO. LEEDS LTD.

Continuing our series of photographs:

No. 18. Works No. 16255 & Tender 16256.
9½" x 14" 0.6.2. loco for Queensland Government
with 800 gallon tender.
Designed for wood or inferior coal fuel.

No. 19. Works No. 16608 0.4.2. tank engine.
Plate reads Rabone Bros. & Cia
Birmingham,
Inglaterra.

No. 20. Works No. 16639 0.4.2. tank engine.

No. 21. Works No. 18619 0.6.0. tank engine

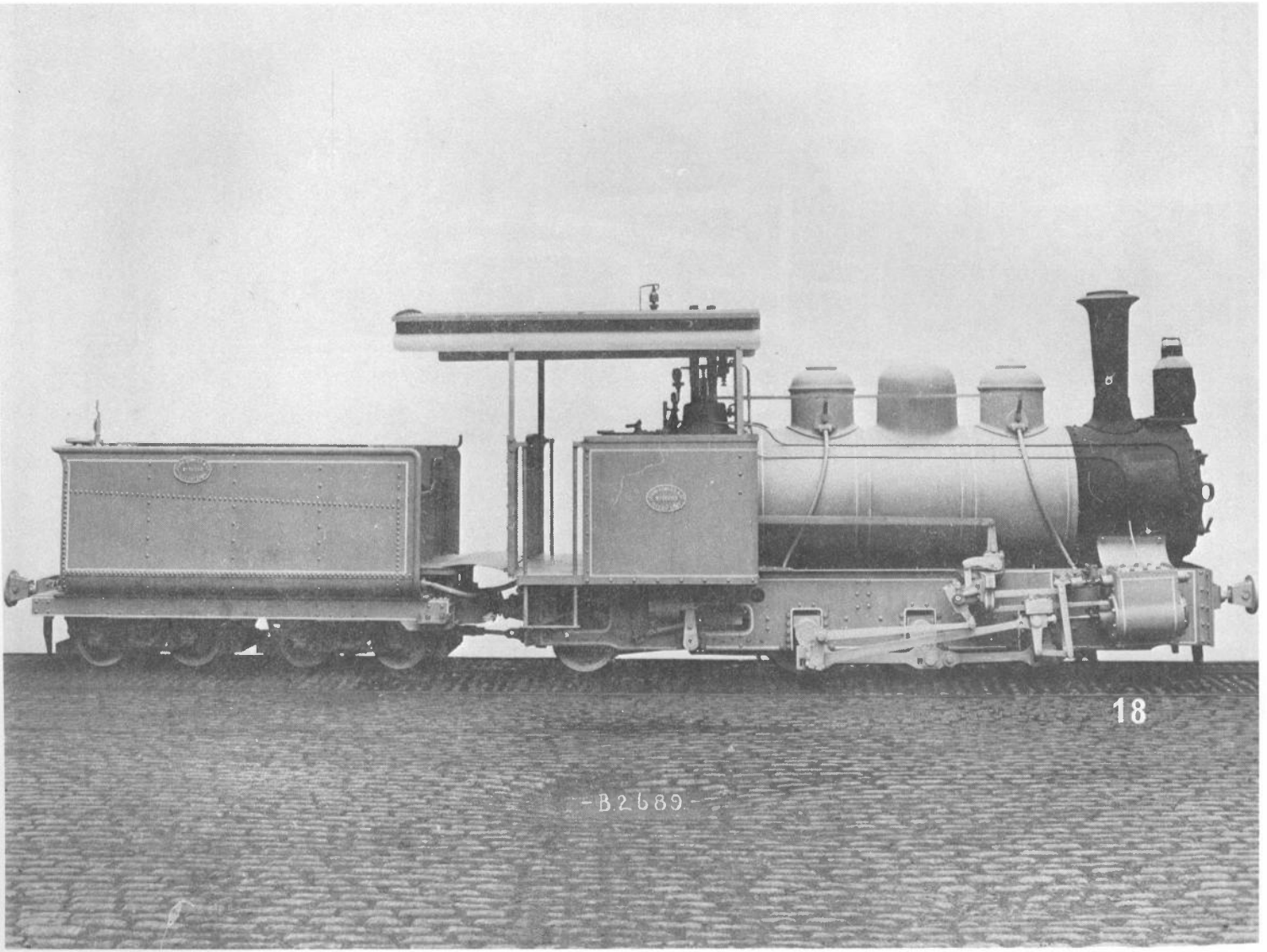
We have to thank Mr. Pratt for allowing us to Copy these fine photographs from his collection, and Messrs Fowlers for permission to print, this ends the present series.

Mr. Pratt has also provided the Ransome Catalogue pages which have been featured on the back cover of recent magazines.

Many thanks - H. H. Editor.

AN APPEAL FROM THE EDITOR

This issue has seriously depleted our stock of articles for the magazine, as we had no incoming mail during the post strike. We especially require drawings, and the popular three or four page article on your special interest, photographs should be minimum postcard size, if bigger we get an even better reproduction.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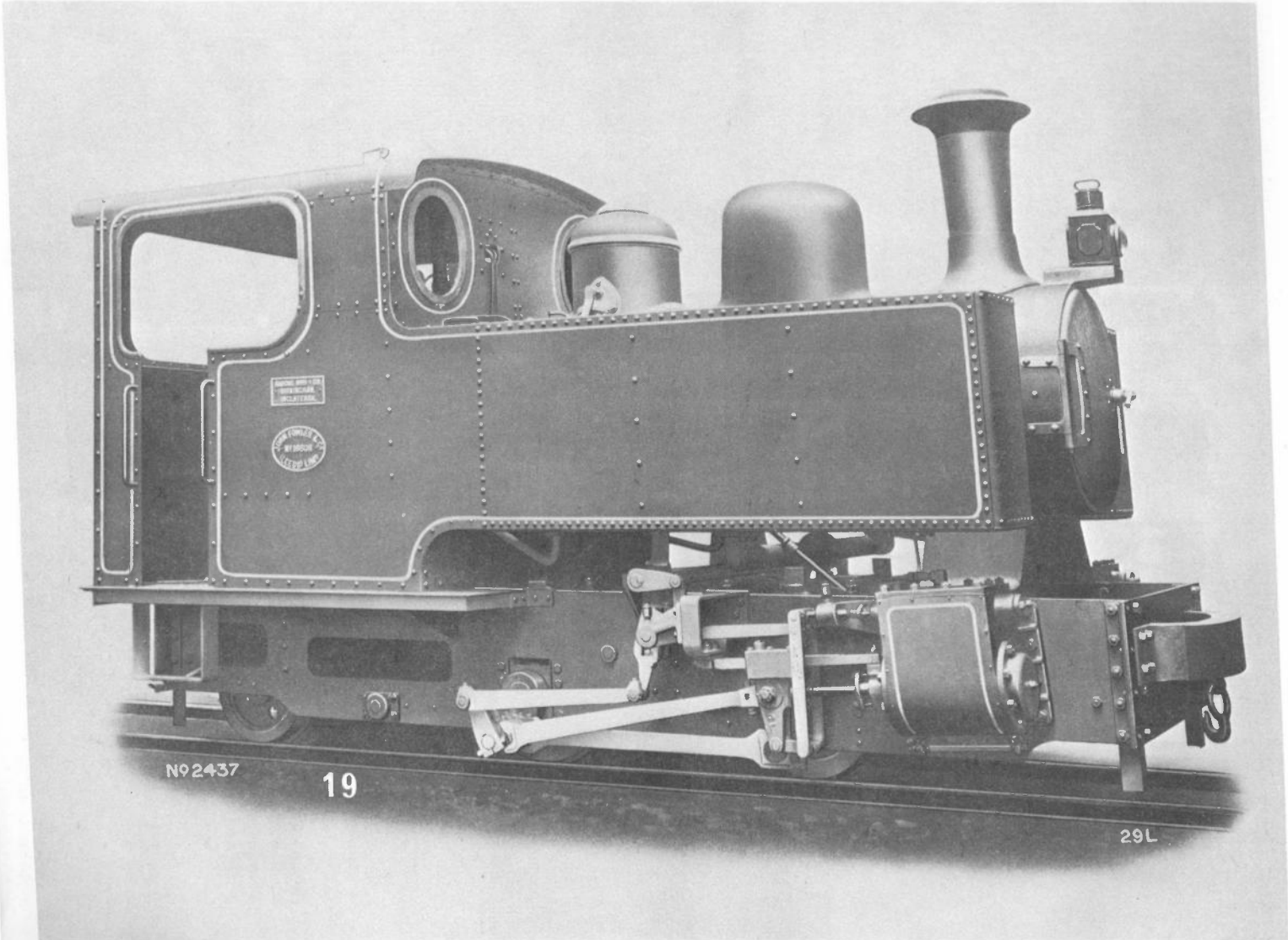
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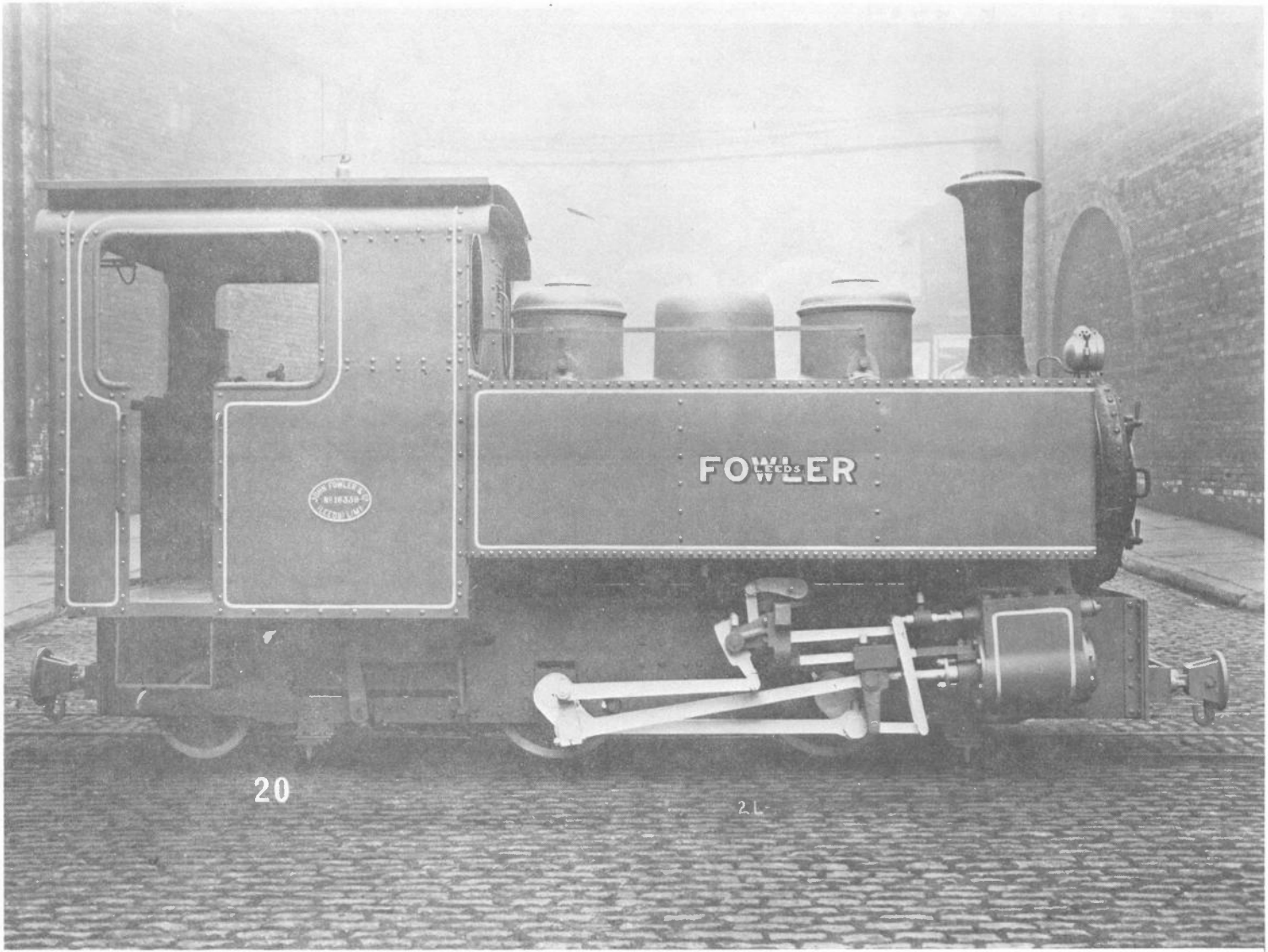
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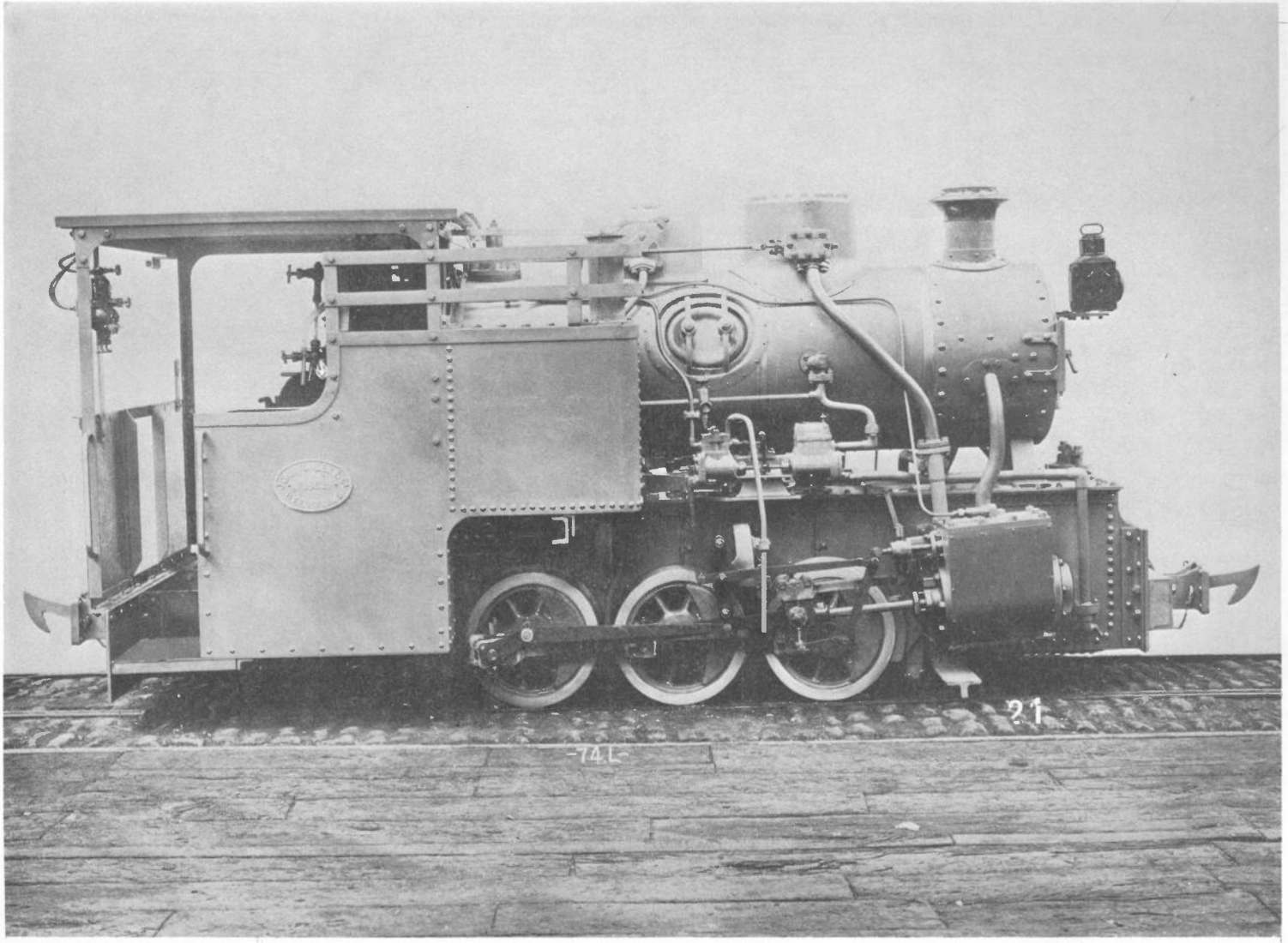
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D-T's IN THE DESERT

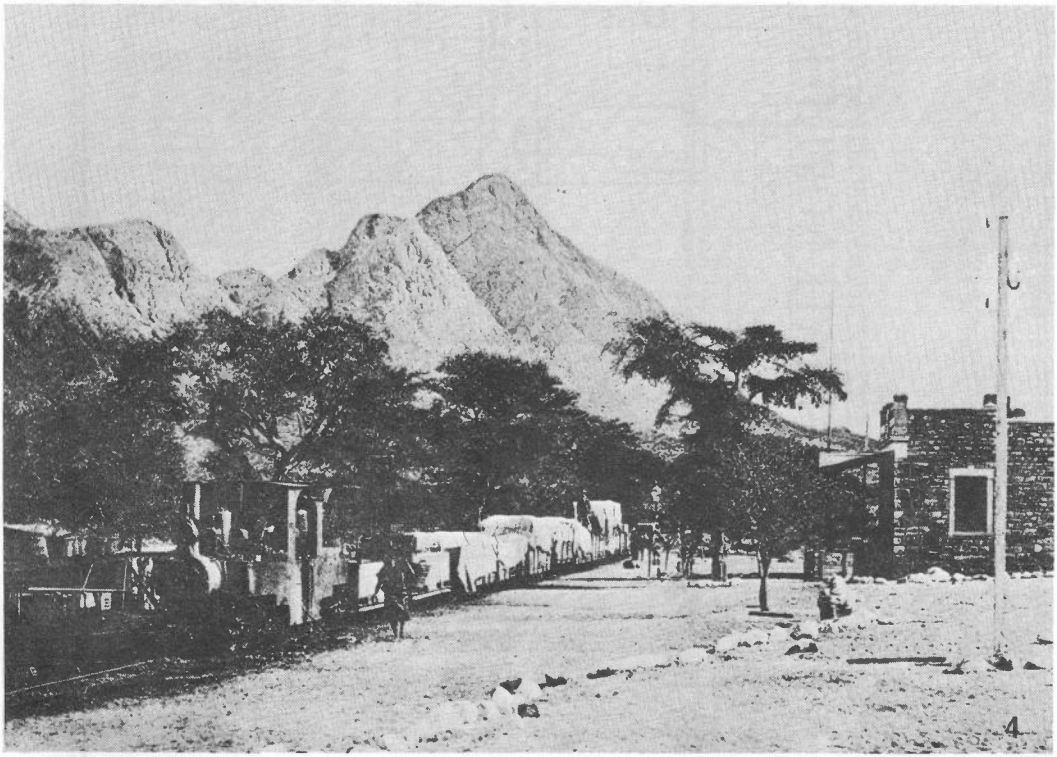
Sydney Moir

PART 2

THE LOCOMOTIVES AND COACHES OF THE EISENBAHN SWAKOPMUND - WINDHUK.
Continued from Magazine No. 56, page 39.

Photo 4

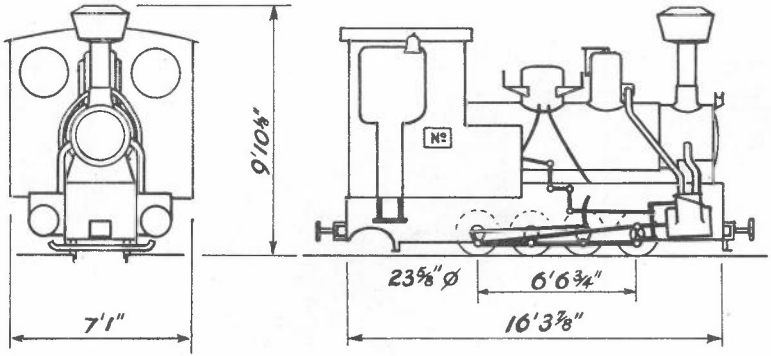
A Zwilling, with a water-truck attached, heading a train at Khan station. The two units have different types of stack: this could be the result of replacing a worn-out stack, or the mis-matching of the A and B units of various locomotives.



German South West Africa

STATE NORTHERN RLY.

TYPE D.T.



WORKING WEIGHT	27,560 lbs.	GRATE AREA	4·6 sq. ft.
COAL CAPACITY	1,100 lbs.	HEATING SURFACE	225 sq. ft.
WATER CAPACITY	205 gals.	CYLINDER DIAM.	9 7/16"
STEAM PRESSURE	170 lbs/sq/in.	PISTON STROKE	11 13/16"

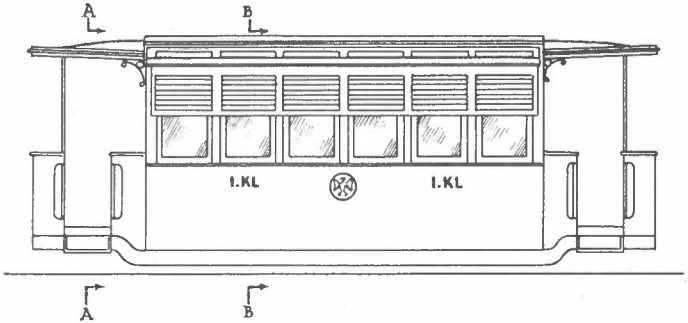
60 HORSEPOWER

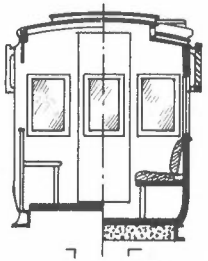
S.M.MOIR-1956

German South West Africa

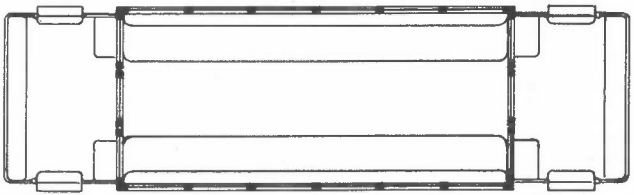
STATE NORTHERN RLY.

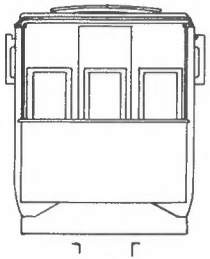
PASSENGER COACHES





CROSS-SECTION
A-A B-B





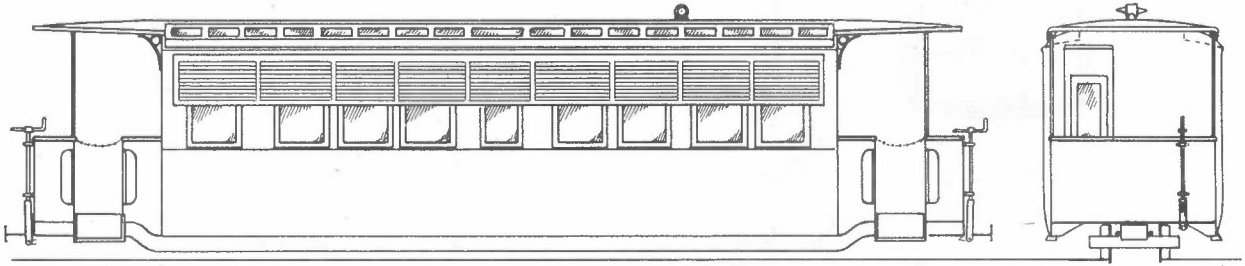
NOTE : THIS DRAWING IS NOT COMPLETELY ACCURATE, HAVING BEEN MADE UP FROM MEASUREMENTS AND VARIOUS PHOTOS.

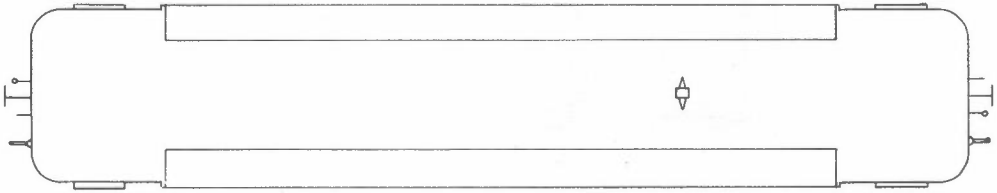
S. Moll 1963

German South-West Africa

STATE NORTHERN RLY.

OFFICIAL'S COACH





This drawing cannot be taken as completely accurate since it has been built up from the main dimensions, diagrams of the coach when modified and various photographs.

This coach was divided into saloon, kitchen, lavatory and baggage compartments.

S. Moir 1962

CROW ORCHARD COLLIERY

KEITH GREGORY

One tends to think of the British Coal Industry as being 100% the National Coal Board (N.C.B.), but there is also quite a number of private coal mines in various parts of the country. These are licensed by the N.C.B. and the Ministry of Power likewise supplies the Safety Inspectorate.

Most of these 'mini-mines' rely on narrow gauge rail transport to bring their output (and the rubbish) to the surface, the tubs being usually rope-hauled or hand-trammed, although a few of the larger 'Licensed' mines do have flame-proofed diesel or battery-electric locomotives, and the 'pit-pony' is not yet extinct!

Situated in picturesque surroundings off Mill Lane, Skelmersdale, Lancs., was Crow Orchard - one of the smaller mines, and employing three men underground and three on the surface. The workings were reached by an inclined adit, with a rope-worked rail line of 2'3" gauge. This emerged from the mine into a cutting about 20 feet below ground level, climbing on to an artificial mound at a convenient height for filling the elevated storage bunkers. At the top of the incline, the single line turned sharply aside by the winch-house and split, the two tracks running parallel for a short distance before rejoining to run over a bridge to the elevated tippler. There were 26 mine tubs, made by Hudson, and these were small enough to be turned (by hand) on steel plates, instead of using conventional pointwork to change tracks. (The Loop line was laid in for the surface storage of those tubs not in use.)

The Registered Office of the owner - Mr. J. Bentham, was in Berry St., Skelmersdale. The colliery was closed in July 1967 and all traces have now disappeared - filled in and flattened to accommodate the development of Skelmersdale New Town.

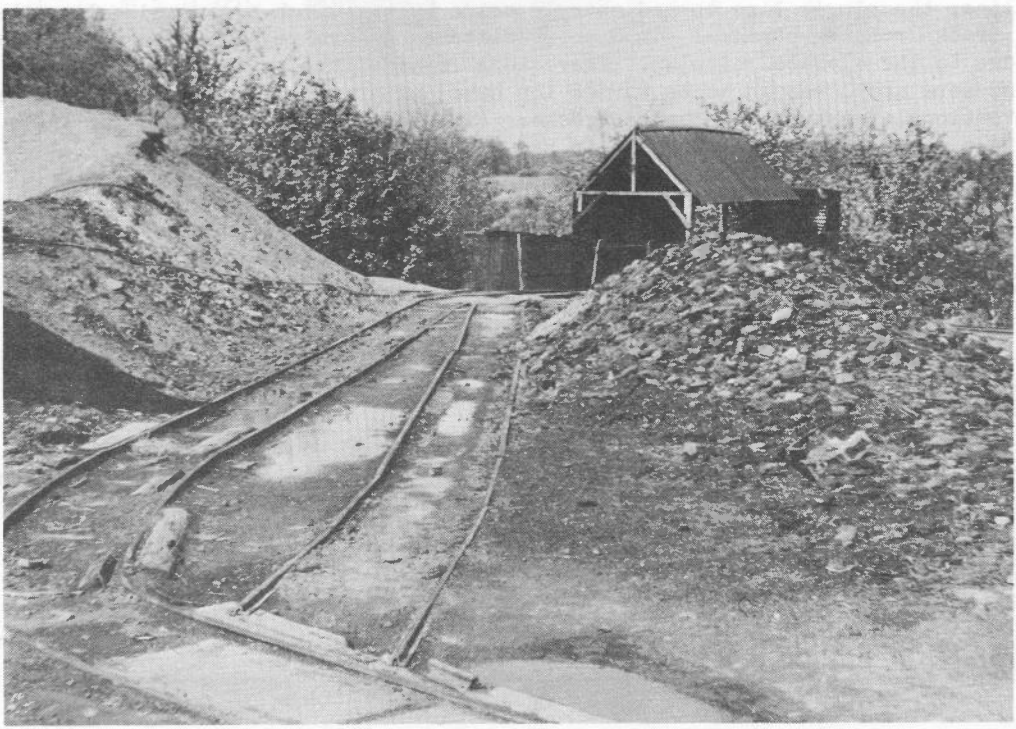
Photographs

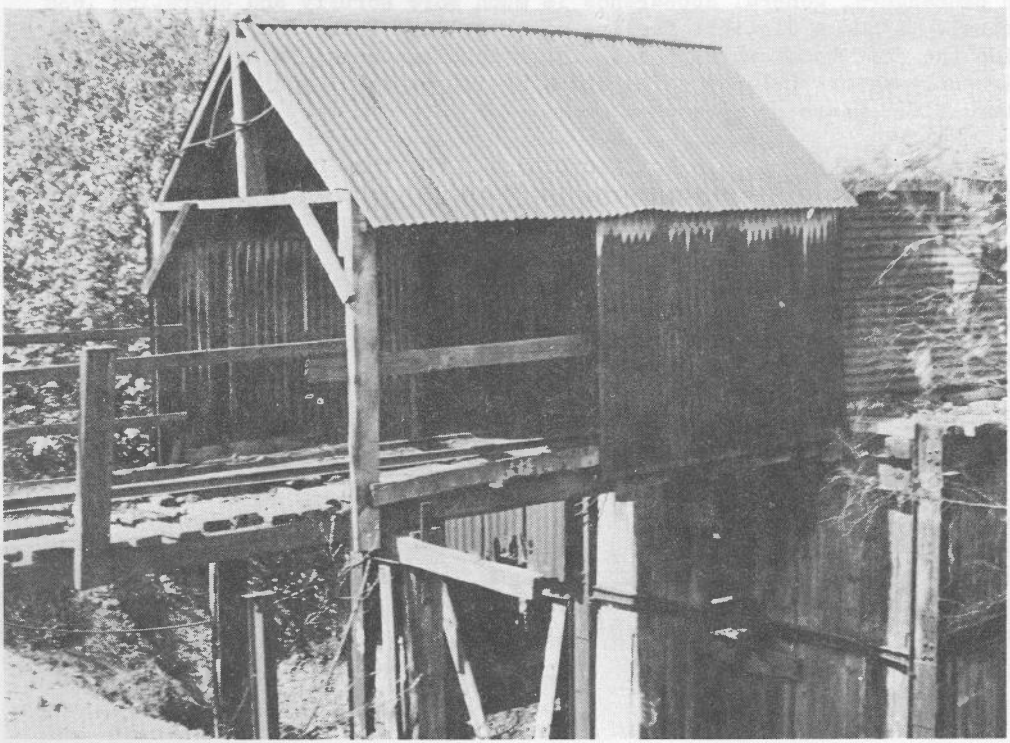
1. General view July 1967. Winding house top of incline. Mine entrance approx. 20' below ground level to right of photo. Wagon tippler to right.

2. Spoil tip on right. Notice skid plates for turning wagons.

3. Standard Hudson all steel pit tub.

4. Wagon Tippler.





SOUTH EAST ASIA '69

GEOFF TODD

These notes on my trip to South-East Asia (20th March to 10th May, 1969) are necessarily brief. If you would like more detailed information on any of the areas I visited please let me know and I'll do my best to elaborate. But be warned in advance that I am primarily a picture-taker and although I have a good deal of loco information, it is far from being comprehensive.

I paused in India for six days only, to visit some of the light railways, and replace some pictures of them which were lost after my previous visit in 1962. In Delhi, the Shahdara-Saharanpur Railway (Martins Ltd., 2'6" gauge) continues to run very smartly behind its little 2-6-2 and 2-6-4 tank locos. I cannot say that the trains are packed to the roof; the passengers are on the roof, and jammed into the goods wagons as well. There must have been 40 people in the coal wagon at the end of the train in which I rode. It provided an excellent, if rather bumpy, viewpoint.

The Arrah-Sasaram and Futwah-Islampur Railways (also Martins Ltd., 2'6" gauge) in Bihar are more like roadside tramways and although no less jampacked with passengers, general appearance is much more scruffy and operation less punctual. I had a distinct feeling of travelling backwards in time as I stood beside the dirt track which passes for a road listening to an 0-6-2T whistling indignantly at the bullock carts blocking its path; I would have seen the same picture fifty years or more ago.

I travelled from Patna to Calcutta on 7 Up, the "Delhi Express", in a superbly roomy broad-gauge compartment although sleep was rather intermittent, punctuated by frequent stops and distinctly poor track. Our WP Pacific took us right in to Howrah and all the activity around this station was steam although the line is electrified as far as Burdwan (95 km). I travelled back to Burdwan in one of the electric m.u.s., the only electric trains I saw, to ride the 2'6" line to Katwa. The locos of this ex-McLeod Railways, now nationalised, line have been repainted in ER green, the staff wear smart uniforms and operation is distinctly improved, but much to my surprise the three trains I saw were almost empty. The much-publicised diesel railcar recently obtained makes only one round trip daily, which is hardly intensive utilisation.

Martins' 2'0" gauge lines from Howrah to Amta and Sheakhala formed the climax of my brief visit. This is a suburban operation, quite unlike the other light railways, and its intensive service (8 trains arrive at Howrah in the peak 66 minutes of the morning) is quite unique for a narrow-gauge single-track whose only communication between stations is a telegraph key. (See "Railway Magazine", September 1965, for description).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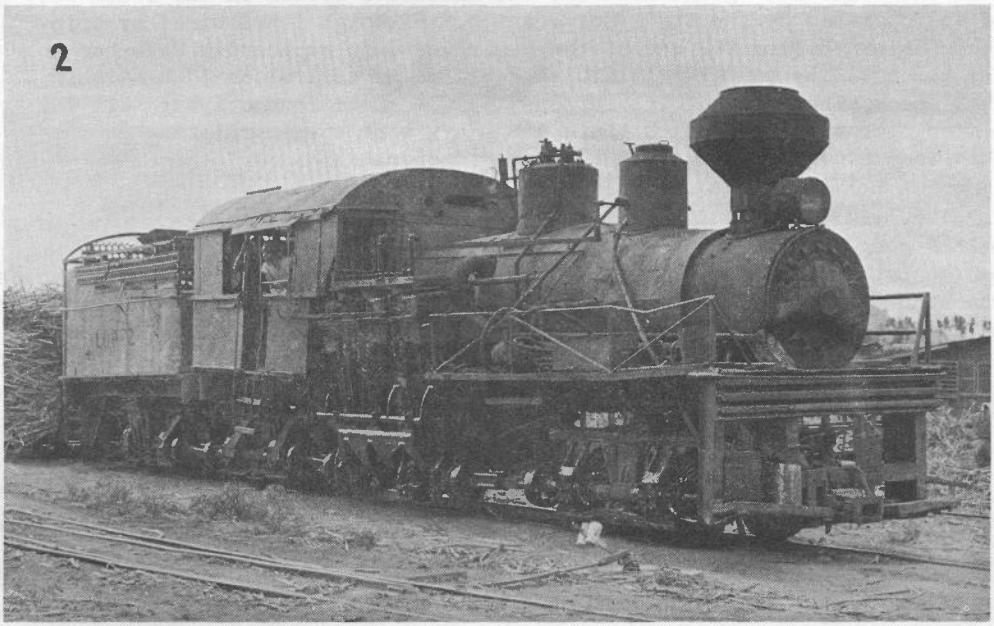
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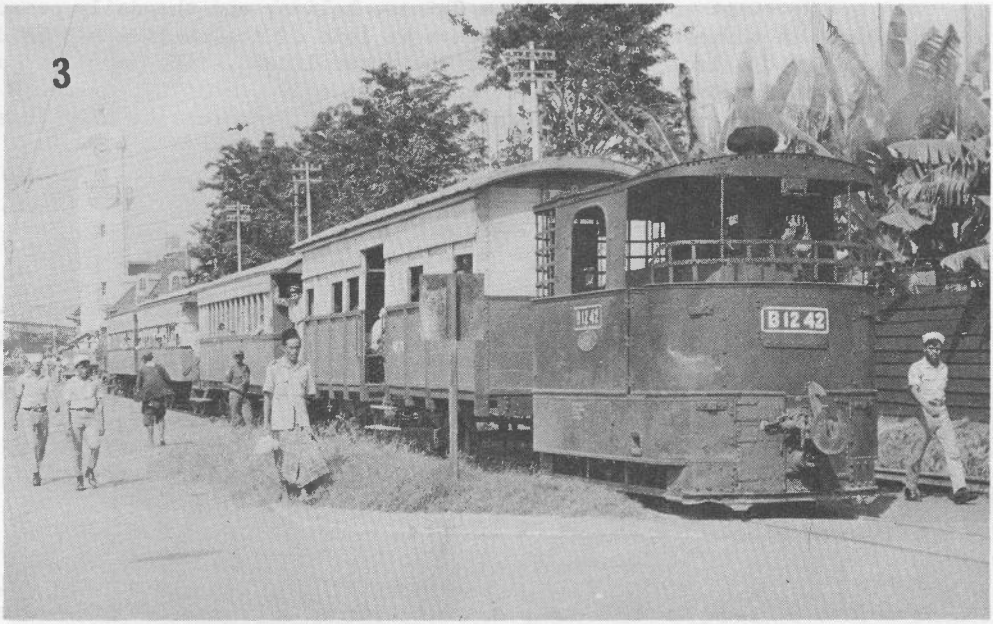
Hong Kong means trams - probably the only place in the world now where one can find, in the rush hour, a long line of green British double-deck tram-cars crawling along, nose to tail, at a snail's pace. Then there are the ferries, handling thousands of passengers across the swarming harbour at an astonishing rate with the fastest turn-around time of any boat I have ever encountered. The Peak tram, a steep funicular serving residents on the hillside as well as tourists climbing to the highest point of Hong Kong island, spoiled for me by persistent low cloud and rain throughout my visit. And, of course, the Kowloon-Canton Railway, still operating a well-filled passenger service roughly once an hour between its palatial terminus alongside the ferry berth in Kowloon as far as the bamboo border.

Taiwan was also a disappointment weather-wise, cold and wet for much of the time, but I was impressed by the State railway system. All the passenger trains are diesel-hauled but there is still lots of steam on freight and mixed trains. Unfortunately Taiwan regards itself as being in a state of war with China and locomotive details, along with the employee's timetable, are "classified information" and unobtainable. Most of the steam locos, of course, are of Japanese origin and in appearance not unlike their JNR counterparts. Operation is first class and so is the condition of the 3'6" gauge track. 100 km per hour is permitted for long stretches of the main line and the riding compares very favourably with India's 5'6" gauge! My only complaint would be the chronic overcrowding which continues despite an intensive service and competition from the equally efficient bus lines.

I did not visit the East coast line - it is all diesel except for two shunting locos at each end and the weather was very off-putting - but I did ride on the other 2'6" gauge network, the intensive system in the south-west owned and operated by the Sugar Corporation. Although I had timed my trip to reach Taiwan before the end of the sugar harvest, supposedly November to April, all activity had clearly finished before my arrival on 31st March. I did not see a single one of the supposedly 100+ steam locomotives; all the passenger operations, of which there are many, were either railcars or ram-shackle wooden coaches hauled by a diesel tractor.

But my visit to the Ali Shan Forestry Railway exceeded all expectations. This 2'6" gauge line climbs 2273 metres - 7500 feet in 42 miles, involving spiral loops, switchbacks and a ruling gradient of 6% uncompensated for curves approaching 100 feet in radius! Some of the engineering is really awesome, as when one burst out of a tunnel on to a rickety wooden trestle high above a mountain stream, only to plunge straight back into darkness again on the other side. Add the noise of a 1912 Shay banging away at the 1 in 17 and you have something worth going a very long way to see. (Photo No. 1).

You have to hear a Shay to appreciate the racket. Not only the rapid exhaust of the vertical cylinders driving the tiny wheels at 5 mph, but the crunching, grinding noise of the gears as the bogies bounce up, down and around on the rough track. There is a first-class diesel railcar twice a day, and a couple of diesel tractors which work on the level few miles from the main-line junction to the bottom of the hill, but everything else is two- and three-cylinder Shays.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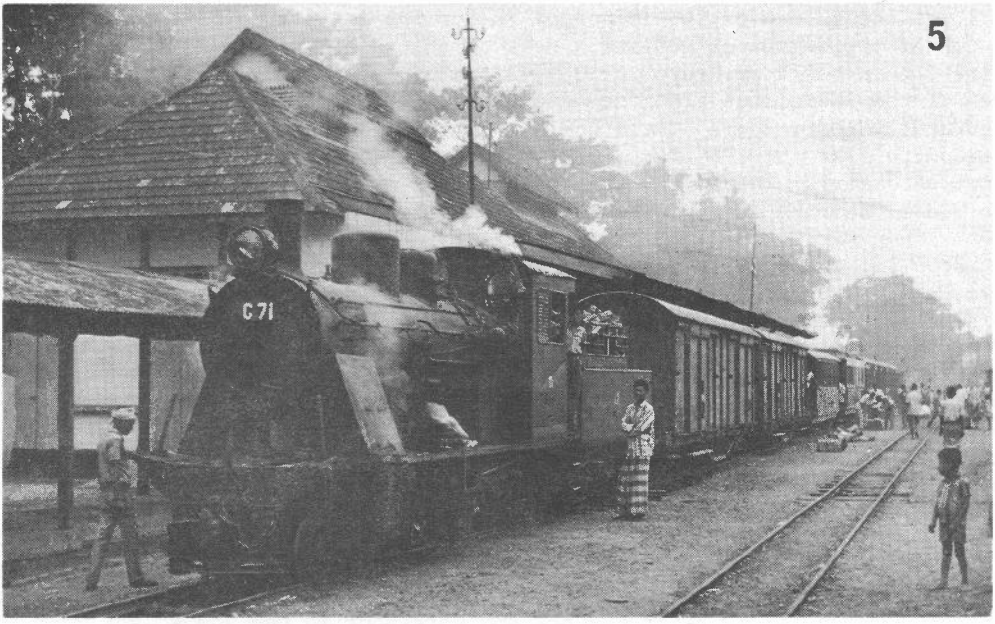
My visit coincided with a Chinese holiday and the daily passenger train was running in three sections which gave me lots of action pictures (and may help to explain the lack of activity on the sugar lines). The mountain has been heavily promoted as a tourist resort so that my only complaint would be that I saw no sign of the railway performing its proper function, hauling logs down to the coast.

A brief glance in Manila at the Philippine National Railways confirmed that it is diesel and dirty; my time was spent on the island of Negros where there are no fewer than eleven sizeable industrial lines with 2'0", 3'0" and 3'6" gauges, all with steam locomotives burning all manner of rubbish. Pride of place must go to the Insular Lumber Company, which operates two- and three-truck Shays, with a Baldwin 0-6-6-0 Mallet as main-line engine. (Photo No. 2). But close behind, partly because they were completely unexpected, come the tiny passenger-carrying horse-trams which operate seemingly ad lib on the 2'0" gauge tracks of the Victorias Milling Co. Unfortunately, loco details were hard to come by at all these places since the works plates have disappeared from most of the engines while the companies themselves have only the most casual of records (their railways are, after all, only a preliminary to their main business). There are quite a number of diesel tractors and more are planned to replace the steam - Victorias, which had 17 steam locos a year or two ago, had only their four most modern Henschel 0-8-0Ts in steam this year. However, the Talisay-Silay Milling Co. have no plans to replace their seven Alco 2-6-0s of 1921, while Lopez Sugar Central, who already have two enormous Shays, plan to buy those of Insular Lumber when the latter closes down in the next few years. But don't leave it too long!

So to Indonesia, unquestionably the most exasperating country I have ever travelled in. Any railway which publishes no public timetable is suspect; one which does not even have an employees' timetable makes advance planning of a tour virtually impossible. I spent the first two days in Bandung, the railway headquarters, where the officers could not have been more helpful. I scribbled down pages of information on train services, location of exotic steam locomotives, etc., and it was only gradually over the next few days that it dawned on me that most of this was useless and they hadn't much of a clue what was really going on. This meant that although I spent two weeks in Java instead of my planned 10 days, I saw much less than I had hoped and one would need endless time and unlimited patience to get around the country in the customary manner, which is to ask on arrival somewhere how you can get to the next place you want to visit. Train services are sparse and overcrowded and apart from so-called "express trains" all are mixed, shunting as necessary along the way. Freight trains as such are seemingly non-existant, and since the passengers travel at absurdly low fares, due to inflation and government regulation of fare increases, the economics of the system are ridiculous, especially since many passengers (around 50% on local trains) do not pay at all.

I visited the short length of rack line in central Java which now sees one train of one or two almost-empty four-wheel coaches daily hauled by an 0-4-2T (Esslingen, 1904). The running of this delicious museum-piece requires ten full-time staff at the intermediate stations, to say nothing of maintenance and the train crew of five!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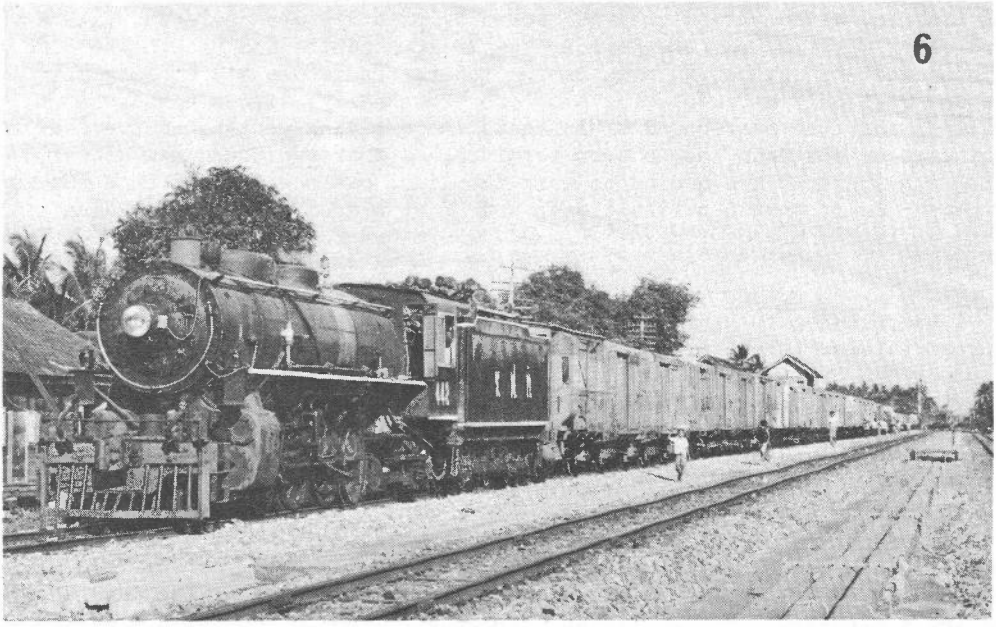
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Diesels are widespread on both main lines and branches while many of the steam tramways are now diesel worked although there is usually a steam loco or two in mothballs for the inevitable failure, mostly 0-6-0Ts of typical Dutch outline. Many of the main line locals are hauled by the 2-8-2s built by Krupp in 1951; fine big engines, kept spotlessly clean like all the locos, but cleaners come cheaper than mechanics and the maintenance is generally poor. Some of the engines would fall apart if the regulator was opened more than about halfway; fortunately the operating is such that this is not necessary. Indeed, during the whole of my time in Indonesia I do not once recall hearing an engine working really hard.

However, all else in Java pales, into insignificance beside the climax of my visit - the Surabaja steam tram. (Photo No. 3). I was disappointed to miss the electric trams in Surabaja - it is typical of Indonesia that I asked three different officials for the date on which the services were withdrawn but the nearest I could get was "about a year ago". Most of the street track has been removed or paved over although the overhead is still in place as is the long stretch of central reservation to Wonokromo. The electric cars shared the station at Wonokromo with the steam trams, offering alternative routes to town, and it is almost beyond belief that the steam tram should have survived after the electric cars have been withdrawn!

The service is no more than a shadow of its former self since only one loco, or occasionally two, is normally at work. The shed at Wonokromo is full of the little 0-4-0s, built by Beyer Peacock and Werkspoor in the 1890s, but most of them will clearly never run again. The line starts a few miles beyond Wonokromo as a typical roadside tramway, then runs right across Surabaja to Udjung, which is the terminal for the ferry to Madura. The little steam engine with its ear-splitting whistle pushes its way through some of the narrowest streets jammed with traffic, although now only two round trips a day are operated, with a third short working from the harbour to the town centre and back. The line is the standard 3'6" gauge, as also is the Madura tram whose 113 km long main line now sees only a token service of one train daily. It is perhaps worthy of remark that the east-bound train meets the arriving west-bound train at the first station out from the western terminus, so that two brand-new diesels (0-8-0 d.h., Krupp) are needed to work the line, out one day and back the next. 113 km per day; that's utilisation! The short branch line to Bangkalan still has three trains per day, steam worked; there are several types of 0-6-0T and 0-8-0T.

I had planned to visit all four lines on Sumatra but was unable to make air reservations (there are only one or two DC3s per week, and surface transport is out of the question) so had to fly directly to Medan. I was sorry to miss Padang - this is the line for which ten new rack 0-100Ts were built in 1964-5, the last steam locos built by Esslingen. However, seven of the ten are still sitting in Djakarta, there being no traffic for them in Padang and I gather train services are minimal.

In Medan I found the Deli railway still using many steam locomotives. The trains are rather tatty and speeds low but the locomotives, particularly ten handsome 2-4-2Ts built by Hannomag in 1929, remind one of the days when this was a high-speed medium-distance passenger line in the Dutch tradition. (Photo No. 4).

At its northern end, the Deli railway connects with the Atjeh steam tram which must surely rank as the longest tram line ever, 495 kilometers! It is laid to 75 cm gauge (the Deli is standard 3'6") and there is a 10 km stretch of mixed gauge to the common terminus at Pangkalan Susu. However, the line would not be a "tram" in any language other than Dutch; it is laid on its own right-of-way with sizeable stations and some pretty heavy engineering in the mountains at its western end. Basis of the loco stuck are 25 0-6-0Ts built in 1898-1904, augmented by some 2-8-0s in 1930 and six 2-6-0s and four 0-4-4-2T Mallets in 1962 from Nippon Sharyo. (Photo No. 5). Train service has dwindled to vanishing point and there is now only one train daily on each section of line. Division points are around 12 hours apart, no trains run at night, and a through journey from Medan to Banda Atjeh would take four days for the 600 km. In fact, the Deli railway connection from the eastbound Atjeh train has been withdrawn so that one can reach Medan only by bus, or by waiting until the fifth morning. Since one can travel the entire length of the line by bus in a fraction of the train timing, much of the way on a tarmac road, traffic is light and the line cannot possibly survive much longer.

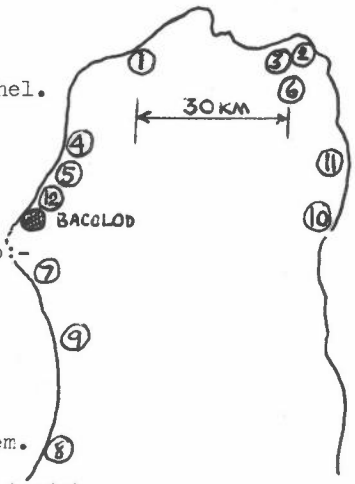
I spent only one day in Penang and rode the hill railway, a spectacular but otherwise unremarkable funicular. I also visited the clean and character-less station of the Malayan Railway at Butterworth, but saw no action. I had planned to travel by the thrice-weekly train to Bangkok but my schedule was a bit disorganised by this time so I took the plane and used the time saved to travel instead to Chiang Mai in northern Thailand. This journey, in an air-conditioned coach, was one of the most comfortable I have ever made, and there is some spectacular mountain engineering at the northern end of the line. All the principal trains are diesel-hauled, but there is still steam on work train and shunting duties while Thonburi station (across the river from Bangkok and which used to be called Bangkok Noi) had a shed-full of serviceable steam engines, although only a few were at work on trains to the south. The locos were of two types only, light 2-6-0s left behind by the Japs and standard USRA 2-8-2s from a variety of American builders. Most of my time in Thailand I became a fascinated temple-goggling tourist, and I'd had about enough of railways for a while. (Photo No. 6).

And why didn't I go to Japan? Lack of time, principally; there is so much to see in Japan that one couldn't spend less than about three weeks, which would have reduced the rest of the trip to a panic-stricken rush. So Japan will have to wait.

Philippines - Island of Negros

Steam locomotives in service

1. Victorias Milling Co. 7 Henschels.
2. Lopez Sugar Central. 2 3-truck Shays (3 2-truck Shays out-of-use).
3. Insular Lumber Co. 6 Shays, 1 Baldwin Mallet.
4. Hawaii-Philippine Sugar Co. 8 Baldwins, 1 Henschel.
5. Talisay-Silay Milling Co. 7 Alcos.
6. Sagay Sugar Central. Diesel only.

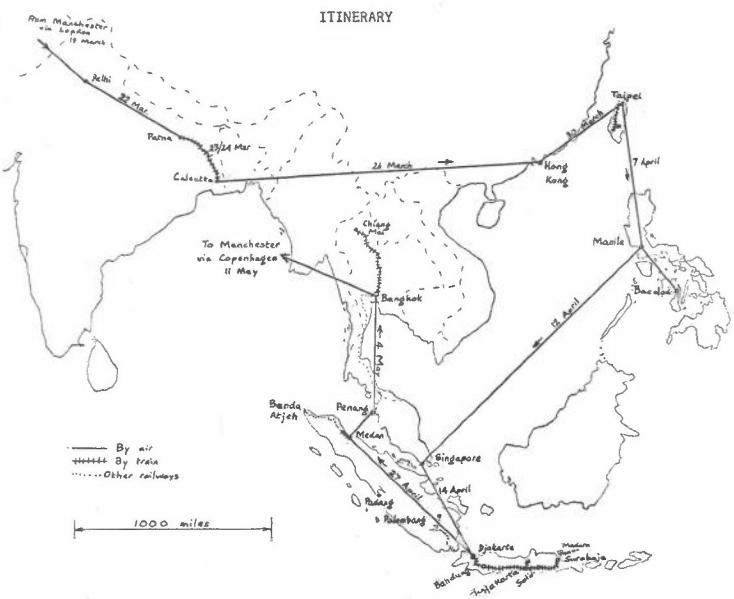


The following were not visited but had a year or two ago:-

7. Ma-Ao Sugar Central. 1 Alco, 4 Blw, 1 Vulcan.
8. Binalbang Sugar Central. 1 Davenport, 1 Blw.
9. La Carlotta Sugar Central. 10 Baldwins.
10. San Carlos Milling Co. 5 Blw, 2 Henschels.
11. Davao Redevelopment Co. Unknown.
12. Bacolod Murcia Milling Co. Now closed rail system.

All are 3'0" gauge except No. 1 (2'0") and Nos. 3 and 6 (3'6").

No. 6 (Sagay) is a new mill which uses the tracks of Insular Lumber (No. 3).



THE BRITISH NARROW GAUGE I/C LOCOMOTIVE

Part 10.

By Brian Webb

THE FOWLER - MARSHALL

The Merging in early 1947 of the interests of Marshall & Sons Ltd. of Gainsborough and of John Fowler & Co. (Leeds) Ltd. resulted in a pooling of considerable experience in all types of agricultural, earth moving, civil engineering equipment, railway locomotive, and general engineering knowhow.

Although Marshalls themselves had not entered the railway locomotive market, John Fowler & Co., had built locomotives since the 1860s, and had built their first petrol locomotive in 1923, developing standard ranges shortly afterwards for plantation, contractors and industrial use with petrol and later diesel engines. Steam locomotive work ceased in 1937.

The locomotive dealt with here, I have called the Fowler-Marshall due to the obvious Marshall influence on the design, but officially the loco was sold as a Fowler 40 h.p. narrow gauge design.

The power unit and indeed its housing is taken from the well known Marshall wheeled agricultural tractor, the Field-Marshall introduced during the 1930s.

Fowlers designed the locomotive for gauges 1'11¾" to 3'6" using two standard underframes. The frame is of very robust construction fabricated from steel plate constructed to stand heavy buffing shocks and rough usage, with a heavy plate steel top platform to carry the engine and gearbox.

The engine is the Marshall single cylinder 2 stroke horizontal valveless diesel engine which has 6½" bore and a 9" stroke. It develops 40 b.h.p. at 750 r.p.m. The engine has a double flywheel and drive is taken from this shaft to the gearbox which incorporates two cone type clutches and has three speeds in either direction. Final drive from the gearbox is by means of Duplex roller chains to each axle.

The engine was started from cold by a Marshall power cartridge, and when warm by hand using a decompression valve and ignition paper inserted in the cylinder head.

Locos were available with a variety of cabs from open to semi open and totally enclosed.

A locomotive of this type together with a standard gauge Fowler diesel was demonstrated at the British Industries Fair, Castle Bromwich in May 1949. Previous to this Fowlers thoroughly tested the prototype at the Leeds Corporation Sewage works railway, Knostrop.

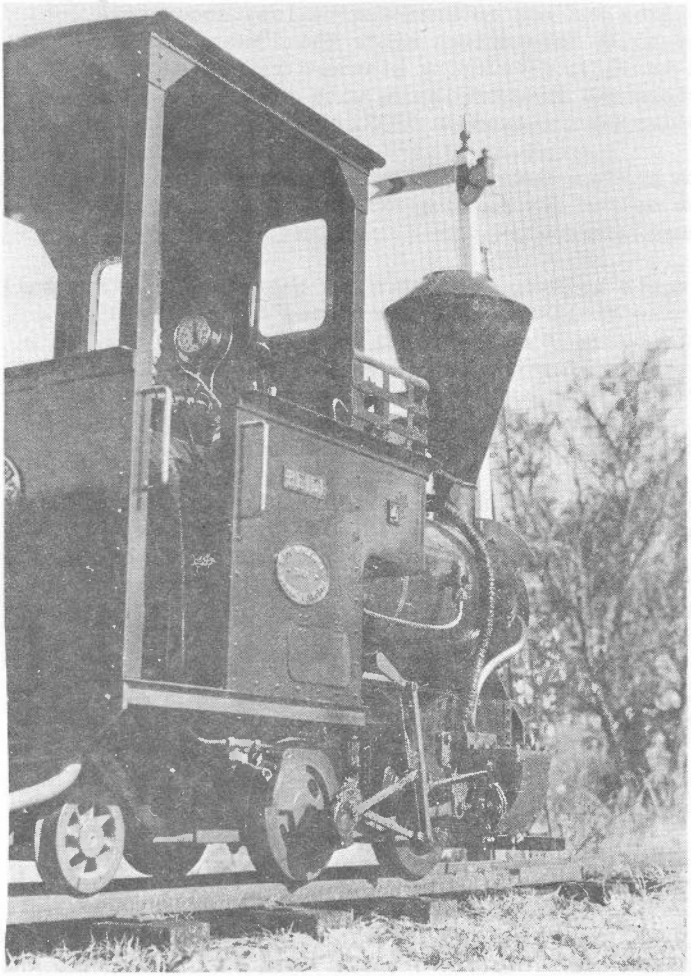
Principal Dimensions.

Gauges 1'11¾" to 3'6".
Wheelbase 4'0".
Wheel Diameter 2'0".
Overall length without buffers 10'1".
Overall height 8'3".
Max. Width (Gauges up to 2'6") 4'3".
(Gauges from 3'0") 5'3".

Weight in Working Order 7¼ tons.
Maximum Axle Load 4 tons.
Fuel capacity 12 gallons.
Minimum curve negotiable 40'.
Speeds 3.25 m.p.h. - T.E. 3925 lbs.
5.6 m.p.h. - T.E. 2275 lbs.
9.75 m.p.h. - T.E. 1310 lbs.

Examples were supplied for use in U.K. to B.P.C.M. Sundon Works, Bedfordshire, North Devon Clay Co., Peters Marland, and others.

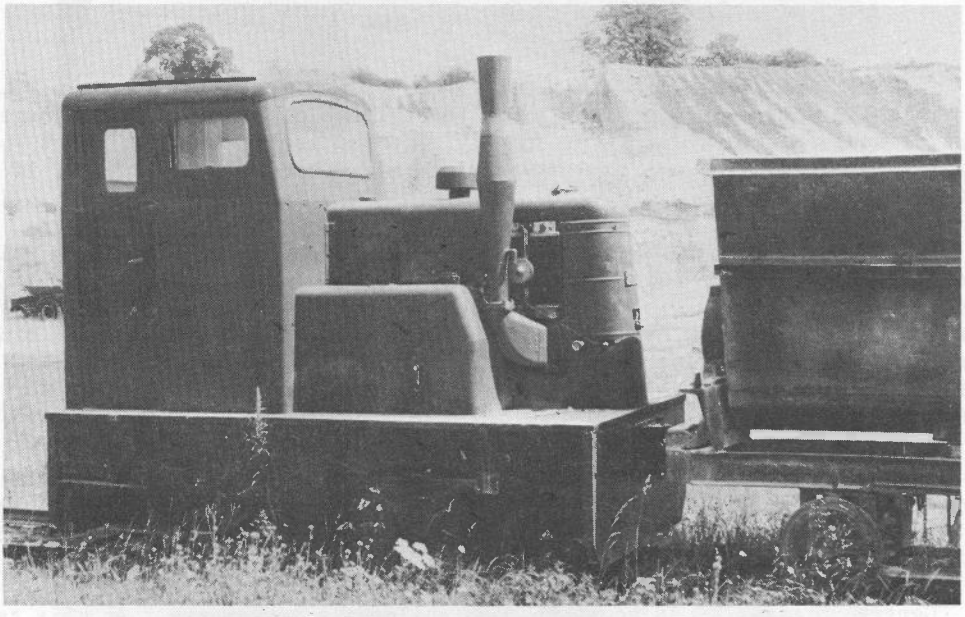
Photos by courtesy of Sydney Leleux show JF 3930044/50 at B.P.C.M. Sundon Works.

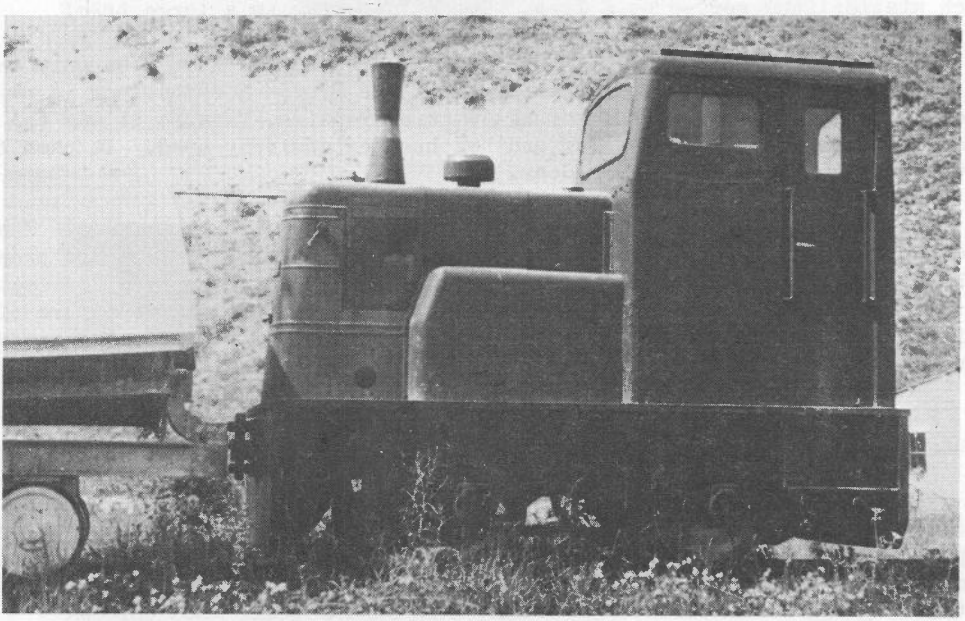


"Driver gone for tea" -
"HEIDA" Steam power on the Castledare NG.

Check your back issues for a clue to gauge.

Photo by Ken Watson, West Australia.





WILSTHORPE LIGHT RAILWAY

ALISTAIR PARSONS

This line one might consider to be the epitome of a modern 2 ft. gauge short pleasure railway. It is pleasantly situated in the middle of West Park, Long Eaton, Derbyshire, and runs as required at weekends in the summer, if the weather is fine.

Entering the park by the main gates on Wilsthorpe Road, one has to walk about 200 yards down a wide tarmac path, beneath the shade of an avenue of Poplar trees. The line starts from a stone faced ash and sleeper built short platform near the cricket pitch - hence the name of the station. Here also is a siding which lies at right angles to the track, containing a few tipper wagons of usual type (i.e. Hudson V-tippers) and a flat wagon or two - obviously for permanent way work.

Leaving Cricket Pitch station behind the line turns a fairly sharp bend to pass through the avenue of trees and then runs parallel with them all the way to the other terminus 'Central Station' with the tarmac path on one side and the trees on the other.

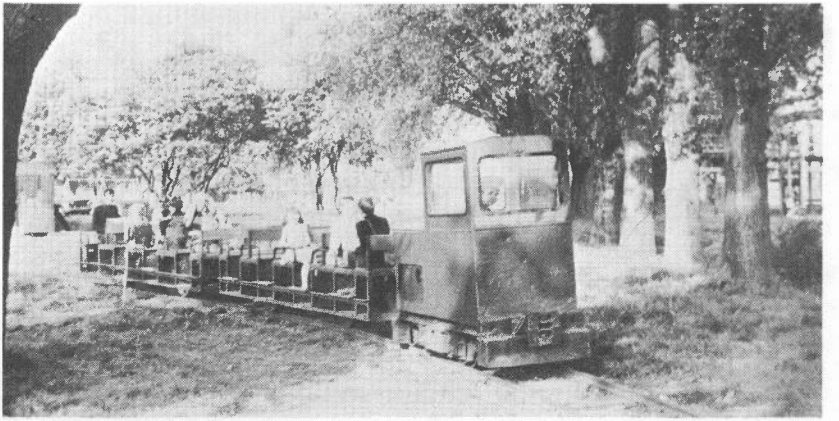
Central Station is adjacent to some children's amusements. At this terminus there is a siding serving a corrugated iron shed which can be securely locked. Alongside the shed is a wooden hut which serves as a ticket office and refreshment kiosk (?) The platform here is of the same construction as at 'Cricket Pitch station' and served by a loop. The buffer stop is a large tree!

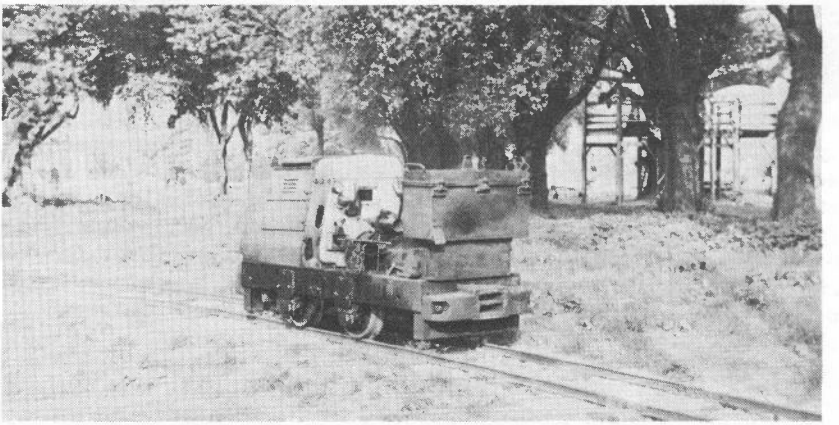
There are two locomotives on the line at present: a Ruston-Hornsby 4WD (RH 209430/42) and Lister 4WD (L 44052/58). The Ruston-Hornsby loco is painted green and is out of use at the moment awaiting repairs, because it was the first loco acquired by the W.L.R. and has been extensively used. It came from British Gypsum Mines, Barrow-on-Soar.

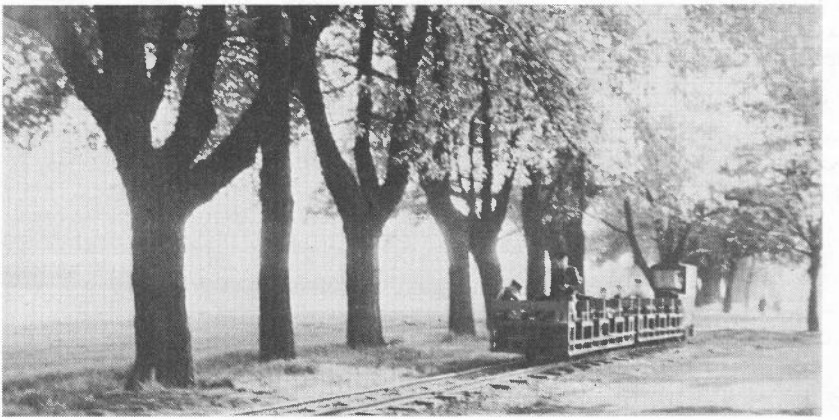
The Lister 4WD operates the service which is a push pull working. The loco hauls the train from Central Station to Cricket Pitch station and propels it back. This loco is painted red and looks very smart. The crew consists of two: driver and a ticket collector/guard/lookout, who signals departure of the train in the usual manner. His whistle is answered by a blast on the diesel's horn.

Passenger stock consists of two 4W toastrack coaches, which are well sprung and have very efficient brakes.

The track despite being of several weights and sections appears to be well laid and maintained. Each type of rail is laid in one continuous length and as progresses from Central to Cricket Pitch stations the types of track decrease from 40 lb. per yard at Central station to 16 lb. per yard at Cricket Pitch station. Despite these facts a ride on this line is quite smooth.







Narrow Gauge in Australia

Hugh Ballantyne

Known as the "Puffing Billy" line today, this was one of four lines with identical (and interchangeable) rolling stock built by the Victorian Railways in "pioneering" districts of Victoria in the period from 1898 to 1910 and closed in sections from 1944 to 1962. Two 2-6-2 tank engines from Baldwin's came in 1898, and 15 similar locos were built in Melbourne between 1901 and 1916. Two 2-6-0 + 0-6-2 Garratt's, built in Manchester, were put into service in 1926, and one worked on the Walhalla line, while the other worked Colac-Crowes. The line on these photos was built from Upper Ferntree Gully, 23 miles east of Melbourne to Gembrook, 18 miles away, with numerous curves (down to 2 chain) and almost continuous 1 in 30 gradients. Due to its proximity to Melbourne, excursion traffic was always popular - but little attempt was made to foster this. In 1950 only 9,000 people travelled on the train - today this number travel on it in one week during summer. Both termini of the train have gone for good - the broad gauge now extends to Belgrave and electric m.u. trains use the narrow gauge platform at Upper Ferntree Gully (little altered), while Belgrave n.g. station was utterly bulldozed to provide a large island platform, bus terminal and car park for the 5'3" electric trains. At the other end of the line, Cockatoo and Gembrook have been abandoned as being too far from the new n.g. terminal at Belgrave.

At present six miles of line - from Belgrave to Emerald - is worked, and it is proposed to extend this another two miles to the Emerald Lake - (lakeside station). The line is still owned by the Victorian Railways who provide Driver, Fireman and Guard for each train (and sometimes a safeworking officer at Menzies Creek when more than four trains cross there in one day). All rolling-stock is bogie, 25 feet long with continuous brake, and automatic centre couplings, (fitted for the arrival of the Garratts in 1926).

Trains up to 12 vehicles are run (10 cars and two vans), but at present only 15 cars are available + 1 vice-regal and special coach, so that when two trains run at once (crossing at Menzies Creek) trains are nine and ten vehicles. Trains can be run to Emerald about every 65 minutes if a drop-on engine is used at Belgrave and Menzies Creek is staffed. The return trip takes $1\frac{3}{4}$ hours. Each car seats a nominal 32, but 100 per car is not unknown (that's right - 1,000 passengers in one n.g. train!). Crowd handling requires a p.a. system at Belgrave, loud hailers in use on the trains, three booking clerks and an army of other volunteer workers.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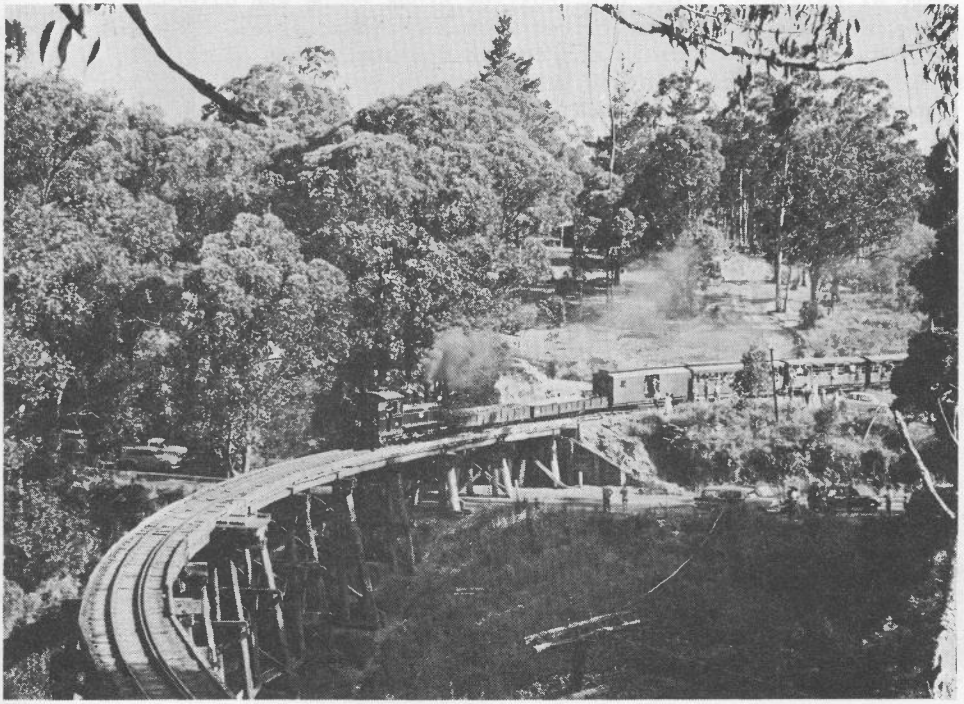


The train passes through particularly attractive scenery - dense forest, past hilly, lush farmland and over a trestle bridge. In some places you can see the sea 30 miles away on a clear day. Belgrave is a busy shopping village (Woolworths, etc.) and many retired people live in its steep leafy lanes. Emerald, on the other hand, tends to be rather Country Club with a retired colonel or two and some company directors' houses hidden from the road by the lush shrubs which grow in the rich red soil. Potatoes formed the main traffic for the railway.

Thousands of sleepers have been put in by volunteers, the whole of Belgrave station and yard built from nothing on the side of a steep hill, Emerald yard has had to be completely relaid and regraded, and even a water supply installed (a bore was put down in the station yard and an electric pump fills an overhead tank). Various per-way equipment includes a covered trolley, a portable generator for electric tools, a poison-spray trolley-train and four 25 ft. long trucks for ballasting with bottom openings. Large toilet blocks have been put in at Emerald and Menzies Creek (not visible in photos).

During summer a motor trolley trails each train and the driver carries a firefighting knapsack spray to put out any fires started by the train. At Menzies Creek the Puffing Billy Preservation Society which organises all this activity, is building a narrow gauge museum and has a Shay geared loco (2'6"), Mt. Lyell's ABT No. 5 (3'6") and a cane tram loco from Queensland - others are to come, notably the 69 ton Garratt (whose boiler tubes have been scrapped).

A ramp at Belgrave allows n.g. rolling stock to be run directly onto special b.g. flat-topped wagons fitted with 2'6" gauge track. Only three locos are at Belgrave so far - this is not enough for the volume of traffic offering, and a breakdown in one can disrupt the timetable (so can lots of other things!) Trains run every Saturday and Sunday throughout the year with three trips on each day, extra services are also run during holidays.

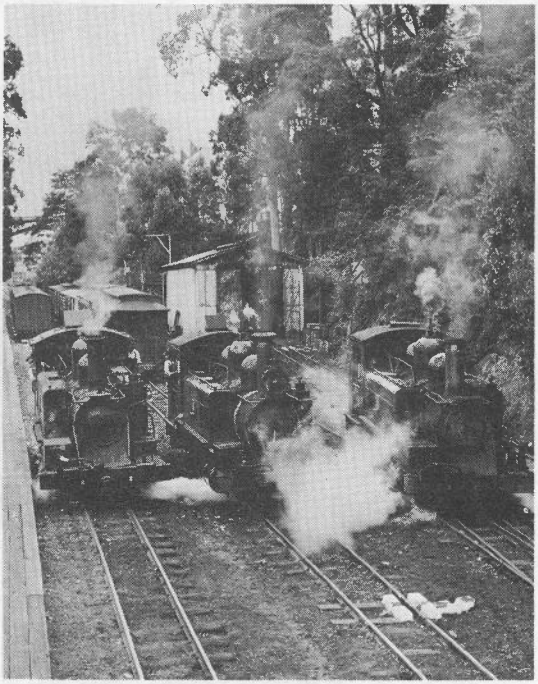
Photographs

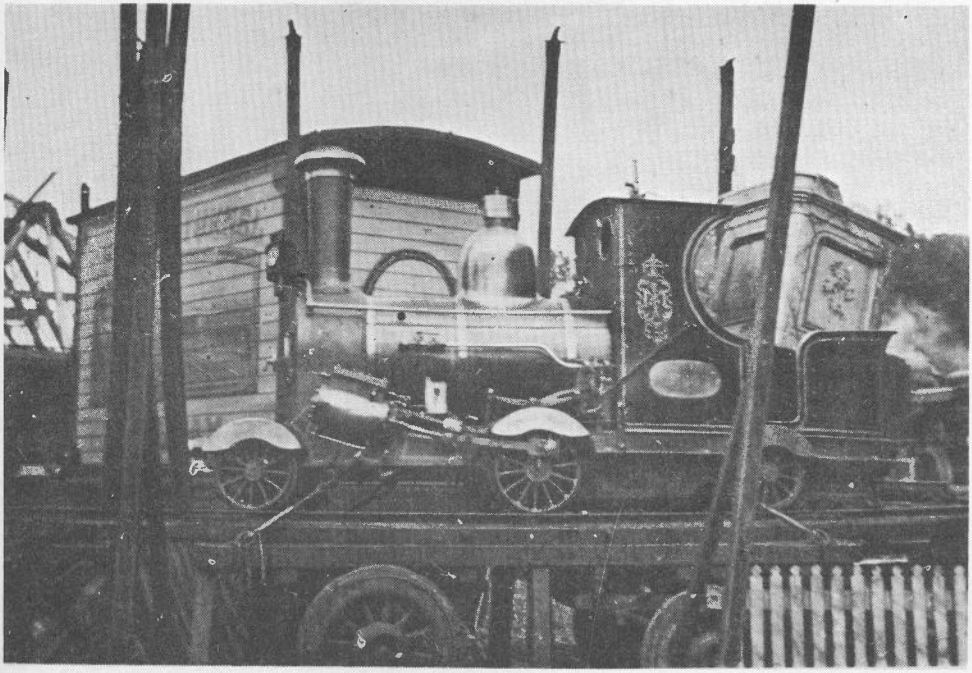
1. Belgrave Terminus showing gangers trolley fire patrol.

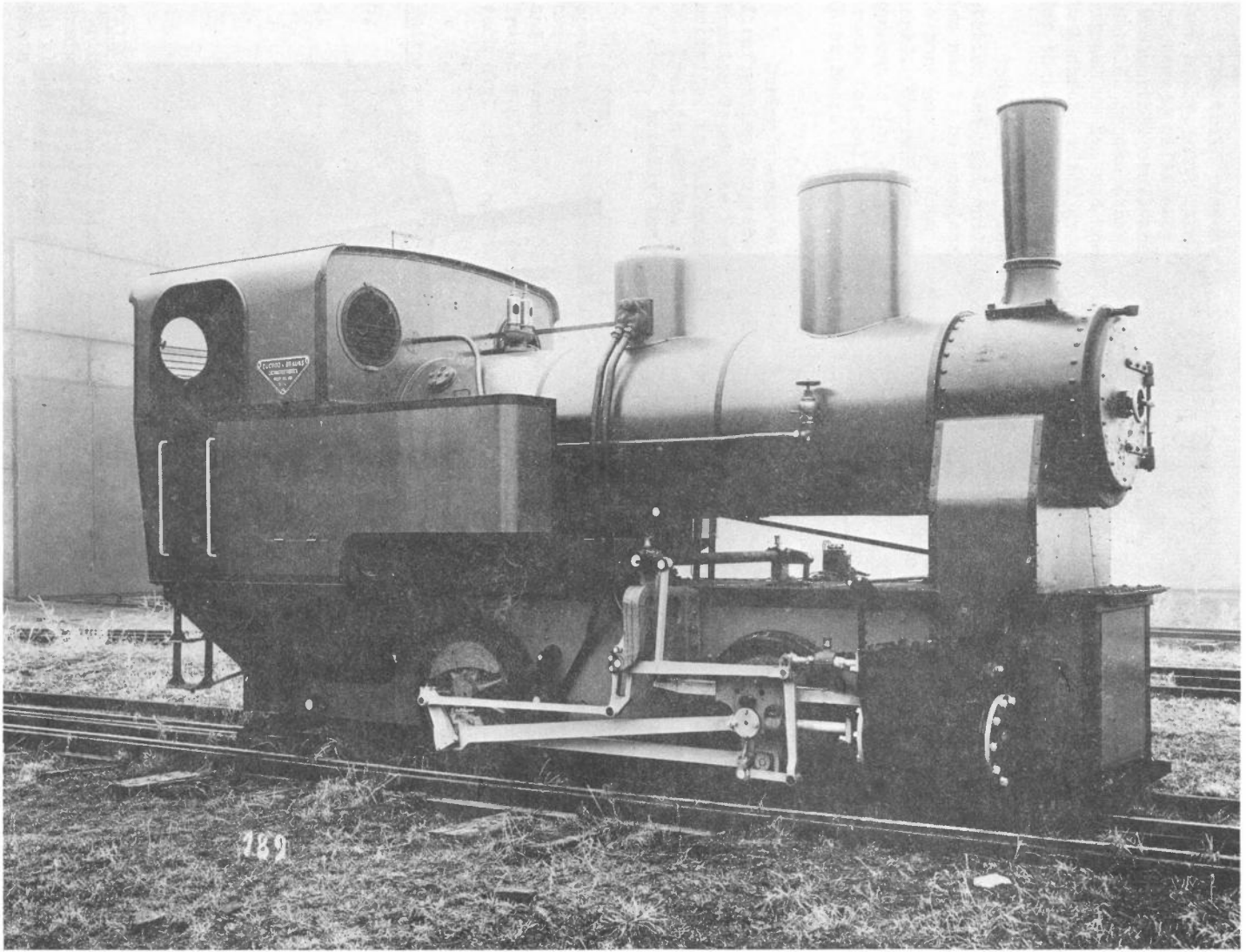
2. Up train to Belgrave passes over trestle, locos run bunker first as there are no turntables on the line.

3. Belgrave, December 1966.

FAIRGROUND RAILWAY 2'3" gauge. 'Channel Tunnel Ride'. 2-2-2 locomotive 'Prince of Wales'. Built by Savage Brothers, Kings Lynn (one of their standard designs). Cylinders 5" x 10" - no reverse gear fitted. The loco was curved in plan to suit the roundabout. Driving wheels 18", trailing 16".
Photo - Ivan Stephenson. Notes Ron Redman.



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MYSTERY PHOTO No. 3

Sydney Moir

Who are DUCROO & BRAUNS, the builders of this hefty little 0-4-0 well-tank? It is believed that they are, or were, a firm in Holland. Can any reader shed some light on them and their products?

Since this engine bears no couplers, it is possible that she formed one of a stock line, being fitted with couplers, to suit the purchaser, after sale.

This letter is, frankly, an appeal for help. In the course of writing the story of the 2'6" gauge railway operated by the Cape Copper Co. between Port Nolloth and O'okiep, in Namaqualand, I have run aground with regard to the loco stock. Various facts, given me as such, are unconfirmed; of locomotive and rolling stock drawings, there is a complete dearth.

The Company possessed tram-type locos, both six and four-coupled, a series of 0-6-2 tender engines, a pair of four-coupled shunting engines, which are believed to have been tender engines, a pair of saddle-tank 0-4-0's on shunting duty, and a batch of similar locos on work around the mines.

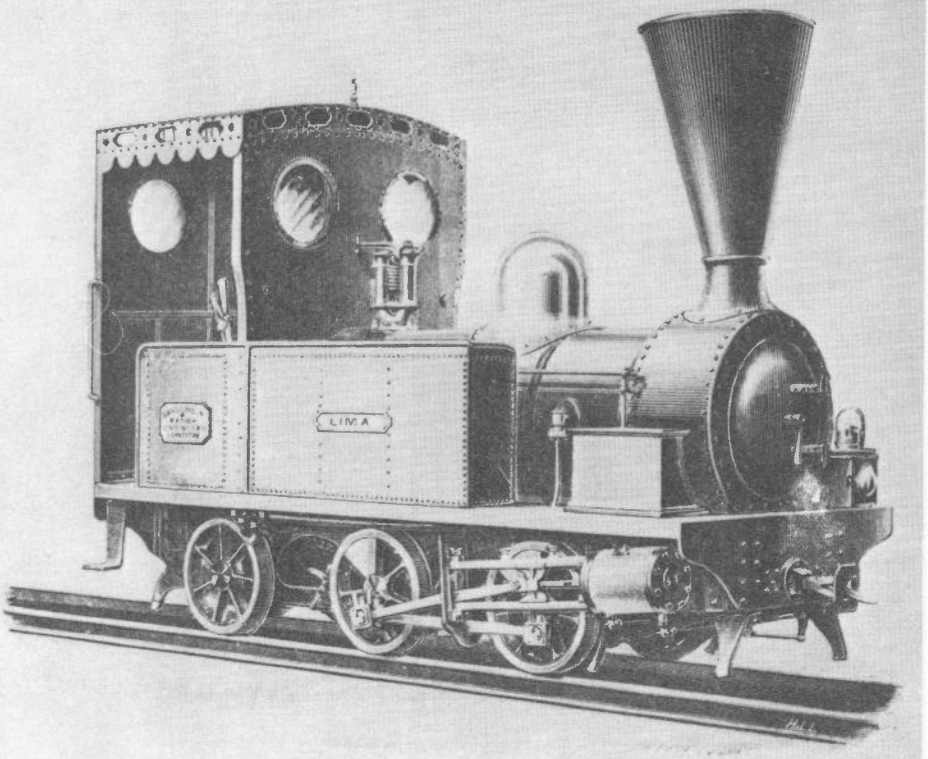
As far as the six-coupled tram engines are concerned, it will be almost impossible for any reader to help, for I do not even know the name of the maker. When we deal with the three 0-4-0 tram engines, we are on surer ground, for they were Kitson-built, being Nos. 198, 220 and 234 in the Kitson Tram-engine list. The 0-6-2 engines were also Kitsons, having appeared as their Nos. 3475, 3486, 3487, 3976, 4089, 4090, 4291, 4331 and 4332. Messrs. Dick, Kerr built the 0-4-0 shunting engines, but here I have no numbers as a guide .. all I can say is that they were built in 1904 and 1905. The saddle-tank 0-4-0's were Bagnall engines .. Nos. 1894, 1963, 1978, 2204, 2038, 2039 and 2056 .. and as far as I know were all alike.

Bagnall 1963 and 1978 are believed to have been sold in to G. Cohen, who sold them to Sittingbourne, where they were finally scrapped in 1950. On the CCC line, they bore the names RAMBLER and RATTLER.

Right now, I have photographs of the 0-6-2 engines at work, around half a dozen in all, two pictures of the four-coupled tram-engines, and nothing at all on any of the others.

Can any reader help me, by supplying either photos or drawings on loan? The same applies to the rolling stock of the railway, but as I am unable to say what was built when and by whom, I cannot reasonably expect anything to come of an appeal.

LOCOMOTIVE ENGINES.



The above Engine is the same as the preceding, with the exception that only four Wheels are coupled, and the trailing wheels are mounted in Sliding Axle Boxes.

This arrangement enables the Engine to pass round corners of one chain radius at a slow speed, and round three chain curves with facility.

Weight, in working order, 12 tons.

Diameter of Wheels, 2 ft. 3 in.

Diameter of Cylinders.

Gauge, 2 ft. 6 in. to 3 ft. 6 in.

Fire Box, Copper.

Boiler of Steel.

All Fittings of the best patterns and quality.

Price for one Engine, £1,650 each.

Price for six Engines, £850 each.