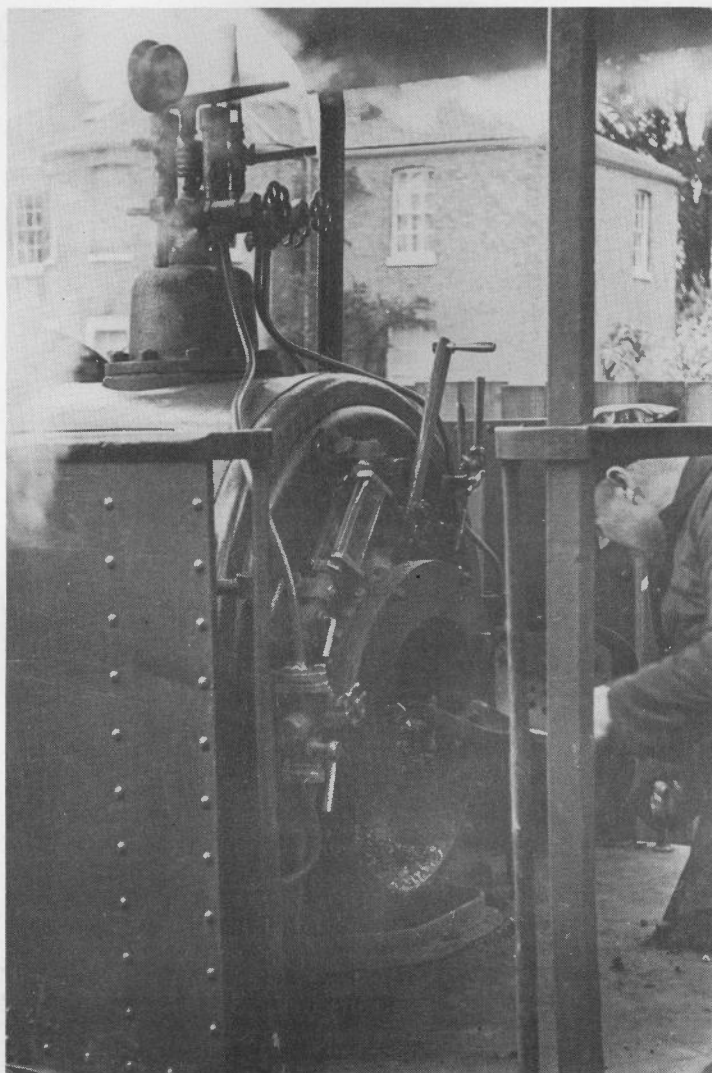


# THE NARROW GAUGE



No. 53 • MARCH 1970

# THE NARROW GAUGE RAILWAY SOCIETY

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## Editorial

Your Editor offers apologies for the lateness of this winter issue of the Magazine, a spell over Christmas was spent in bed with a backstrain, then a week or two later Mao caught the family with his Flu and that was that! However all is well again and I hope you enjoy this issue.

Sydney Moir's photograph of "Little Yarra" in No. 50 certainly brought in a lot of correspondence which has been incorporated in our main article on The Powelltown Tramway.

The photographs opposite show two superb models on the Lilliput Bahn in Lucerne, Switzerland ( $\frac{1}{4}$  mile past the Transport Museum on main road). They are  $\frac{1}{4}$  full size to run on 15" gauge.

S.B.B. No. 781 a 4-6-0  
& S.B.B. No. 182 a 4-4-0

the owner also has four British 7 $\frac{1}{4}$ " steamers from Basset Lowke Castings, certainly worth a visit if ever in the area.

### PHOTO COMPETITION:-

Because of poor response the Committee have decided to withdraw the competition, however if you have any good B & W photos let me have prints (postcard or over) to publish in the magazine.

Best wishes, Henry Holdsworth

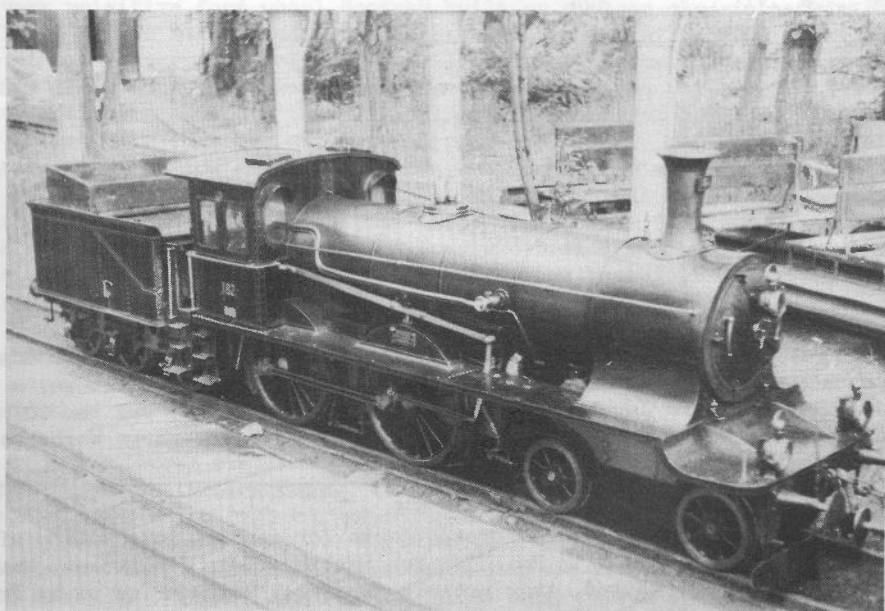
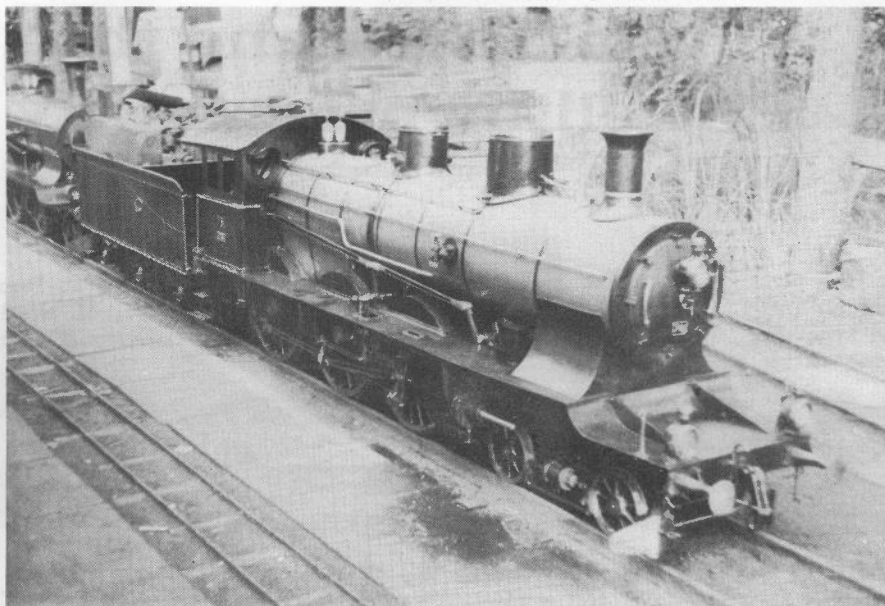
## Cover Photo

Firing "Pixie" at Cadeby (Rev. Teddy Bostons Line) Regret photographer unknown, would he kindly contact editor.

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# Little Yarra and the Powelltown Tramway

Frank Stamford

The photograph of the 3 ft. gauge Baldwin 2-4-0 locomotive at Yarra Junction in "The Narrow Gauge" No. 50 was a pleasant surprise, as the Powelltown tramway, on which the locomotive operated, is almost a legend with Victorian rail fans.

"Little Yarra" was built in 1912 and named after the Little Yarra river along which the Powelltown Tramway ran.

## LEADING DIMENSIONS

(Courtesy of Ivan Stephenson)

BALDWIN	No. 37718 of May 1912.
Cylinders	10" x 16" - Slide Valves - Stephenson motion.
Wheel arrangement	2-4-0
Driving wheels	37".
Leading wheels	28"
Wheelbase	14'4" (8'6" rigid)
Heating surface	357 sq. ft.
	Tubes 86 of 1 $\frac{3}{4}$ " diam.
	Grate 8.5 sq. ft.
Boiler pressure	160 lbs. sq. in.
Tractive effort	5,888 lbs.
Weight in working order	28 tons.
Gauge	3 ft.
Tender carries - 2 $\frac{1}{2}$ ton of wood.	800 galls. water.

The locomotive was built for the Victorian Powell Wood Process Company and operated on their tramway between Yarra Junction and Powelltown, a distance of 10 $\frac{1}{2}$  miles. Yarra Junction (42 miles east of Melbourne) was the interchange point with the Victorian Government Railways 5 ft. 3 in. gauge Warburton branch line.

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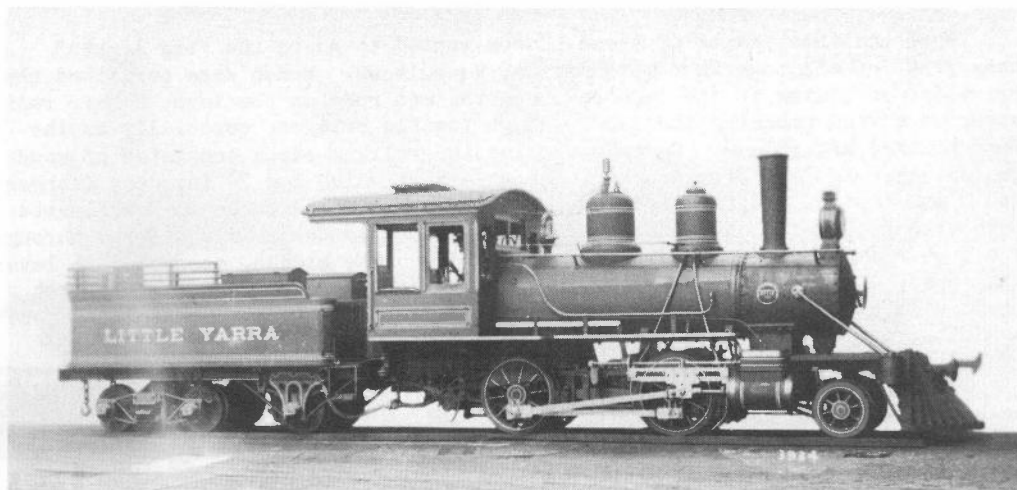
### Editor's Note

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We have to thank several correspondents for sending information after the mention of "Little Yarra" in No. 50. Ken Hartley, Ivan Stephenson, Maurice Billington all contributed, this article specially written for us by Frank Stamford includes the points they made.

Many thanks to all.

H.H.



The tramway was opened in 1913 or 1914, replacing an earlier wooden railed line owned by the Gilderoy Tramway Company. The picture (page 10, No. 50) would have been taken shortly after the opening. The last vehicle on the train is a very primitive four wheel "coach" built on a wagon chassis. This didn't last long, as two magnificent luxurious bogie coaches with hardwood seats were built at the Company's Powelltown sawmill. These coaches didn't have any glass in the windows, but wooden shutters were provided to keep the rain out. The locomotive is shown in its original livery which was red, fully lined out. Later it was painted green and kept in poor condition. The other rolling stock consisted of 3 ton low sided bolster wagons, and 5 ton medium sided wagons, these vehicles being sprung, each fitted with one brake block and chopper couplings, the total fleet numbering about 85 wagons. They had 2 ft. diameter wheels of normal railway profile. A four wheel meat van was built in the 1920's, this survived until 1958, and had vertical matchboarding of three different widths.

The Company's sawmill at Powelltown was, at that time, the largest hardwood sawmill in the world, and had the most modern electric and steam powered machinery.

From Powelltown the line continued a further  $8\frac{1}{2}$  miles into the bush - terminating at Splitter's Camp. This section abounded in trestle bridges, several of them being high curved structures, and it also included a quarter mile long timber lined tunnel. "Little Yarra" and the passenger coaches did not venture onto this section - the track was too rough - it being operated by two small tank engines, and later by two Shay geared locomotives. This was the so called "mountain section", and was well named. The country is rugged and covered in dense lush forest, through which isolated timber mills and settlements were scattered.

When the inhabitants of these places wanted to go to the "big lights" they first of all rode on the tramway to Powelltown. Women were permitted the privilege of riding in the loco cab, but the men rode on the logs, a hair raising experience when crossing the 100 ft. high trestle bridges, especially as the logs pitched and rolled. On this section the rolling stock consisted of wooden framed unsprung "skeleton trucks", the wheels of which had  $2\frac{1}{2}$  in. deep flanges and 6 in. treads, and the track gauge could vary several inches. Deraillments were frequent, and today remains of these wagons can be found scattered through the bush. Each of these wagons had two wooden brake blocks, connected to levers and ropes, and brakemen ran along the logs to apply these brakes. The first train each day went out before sunrise and on wet mornings the brakeman's job was hazardous to say the least.

At Splitter's Camp a mile long three rail cable worked balanced incline began, on a rising grade averaging 1 in 4, and at its summit a further incline, on a descending grade, took the tramway to Ada No. 2 Mill. From this mill a third incline took the tramway up a fairly steep rising grade for about  $\frac{3}{4}$  of a mile, then the tramway levelled out for the remaining  $1\frac{1}{2}$  miles to the terminus at New Ada Mill, this level section being operated by horses.

#### Other Locomotives

The Powelltown tramway had six locomotives altogether, "Little Yarra" was the first. It was closely followed by "Powellite", a Bagnall 0-6-0 tender engine, builder's number 1965 probably built in 1913. This locomotive had 11 in. x  $16\frac{1}{2}$  in. cylinders, 2 ft. 6 in. driving wheels, and a total rigid wheelbase of 9 ft. The boiler pressure was 160 lbs. p.s.i., and the tractive effort 8,000 lbs. The total weight of the engine and tender was  $28\frac{1}{2}$  tons. "Little Yarra" and "Powellite" took turns on the Yarra Junction - Powelltown section.

Editor's Note: (Ken Hartley adds some further details here:-

He suggests the cylinders were 10" x 18". Heating surface tubes 384 sq.ft. Firebox 48 sq.ft. Total 432 sq.ft. Tender carried 800 galls. water and 150 cu.ft. fuel. 27 tons in working order, with tractive effort 7000 lbs. Stephenson valve gear, Detroit sight lubricators and like "Little Yarra" one gauge glass and two test cocks).

An Andrew Barclay 0-4-2ST, built about 1889 was the first loco used on the mountain section. This passed through Kerr Stuart's hands in 1896 gaining their builder's number 539, and the Powelltown tramway got it second, third or fourth hand. It weighed only four tons, and with a tractive effort of only 1,300 lbs. was not much use on the 1 in 30 grades. It was later hauled up the incline to work a branch from near Ada No. 2 Mill, and the saddle tank still remains at the site of this mill, but the rest of the midget has vanished.





(Ken Hartley tells us this was loco "No. 3" 2 ft. coupled wheels and 5" x 12" cylinders (?). Boiler pressure 130 lbs. total weight 4 tons. There was no standard livery No. 1 being described red with white bands, No. 2 green and white, and No. 3 green unlined).

The next locomotive was Kerr Stuart O-4-OT number 643 of 1898 obtained in 1916 from the Beaconsfield tramway in Tasmania. This loco weighed 8 tons, and with a tractive effort of 2,300 lbs. was much more useful, nicknamed "The Coffee Pot".

However the mountain section required something bigger, so in 1919 a 32 ton Lima Shay geared locomotive arrived. This was built in 1912 and was purchased second hand from New South Wales. It proved very successful, and an identical twin was obtained third hand in 1926, also from New South Wales. These two truck three cylinder locomotives carried Lima's builder's numbers 2575 and 2576.

The Shays weighed 30 tons, overall length 42'6", 7'9" wide, boiler pressure 150 lbs. Tank capacity 1000 gallons. They were carried on 2' wheels, and had wood burner "diamond stacks". They could haul loads of up to 100 tons and were much more suitable for the logging lines than No. 1, 2 or 3.

The only other motive power was two or more kerosene powered tractors, with six wheels, of timber tramway profile for working on wooden railed branches.

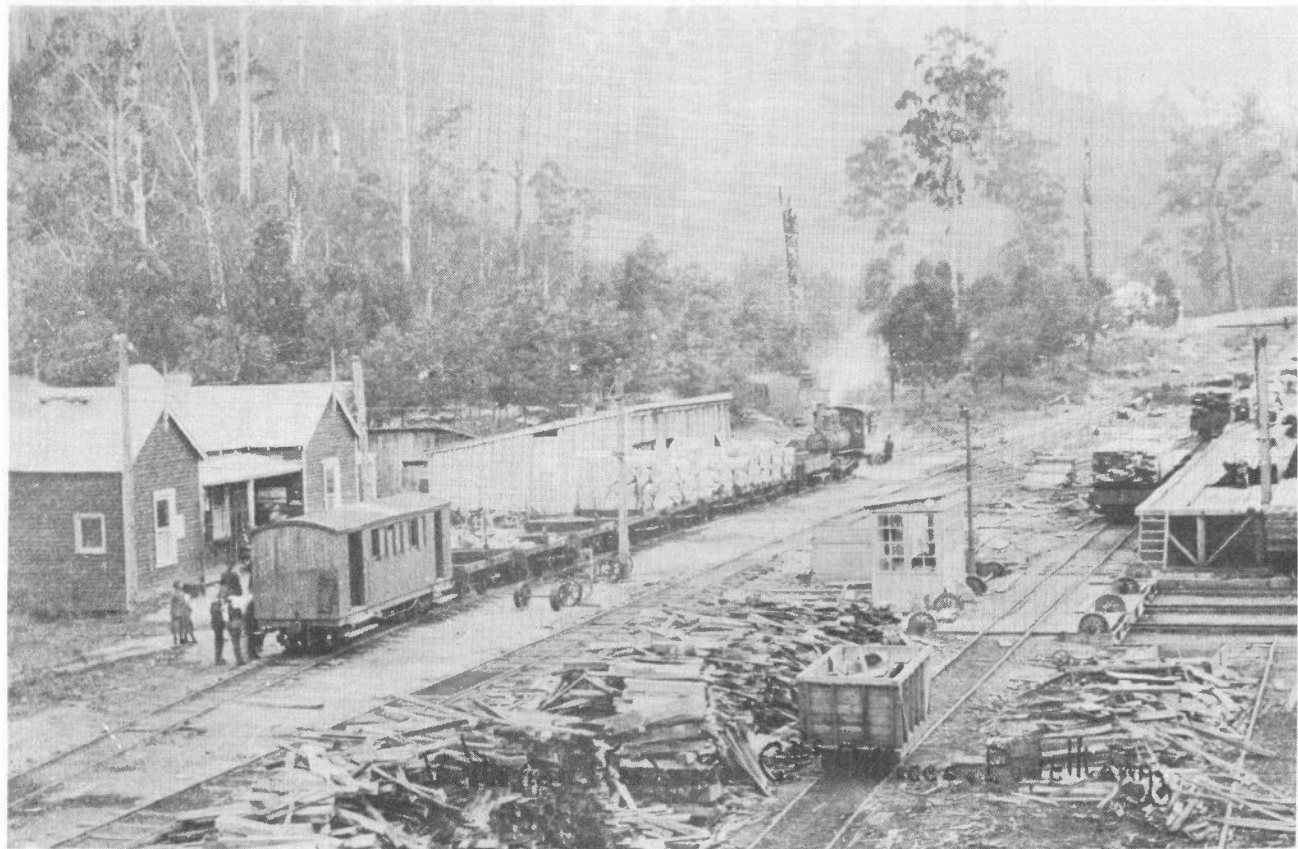
Rolling stock comprised 85 four wheel wagons of two sizes, larger ones had sides, the smaller ones were without.

	Large	Small
Wheels	2'0"	2'0"
Wheelbase	9'0"	6'6"
Length overall	16'0"	12'6"
Width	6'6"	6'0"
Capacity	5 ton	3 ton
Tare	2 ton	1 ton 5 cwt.

There were two bogie - composite luggage passenger coaches, seating 20, overall length 24 ft., width 6', bogie wheels 2' diam. on 4' wheelbase, the guard collected the fares, 1/1 for a single journey. All stock fitted with centre buffer couplings and handbrakes. The journey from Powelltown to Yarra Junction took 1 hour, in 1938 the public timetable showed 2 trains per day each way.

The area in which the tramway operated was very heavily timbered and many horse worked wooden railed branches struck off from the Powelltown tramway. These were fantastically rough affairs, where gauge differences of up to three inches were normal. Other steam operated timber tramways also penetrated into the area each of these having its own network of branches, so that in an area of about 20 miles by 15 miles, at least 250 miles of narrow gauge tramway was once to be found.





"Powellite" and "Little Yarra" took turn about on the Yarra Powelltown section, the Shays keeping to the mountain section. "Coffee Pot" was used in the bush between the inclines. It is said that when the Doctor was needed a loco set out from Powelltown, the driver whistling when coming over the hill near Yarra to attract his attention and he would be at the Yard when the loco arrived ready to travel back to the emergency.

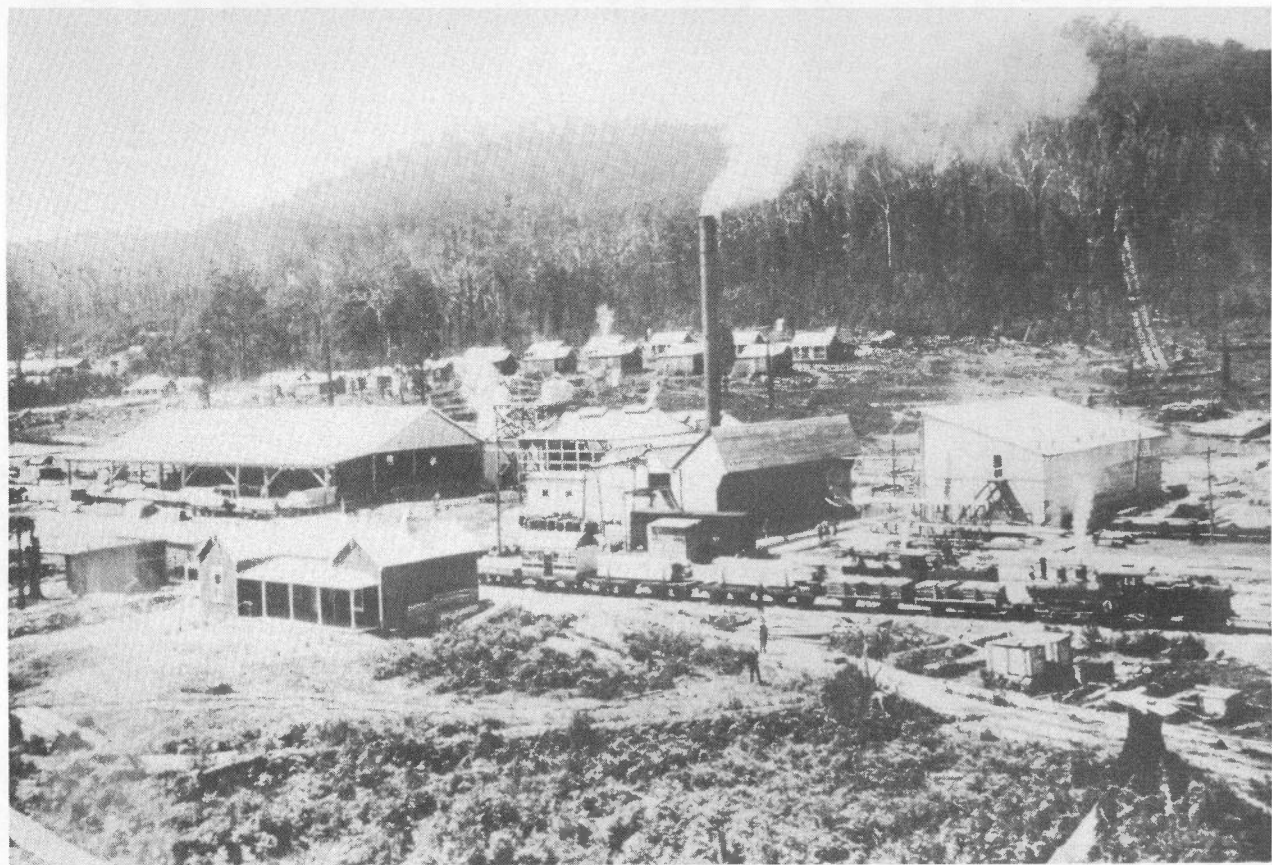
Of all these tramways, the Powelltown was the longest, best built, and the only one to provide a passenger service. It was one of the last in the area to close, and the only one to remain faithful to steam right to the end. Add to this the fact that privately owned passenger carrying railways were very rare in Victoria, and we can begin to realise why the Powelltown tramway is a legend.

The end came on the 15th July, 1944. By this time most of the horse worked branches had been abandoned, and the Powelltown's line was very run down. After closure road trucks (or lorries as you would call them) took over the timber cartage, buses had already taken over the passenger service in 1942, but ceased running in the 1950's as most of the residents own cars. The Kerr Stuart O-4-OT was scrapped, so were the two Shays, although the boilers of both and cylinders and water tank of one were sold to timber mills, and are still in existence. "Powellite" was sold to the British Phosphate Commission for use in Nauru (a tiny island in the Pacific Ocean). It is thought that "Little Yarra" went there too, but it is believed both these engines were sold to Japan for scrap in 1957. Records of the British Phosphate Commission are not too clear, so we are not certain whether "Little Yarra" made it to Nauru. If it did, it probably saw very little service as it was in very poor condition

The area in which the tramway operated was frequently the scene of tremendous bush fires - on several occasions many of the trestle bridges and timber mill settlements were burnt out. At the eastern portal of the tunnel the little settlement of Nayook West was located, and during the second week of January 1939 fires were approaching it from all sides. The Australian Gum tree tends to explode into flame under these conditions, and five days of above century heat was brought to a climax on Friday, 13th January. Nayook West was completely wiped off the map. The town's inhabitants saved themselves by sheltering in the tunnel. Not a trace of the township can be found today, just a caved in tunnel, a collapsed trestle bridge, a river and lots of leeches

#### The Goodwood Tramway

One of the other tramways in this area was the 14 mile long 3 ft. 6 in. gauge Goodwood tramway which ran from the Victorian Railway's Nojee station (see bottom right hand corner of the map on page 5.). This tramway had four locomotives -



0-4-4WT	Beyer Peacock,	B/No. 1599	of 1877,	3 ft. driving wheels,	9 $\frac{1}{2}$ " x 15" cyls.
0-4-4WT	J. Martin	"	67 of 1893	" " " " " "	" " " "
0-4-4WT	J. Martin	"	69 of 1893	" " " " " "	" " " "
2-6-0	Beyer Peacock	"	2245 of 1882	39 $\frac{1}{2}$ in. " " 12" x 20" "	

This tramway was notorious for its slapdash methods. By 1936 one of the 0-4-4WT's had wandered off the track, and turned over into a gully. The other two 0-4-4WT's were out of service, leaving only the 2-6-0. This was in a terribly decrepit state, with a home made wooden framed tender, the original steel tender having apparently disappeared in a derailment. It had very weak hand brakes, and the regulator was jammed in the fully open position, however the driver became quite skilled at controlling the loco with the reversing lever. It was far too fast and heavy for the deplorable track and flimsy bridges. In 1936 it dived through the top of one of these bridges, killing the driver.

The Goodwood then bought a six wheel kerosene tractor, but the 1939 fires wiped out Noojee township and took most of the Goodwood tramway as well.

Rail transport finally came to an end in this area in 1965 when the Victorian Railways closed the Warburton line. But the narrow gauge enthusiast still finds things of interest, hacking his way through the bush, crawling along the beams of rotting trestle bridges, every now-and-then finding a pair of wheels, a few rails, old winding engines and boilers, and even locomotive parts. And every time we visit this area we usually find evidence of yet another tramway which we didn't know about.

### Photographs

- No. 1. "Little Yarra" (Courtesy of Ivan Stephenson).
- No. 2. "Powellite" Bagnall 1965 of 1913.
- No. 3. Powelltown in 1919 with "Little Yarra".
- No. 4. Powelltown about 1914 just after the Mill opened, both "Little Yarra" and "Powellite" are on view.
- No. 5. One of the Shays taking supplies back to camp about 1932.
- No. 6. About 1919 - curved timber trestle about 3 miles on Splitters Camp side of Powelltown. In lower left can be seen some wooden rail track. The trestle destroyed in the 1926 fires, rebuilt it was intact in 1959 but has since collapsed.

(Photos 2 - 6 Courtesy of Frank Stamford).







# WESTERN VALLEYS SEA OUTFALL

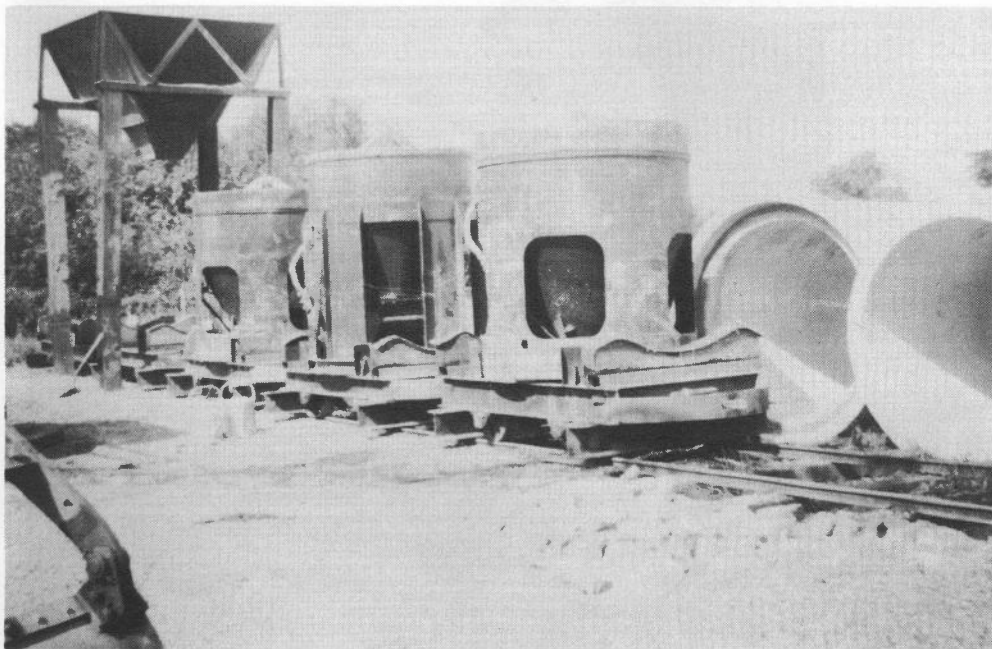
CONSTRUCTION OF STORAGE TANKS. MAIN TRUNK SEWER AND SEA OUTFALL,

CONTRACTORS: DEW OF OLDHAM

by Lionel Heath.

For the above job they are using a metre gauge railway which was certainly an interesting discovery for me. I have now been able to walk the whole length of the track which is probably rather more than half a mile at present but is being extended as the pipe line is constructed. The rail section is probably BSM 30 lbs as taken from an old Hudson's catalogue laid on mostly full length second hand main line sleepers, the ground being very soft and marshy.

There is one Ruston Locomotive in use being of course, a diesel and the number as far as I can make out is Size 48 No.398089, construction number being 4, although it is the only loco on the job.



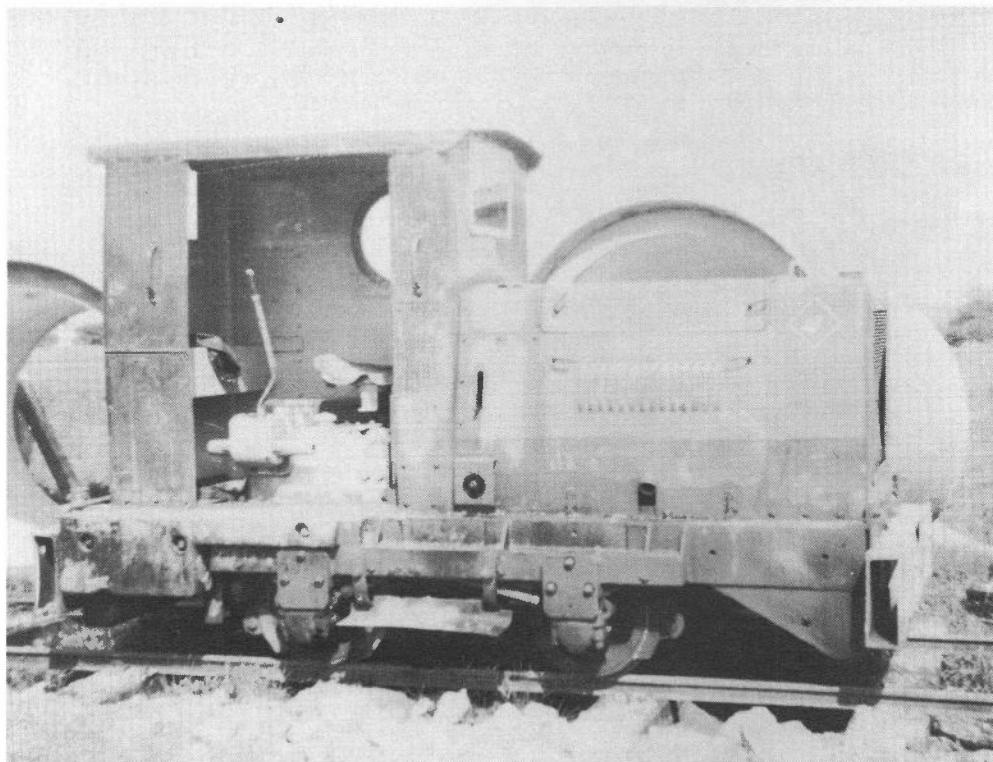


The wagons in use are all Hudson bogies with bolster each end to carry the 5 feet diameter concrete pipes, also 4 guide brackets to hold what I think are Blaw-Knox bottom door concreting skips of probably about 2 cubic yards capacity. These later convey broken stone which is used dry under the pipes, the skips being loaded by a Ruston No. 10 excavator fitted with grab which loads through a square steel hopper spanning the track, this is shown in one of my photographs.

I understand they have had a lot of axels broken owing to the lightness of the rough track each wagon load being about 5 tons. They have, therefore, welded heavy section derailing beams under the end of each bogie. These can also be seen in photographs.

The track is just one continuous line with no turn outs. Probably when this section of the pipeline is finished the track will be shifted and again used between the coast road to the outfall.

The line is near St. Brides between Cardiff and Newport.



# FIFTY YEARS OF SIMPLEX

FRANK JUX

It is now just over fifty years since the design of a locomotive was to revolutionise narrow gauge throughout the world, but particularly in Britain. This was the Simplex petrol locomotive, it brought in an era of narrow gauge rail usage unparalleled before.

The Motor Rail and Tramcar Co., Ltd., was formed prior to 1914, and had been engaged in the construction of petrol-engined trams and railcars at a works at Lewes, Sussex. Then war broke out. The military authorities made use of narrow gauge feeder lines to bring ammunition and supplies from depots to the fighting lines. Anyway, the broad gist of the story is that the authorities stuck to steam haulage, with locos built in France, the UK and America, and it took considerable effort to "sell" them on the idea of using internal combustion locos, at that time in a comparatively undeveloped state. The petrol locos, without the revealing smoke of the steam locos, were, to our eyes now, just what were needed, but the officials of the Motor Rail and Tramcar Co., were hard pressed to convince the Government officials, who were still thinking in terms of horse-power. Eventually they did, and the course of narrow gauge history was altered. The design was for a twenty horse power loco. of simple design, with a Dorman petrol engine. Since the suppliers of the main components were now at Bedford, the factory was moved there, and mass production commenced. A further design was produced with a forty horse power motor, and armour plate cab to haul ammunition trains, as the twenty horse power machines needed quite a few units to move the heavy trains over the poorly laid temporary tracks. These were not the only petrol locos in the war, and not the first petrol locos built by a couple of decades, but they were the first mass produced design, and one that was simple and successful. How successful they were can be gauged by the fact that some of the original War Department locos. are still running.

When the war was over there was a vast store of narrow gauge rolling stock available for disposal. Many firms were operating narrow gauge lines with steam locos., but many others had not the traffic to warrant the expense of maintaining a steam loco and the heavier track that it required. With the availability of equipment specifically designed for portable track, here was a new era of cheap transport opening to them. One Simplex could run on many of the light lines where horses had been used and at a far cheaper cost, and new lines were opened all over the country. The Nocton potato estate line is a good example for here the rolling stock came from the WD lines, including the Lincs Coast Light Rly hospital coach office and stores. The locos were bought later from Motor Rail. The WD batch of locos that survived the war were spread over quite a few countries though most returned to the UK, many of them going through Motor Rail's hands for repair and resale.

With the return of peace a standard gauge design was produced with the same basic design, and this was quite popular for sidings with small traffic. Some railcars were built, but the works was still mainly concerned with production of the standard twenty horse narrow gauge loco, which was proving itself the ideal means of motive power in quarries and works throughout the country. Some went overseas, but the home market took most of the output, with little competition from other makes. There were competitors, one even copying the design, but it was not until the advent of Ruston diesel locos in the early 1930's that any had to be taken seriously. Since the first locos left the works the basic design has remained unchanged with the simple transverse layout of engine and gearbox since adopted in the BMC "minis". Welded frames and all sorts of technical modifications and types of engines have been introduced, but the Simplex idea remains the same. Designs for standard gauge lines and anything down to 15" have been produced, with engine units by Ford, Dorman and Ailsa-Craig.

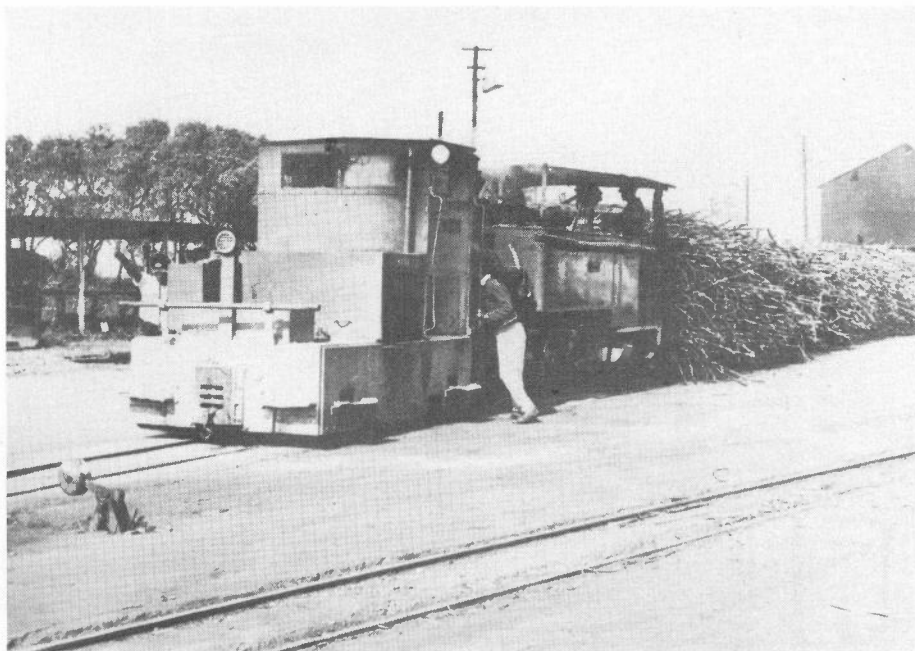
They have operated in dozens of countries, hauling pretty well every basic commodity from sugar cane and timber to sludge cake. They have even hauled passengers above ground; and underground in scores of mines.

Their success can be attributed to a number of things. Primarily a simple design, easy to maintain and to drive, it was conceived at exactly the right time and was able to benefit from the possibilities of mass production provided by the war. With such an advantage prices could be less than for the small runs usually associated with locomotive construction. None of this would have benefitted a poor design, but its soundness had been proved under war conditions. Somewhat similar was the popularity of the Austerity saddle-tank produced during the last war.

Of late there have been relatively few loco's leaving the works for England. For this there is increased competition, and above all, the demise of narrow gauge railways in favour of road transport to thank. The day when the Last Simplex runs will be a sad one for narrow gauge enthusiasts.



Photo shows a Simplex assisting a Fowler Steam loco at Natal Estates - Mount Edgecombe mill (system now closed) Post war Simplex with welded plate frame.



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CENTRE SPREAD PHOTOGRAPH:

NASMYTH WILSON & CO. MANCHESTER

No. 828 of 1907 for County Donegal Railway.

Class 5. Renumbered No. 4 "MEENGLAS" in 1937.

3' gauge. 175 lb. working pressure.

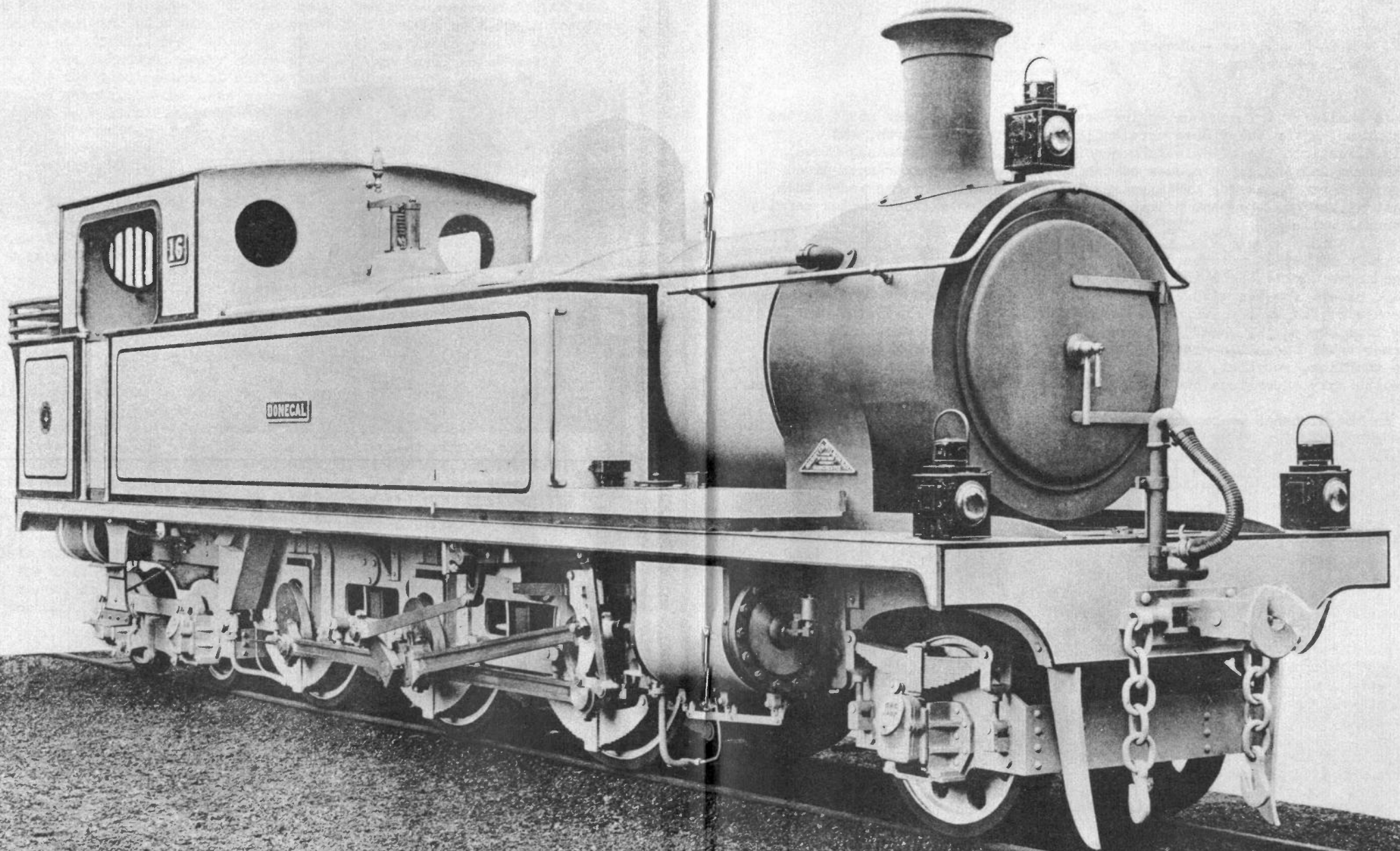
Cylinders 14" x 21".

Wheels 4' Driving 2'3" Trailing 2'9" Bogie.

Wheelbase 26'3" rigid 10' Overall length 33'2½"

Height 11' Width 8' Weight in w/o 43 ton 5 cwt.

Photograph from:- The Locomotive Magazine Nasmyth Wilson Souvenir  
1908-1909. Courtesy of Ron Redman.



# *It might have been—* R. & E. R.

From the R. & E.R. Newsletter - January 1962.  
Courtesy of Douglas Ferreira.

"With a shriek of triumph our engine breasts the summit, just short of the 800 foot contour, after the fierce unrelenting climb from Dalegarth, and immediately dives into the mile-long Hardknott Tunnel. The stupendous views of upper Eskdale and the great masses of the Scafell and Bowfell ranges give way to stygian darkness as our train gathers speed. Deep under the rocky bulk of Hardknott we burrow, the beat of the powerful 8-coupled engine echoing merrily from the tunnel walls.

"Our train of saloon coaches bursts out into the daylight to a very changed scene, high above Cockley Beck in the valley of the River Duddon. On a ledge all the way, except for the viaduct over Moasdale, we wend our way to the bleakly beautiful head of the valley, with the peaks of Carr and Grey Friar frowning down on us from across the vale. Climbing gently all the way, our train makes good progress until the hills close-in and our way is barred by Wrynose Pass. Beside the tumbling, youthful, River Duddon we dive once again into the dark - darkness which only emphasises the magnificence of the views when we again emerge.

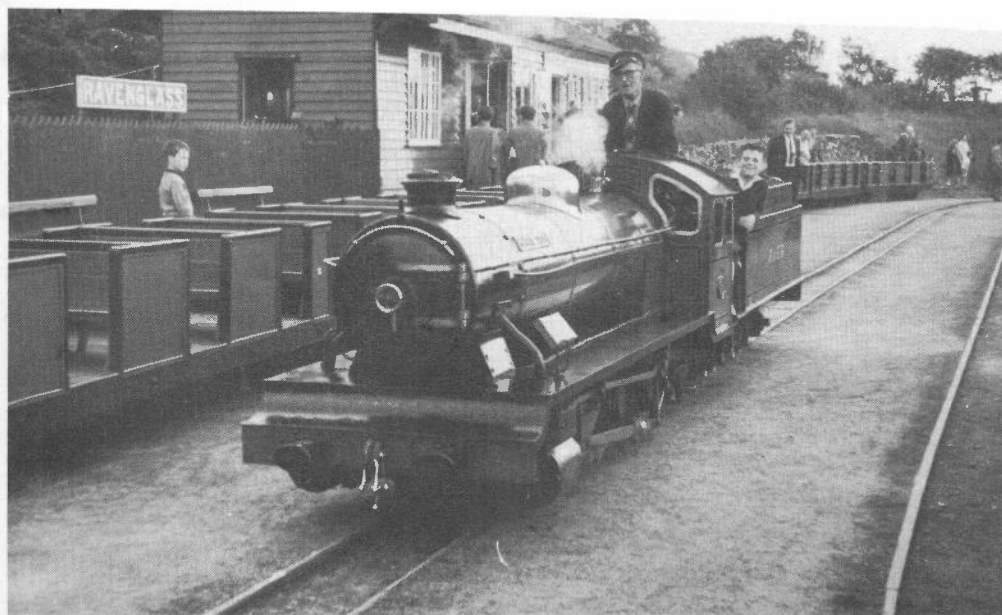
"Far in the distance we can see our destination, Ambleside and the head of Lake Windermere, and far below the fields and tarn of Little Langdale beckon. Our way ahead is cut in the fell-side as we round Blake Rigg and start the long descent past Blea Tarn, where we describe a 180 degree turn on our way down towards the valley-floor....."

Yes, it might have been - and nearly was possible to travel from Raven-glass to Ambleside by 15 in. gauge train.

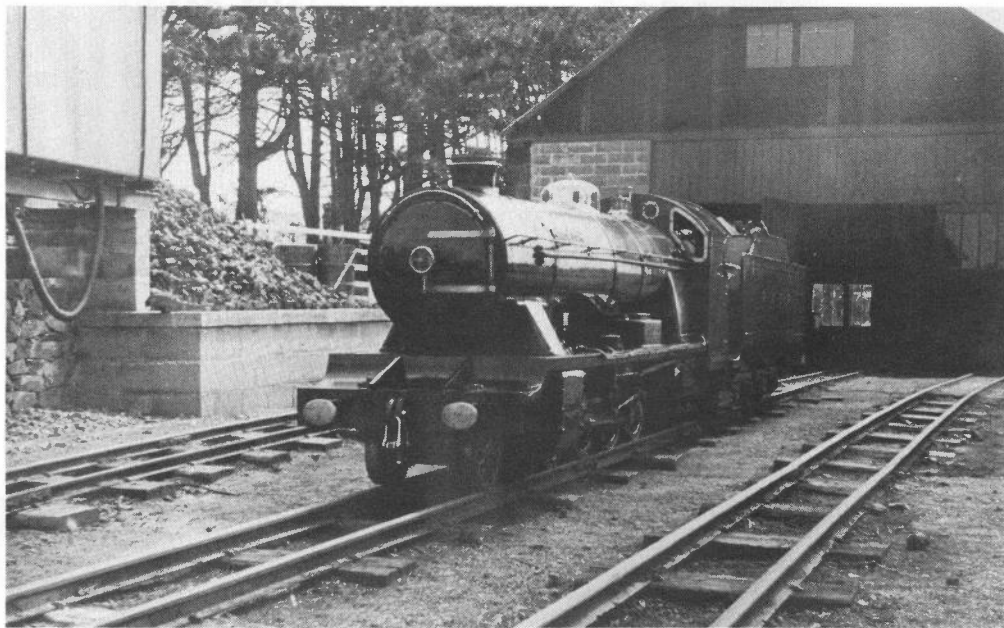
The route was roughly surveyed in 1925 by Captain J. E. P. Howey, who later built and still operates the Romney, Hythe and Dymchurch Railway. The problems and the magnitude of the works en route seem quite impossible now, when the cost of construction would run into millions. In those depressed times the work could have been undertaken at a fraction of the cost and the scheme might well have come to fruition if Captain Howey's negotiations had been successful.

It can never now happen, but it is delightful to contemplate the possibility. This was in the days before the road over the passes was made-up and when only the most daring motorist would attempt to cross them. The line would hardly have spoilt the scenery as much as the masses of cars which often now almost choke these mountain roads during the summer.









There would have been no railway line in these islands to compare for the magnificence of the panoramas it unfolded - and few in the world. It would have been overwhelmingly popular for tourists from the start. Round trips taking in the Cumberland coast, the Ravenglass and Ambleside Railway and the Windermere steamers would have been a "must". The line would also have been the only direct communication between West Cumberland and the Ambleside, Windermere, Kendal area - which even today is a difficult and lengthy business by road. As a result, there should have been a fairly flourishing goods traffic and all-the-year service for passengers.

The fierce gradients and long length of mainly single-line would have made the operation difficult to say the least. More powerful locos, enclosed rolling-stock, continuous brakes and very rigid safety measures would have been essential.

It is debatable, despite the excellent traffic prospects, whether it would have been an economical proposition. The project is still extremely interesting to anyone who knows the wild country through which it would have run.

Ah, well - it might have been !

Photographs: River IRT and River ESK at Ravenglass, May 1964.

# RESEAU DU VIVARAIS 1967

Roger Capewell

"Monsieur", the letter said last spring, "We have the honour to inform you that it is exactly as you have heard tell, that a decision to close the Réseau du Vivarais has been taken by the Prime Minister." So closed almost the last of the epic little lines of France of which Bryan Morgan sings (there is no other word) in "The End of the Line." Together with the Lozère line from Ste. Cecile d'Andorge to Florac (see magazine No. 45) it was run by the private Compagnie des Chemins de Fer Départementaux, presumably at a loss which explains the Prime Minister's intervention. The Vivarais line crossed a departmental boundary from Ardèche into Haute Loire and was officially classed as of General rather than Local interest, qualifying for higher subsidies.

The Réseau consisted of three branches. The eastern terminal was at Tournon, and the south-eastern at La Voulte, on the west bank of the Rhone 50 and 70 miles south of Lyon. The tracks climbed two spectacular side valleys into the central highlands of France. The junction and headquarters was at Le Cheylard, 33 miles from Tournon and 30 from La Voulte. The northern branch climbed to a summit at St. Agreve in the Vivarais mountains and then dropped to meet the SNCF again at Dunieres 39 miles from Le Cheylard. A western branch later replaced by buses formerly connected this section with La Voulte sur Loire about 20 miles west, so the network spanned the main central watershed of France.

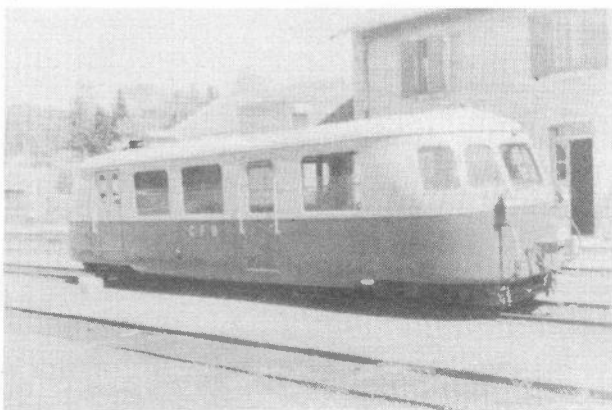
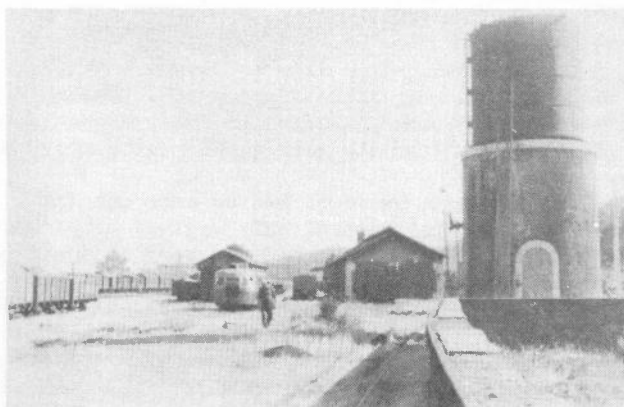
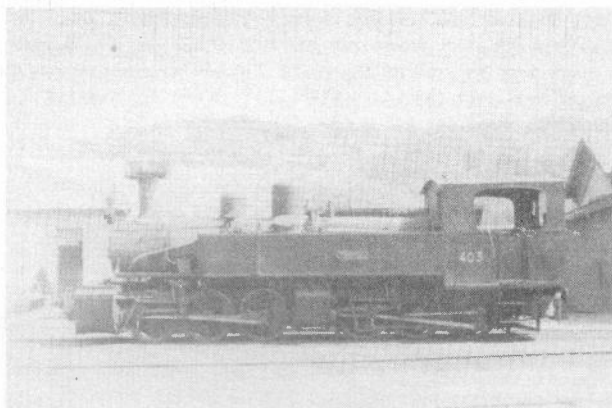
On a leisurely camping holiday in June 1967 my wife and I pitched our tent under the trees by the Rhone at Tournon. From this campsite at one end of the busy little town one looks down a broad tree-shaded esplanade past the statue of local hero Marc Seguin, inventor of the modern suspension bridge, to the site 500 yards away of his first bridge across the Rhone, replaced only a couple of years earlier. Esplanade, market, main road, town, and SNCF tracks (Lyon to Nîmes) squeeze between the river and the hills. The main electrified artery to the Riviera roars all night on the opposite bank, but Tournon's smart white station sees only diesels and steam. The tidy metre-gauge platform was behind the SNCF station which it shared. No-one challenged my reconnaissance in the blazing afternoon. Beyond, grass and wild flowers grew everywhere in the extensive metre-gauge yard, but there were plenty of signs of activity. Wagons of cut timber awaited the trans-shipment gantry which I later saw working. Ten-tonne wagons and vans predominated, many well-painted, but as many disused. There were a few bogie bolsters, and some timber was carried on pairs of four-wheel bolster wagons. Stock had centre buffers with a coupling on either side and a pipe for continuous brake. Gradients are fierce! The loco road, disused, had a coaling platform, a substantial stone-based round water-tower, a pit, and turntable, and led to a two-road stone shed. All were typical of the line and many articles bore the date of building, 1902. At an end-on break of gauge a gang of men were loading a standard-gauge transporter wagon with a De Dion railbus (No. 204) brilliantly repainted red and light grey for return to the Lozère line.

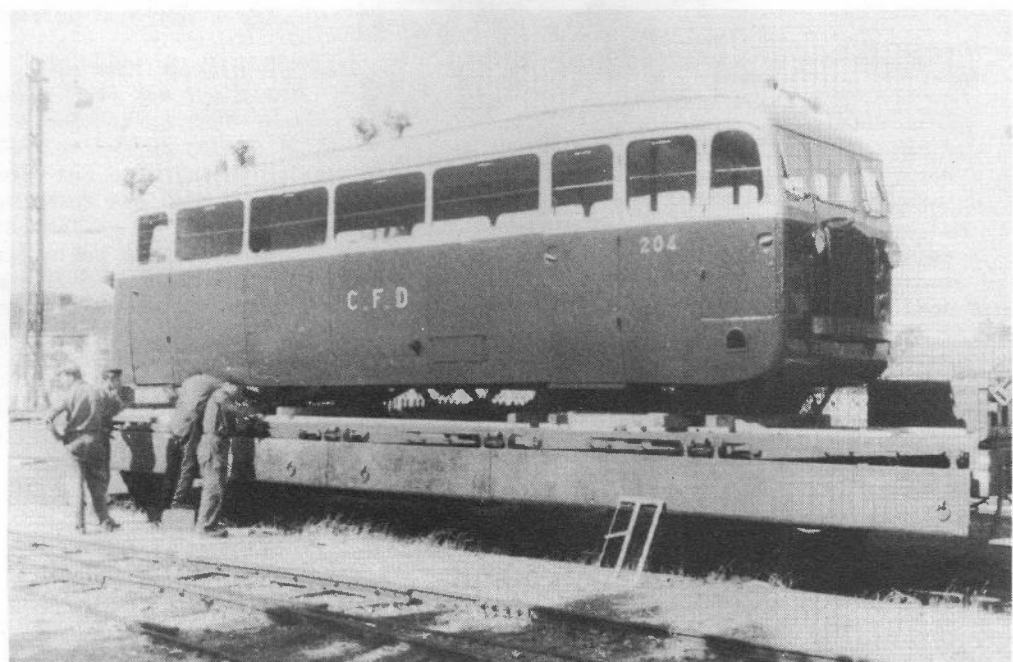
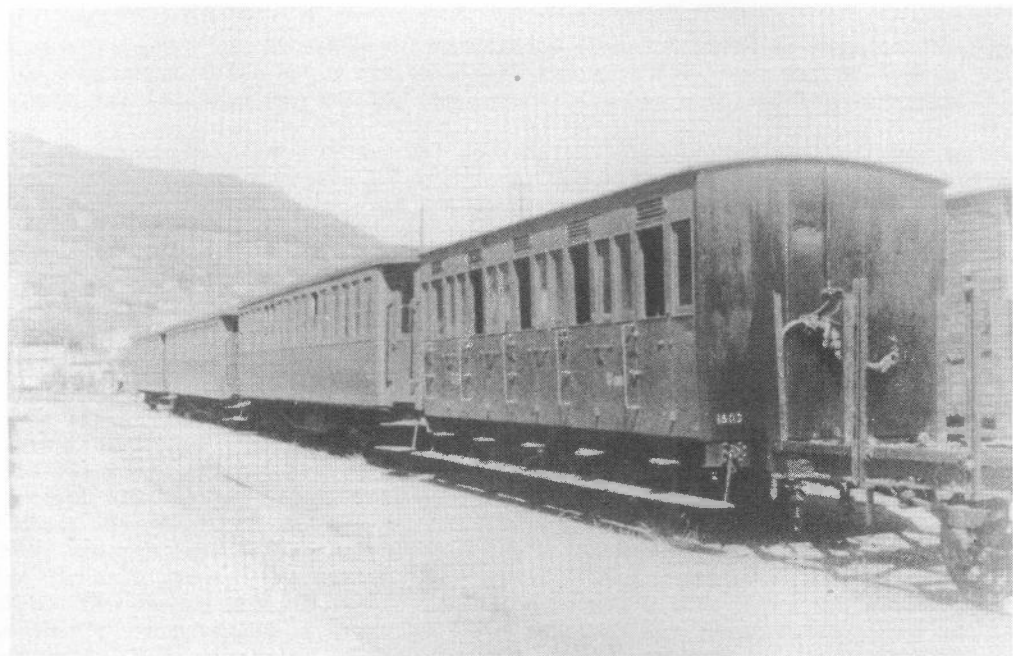
It may have been one of those pictured in Magazine No. 45. This single-ended car had a built-in jack under it for reversing at termini without turntables. Ironically, the Lozere line has outlived the Vivarais.

The track was flat-bottom rail spiked, or screw-bolted near points, to fairly well squared sleepers in good condition. Ballast was good stone, but a bit grassy on the main line. In the yard the unusual point levers had a weight on a horizontal arm pivoted on the main lever so that it could retain the point in either position. Turnplates made a connection between the blind ends of the sidings.

The Company issued a handy timetable booklet with a photo on the front, a map, ten pages of timetables (including the Lozere line) and twenty four of local advertising. I have never seen so compact a collection of single-digit phone numbers. One entry must be unique - a railway station extolling its attractions! The timetables showed one out-and-back mixed train but the rest were railcars, and two-thirds of the trains were qualified by limitations of fiendish complexity: "Only runs on Tuesdays and fair-days at Lamastre"; "School Saturdays and the eve of holidays"; "Mon, Tues, Thurs, non-school Sats, Suns, and the days before and after fairs". What happened on the fair day itself one can only guess. The winter timetable differed very little in timing but showed the darker side of the fiend: "Suppressed without warning in intemperate weather"; "Suppressed if train 226 does not run" and the most evocative of winter in these mountains, a diesel-hauled mixed train "operates instead of rail-car 218 in intemperate weather". In summer the maximum (and minimum) number of trains per day were : leaving Tournon 6 (2), leaving La Voulte 4 (2), and leaving Dunieres 9 (5).

So next morning we arrived at Tournon station festooned with cameras and sandwiches for Train 304, the 9.12 to Le Cheylard. This was an articulated Billard car on three bogies towing an odd baggage van the size of a four-wheeler but on bogies which projected beyond its ends carrying mudguards to keep the end windows of the railcar clean. The train nosed out onto mixed gauge on the SNCF northbound line for a mile before turning west to snake up the valley of the River Doux between orchards and farms. Vines grew on the hillsides and thick woods higher up. The road was left behind, the valley narrowed to a gorge and became more rocky. The track followed the contours up each side valley, over a beautiful curved stone viaduct complete with iron hand-rails, and out again, curving continuously with frequent short tunnels. At each station, tiny but solidly built in stone, the shirt-sleeved driver was greeted as a friend, perhaps the only contact of the day. A box of peaches would be loaded, a new bedstead carried into the house, and off again charging the trailing points back onto single track. The driver's cubicle was only a fence in the corner. His controls were like a bus except that he had three gear-levers, one for each pair of gears instead of moving a single lever across the box. Occasionally we stopped in the middle of nowhere to drop a farmer near home. Over a summit and down to Le Cheylard in the Eyrieux valley, an hour and three-quarters for 33 miles. All change for a single railcar to climb the heights, and off again. The track wound upwards on a fearful gradient, and dark woods closed in.





Alpine butterflies flitted off the track as we neared the head of the valley, and suddenly amazingly, we were out on an open grassy plateau stretching to the horizon, and were running level through unfenced meadows into the little health resort of St. Agreve at 3400 ft. Here there were an empty loco shed, a water-tower, and a turntable; identical with those down in Tournon.

We did not go on to Dunieres but sat in the shade eating lunch. It was pleasantly cool in the upland breeze after the roasting heat of the Rhone valley. The 14.01 took us back to Le Cheylard station (16 miles in 49 mins) where I explored the adjoining depot as tactfully as possible! Here were the main work-shops (well equipped), piles of spares, sheds, sidings, wagons of timber, and a loading gantry. The buildings here and those in Tournon were like those on the Lozere line (magazine 45 picture). Outside the loco sheds stood a superb 0-6-6-0 tank, a true Mallet compound, and inside, another was being prepared for a public steam excursion, of which the Company advertised three that year: "Whistles, Noise, Real Smoke"! A third identical engine was outside, cannibalised. The coach stock consisted of three magnificent olive-green saloon bogie coaches worthy of standard gauge (14½ tonnes each) and one older five-compartment coach covered with brass handles. Local shops sold postcards of these four bursting with enthusiasts behind a Mallet on an excursion the year before. For goods traffic there was a Bo-Bo steeply-cab diesel and for passengers a fleet of railcars, mostly squat double-ended Billards in scarlet and light grey. Everything was brightly painted.

All too soon we had to board another beetle-like Billard car for the 17.00 to La Voulte. The Tournon line forked left, ran companionably alongside for a while, then climbed away towards Lamastre while we went on down the Eyrieux. This valley is at first deeper and rockier than most of the Doux branch, with fewer side-valleys and tunnels, less cultivated land, and fewer stations, but does not become a true gorge. The track ran mainly on a shelf in the hillside above the river. Further down, the valley broadens out. There were the same stations, the same stops in the depths of the country, until at last the car edged, nervously it seemed, onto mixed-gauge SNCF track for the last mile, southward. A last level crossing, through a tunnel (on the wrong road, an eerie experience), and we, the only remaining passengers, stepped out onto the ground-level CFD platform beside the deserted cruciform station of La Voulte sur Rhone (see Bryan Morgan), 30 miles in 91 minutes. Plenty of boring main-line trains back to Tournon, Let's have dinner out on the terrace of a cafe in the soft southern dusk, watching the Rhone gliding past, fixing our memories of a unique day.

We shall not pass that way again.

Editor's Footnote (R du V.)

Stop Press - news item in the February<sup>69</sup> newsheet states that CFD Company have ceased to operate the line, the preservationist CF Touristique de Meyzieux people have obtained a concession to operate at least the Tournon to Cheylard section in 1969 including steam specials, so all is not lost yet.



# OPERATION ON THE TALLYLYN

Christopher White

For many people the fascination of railways is as much in their organisation and operation as in the locos and rolling stock. Quite rightly much of the emphasis in The Narrow Gauge is on locos and rolling stock, often on lines that long since ceased operations. It may be of interest to outline the problems and methods of train operation on one narrow gauge line that is still very much alive.

To understand the Tallyllyn Railway's methods of operation it must be appreciated that methods vary with the traffic handled at different times in the year, and secondly, that practically all train operation is in the hands of unpaid volunteers.

From the middle of October to Easter there is no regular passenger service on the line and the movement of works trains is confirmed by telephone conversations between the Foreman Platelayer and the operating staff concerned. The whole line is covered by a single staff marked boldly "One Engine in Steam". Here is an account of a typical afternoon's work on an October afternoon in 1968: a train was made up in Pendre Yard consisting of the RH 4w Diesel No. 5 "Midlander", one wagon with sides and one flat waggon (both empty) and the Corris van full of ballast-digging tools which were to be delivered to Quarry Siding. A check was made with Control at Wharf Station and we were told that there was an empty waggon on the main line at Cynval and that resleepering and levelling were in progress in the woods near Dolgoch viaduct.

With this information, we set off; a volunteer driver and two volunteers in the guard's van. At Cynval we came up with the empty waggon on the main line (a load of sleepers had been unloaded from it) and this was propelled to Rhydyronen, the loop there unlocked, the waggon shunted out of the way, the points re-set and locked up and we were on our way again: a slowing for Brynglas loop and level crossing and then on the long stretch towards Dolgoch. Just before the woods we came up to the warning sign and eased speed until we came up to the Platelayer's Trolley and Hugh Jones with a broad grin on his face. He had been working alone since 8 a.m. and there were very few spikes and no fishplates on the stretch of track on which he was working, so while he went ahead on the motorised trolley the diesel followed very cautiously. Once through Dolgoch station there was a clear run to Quarry Siding. From the siding we had to extricate one open waggon from behind two tipplers which were to remain there, re-marshall our train and unload the tools. The Siding point is rather tricky here, the blade is not a very good fit against the stock rail because of rail creep down the hill from Abergynolwyn, but we managed not to have a derailment, although one waggon tried to go both ways at once. The return journey started - we kept a good lookout for two rail-benders which we had been told to bring back and eventually found them: other materials and tools were also collected and we had two waggons full of various bits of ironmongery by the time we got back to Rhydyronen; there we collected the waggon that had been left there and so back to Pendre, where the permanent staff took over the train to dispose of the tools and materials and sort out the waggons.

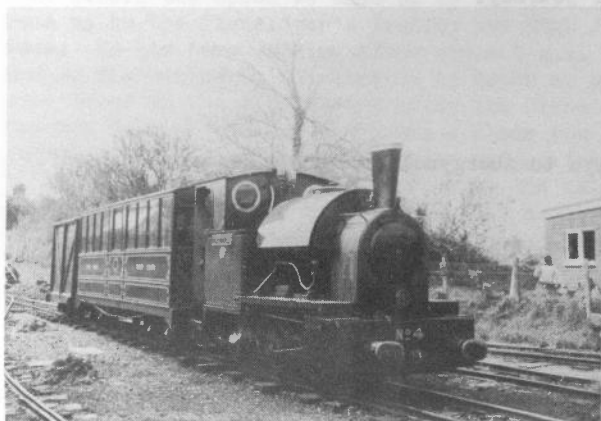
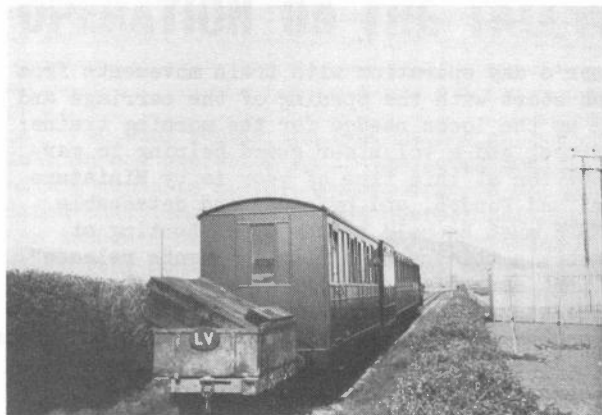


For contrast consider a summer's day operation with train movements from 7 a.m. to 9 p.m. Operations might start with the opening of the carriage and loco sheds; a volunteer lighting up the locos needed for the morning trains; a permanent staff driver on the diesel and a volunteer guard helping to marshal the sets of carriages. Operation at this time of year is by Miniature Electric Train Staff between Wharf and Pendre, and by staff and detachable tickets on other sections. The METS must be held by any loco shunting at Pendre so the diesel driver must obtain this by obtaining a "remote release" from the Control office at Wharf (not manned so early). If a works train is to run before the passenger service starts it must be clear of Pendre not long after nine and the driver must remember to leave the METS in the machine. Soon after eight staff will be arriving in force to clean carriages and locos and the first train is due to leave Pendre for Wharf (with empty carriages) at 09.50. During the height of the season, three passenger trains and the works train could be in circulation, with passing loops (manned by volunteers) in operation at Pendre, Brynglas and Quarry Siding - at this time of year the staff might be made up of three paid drivers, one voluntary driver, Controller and booking clerk (paid) then voluntary staff consisting of four guards, four assistant guards; three blockmen, three station assistants, two booking clerks, four firemen and four cleaners; to say nothing of engineering and refreshment staff. Of course the line could be operated with a rather smaller paid staff but there would not be the same standard of service to the public.

Between these two extremes of the peak days of the summer and the works train of winter there is the basic passenger service: here again volunteers may play a large part in train operation but it has been known for the permanent staff to have to turn out driver, fireman and guard in May and June when not many people have holidays. It is at this time too when there is likely to be the operation of waggons on the back of passenger trains, and all the special problems they bring: for example a mixed train must be in possession of the train staffs (not merely tickets), the last waggon carries a special LV board and arrangements have to be made to dispose of them after they have got to the end of their journey.

### Photographs

1. 17th April, 1968, 3 p.m. Towyn to Abergynolwyn leaves Pendre - "mixed".
2. 15th June, 1968, works train between Abergynolwyn and Nant Gwernol.
3. 11th May, 1968, empty stock train at Pendre waiting to form special to Brynglas for the Corris Society.



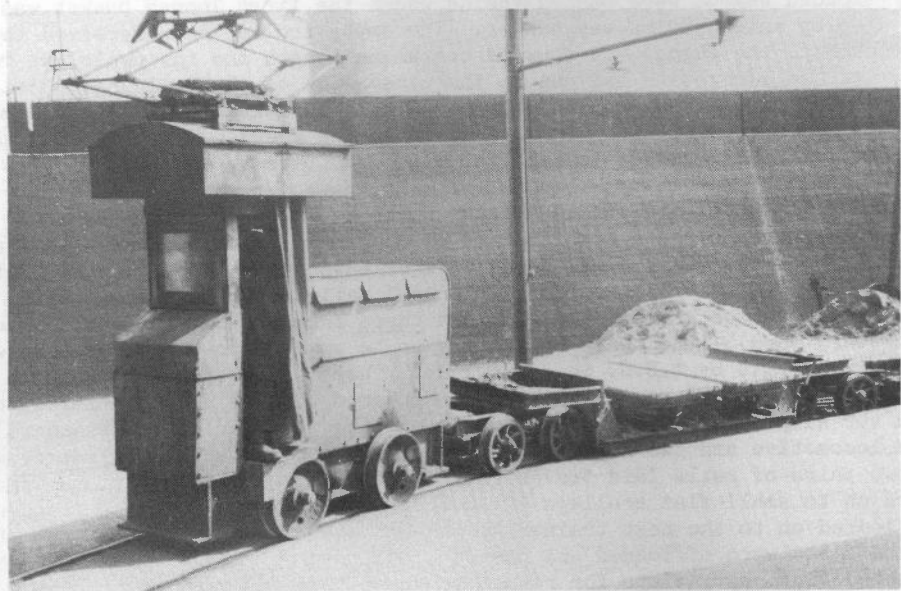
# ***Contrasts at London Brick Co. Ltd.***

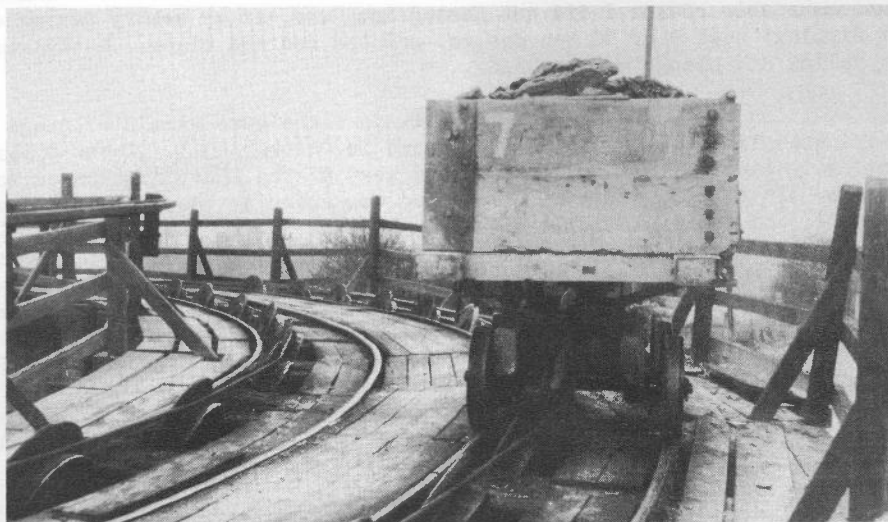
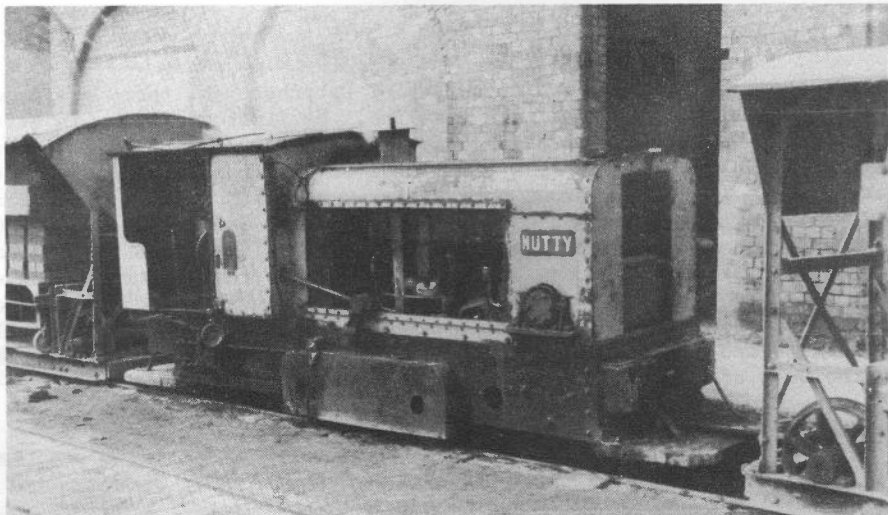
Sydney Leleux

The London Brick Co. Ltd. used to have narrow gauge railways in most of its works, but in about 1964 the Company announced that it wished to replace them by conveyors or dumpers. Since then some lines have closed and others are threatened, with the result that some interesting systems are disappearing.

I visited the 2'11" gauge system at Newton Longville works, Bletchley, in October 1956. The long single line was laid on the floor of the clay pit, from a transshipment point close to the works to the face where a hopper spanned the track. Half way was a loop. The wagons were flat trolleys, each carrying a standard ropeway bucket. The transshipment point was in a building on a return loop. Loaded wagons were pushed inside where the first loaded bucket was picked up by an empty ropeway hanger. The empty trolley then received the next empty bucket, the wagons ran forward one wagon length and the cycle was repeated. Meanwhile the locomotive had run to the other side of the building to collect the previous rake of wagons, now all carrying empty buckets. The ropeway lifted the clay out of the pit and took it to the works. There were, I think, three heavy Simplex diesel locomotives which shuttled to and fro.

In April 1958 I discovered Arlesey Works by Three Counties station. Just inside the entrance was a sign "Beware of the Tram", and I wondered what a passenger carrying vehicle was doing in a brickworks! (Go on, laugh. But in 1960, when I was being shown round Guinness' railway, Dublin, I was asked if I would like to see a tram, and they had three from the Hill of Howth line in the brewery yard). The trams turned out to be small four-wheel overhead wire locomotives built by L.B.C. in about 1925. There were about half a dozen of them, running on 3'0" gauge track which appeared to make a continuous circuit round the kilns and stockyard (I did not explore very far). The standard train was a locomotive and two bogie well wagons, 13'8" long over main frames, which had two pairs of rails laid transversely in the well. Bricks and pipes were loaded on to small flat trolleys (2' gauge?) at the kilns, and the flats were then loaded on to the next train. At the stockyard there were temporary tracks and the flats were offloaded and pushed along these by hand. The train then collected four empty flats for return to the kilns. Current was supplied at 220 volts DC, and collected by pantographs mounted on the cab roofs.





- 1 - L.B.C. NEWTON LONGVILK. 28/10/56.  
2'11" - MR 4WD carrying ropeway buckets outside rail/rope exchange.
- 2 - L.B.C. ARLESEY. 21/4/58.  
3'0" and bogie transporter wagons.
- 3 - L.B.C. PETERBORO' (HICKS No. 2) 25/3/60.  
2'11" NUTTY Sentinel 7701/1929.
- 4 - L.B.C. 2'6" wagon on ropeway 25/3/60. Crossing G.N.R.

At Fletton, on the southern outskirts of Peterborough, there are numerous brickworks on both sides of the LNER mainline. My first visit was in March 1960, primarily to see Nutty, 2'11" gauge Sentinel 7701/29, built to a reduced loading gauge, which hauled trains of unfired bricks from Hicks works to kilns at Hicks No. 2. The wagons, four to a train, were flats with very low floors (the axle bearings were mounted above the underframe) and curved roofs. On these were loaded trolleys of bricks. At No. 2 works the train ran into a loop. The locomotive was uncoupled and then coupled to the previous train, now empty, which it then proceeded to push out of the loop. When it was clear of the further set of points it reversed and hauled its train through the other loop road, and returned to the brickmaking plant. The "main line" was just beside, and to the west of, the LNER.

To the east of the LNER were other works with 2'11" gauge track, but I gave them only a cursory inspection. I saw two locomotives, both Simplex. 91 (7998/47) had an unusual cab and closely spaced spring buffers either side of the coupling block, and appeared little used. The other locomotive which for some unaccountable reason I did not photograph, was, if my memory serves me, one of Simplex' neat 9 or 10 ton design, painted red and black. Nutty was bright yellow and black, and 91 green.

In addition to locomotive worked railways there were also 2'6" gauge cable operated lines, which still functioned in October 1963. These appeared to lead from claypits south of Fletton and west of the LNER, northwards to the brickworks. In particular, one line served works beside the main road near Hicks No. 2, and another crossed the LNER at Hicks No. 2. These cable railways were double track with the cable carried on pulleys between the rails. In curves, the pulleys were angled, single flanged and closely spaced near the inside rail. The wagons were wooden inside framed side tipplers, each provided with a cable gripper. Wagons were hauled singly, spaced along the line like beads on a string. At points the cable had to be taken underground. As it approached a junction the wagon would run up a slight hump, at the summit of which the cable would be automatically released. The wagon then ran across the junction under its own momentum, aided by gravity, and was then reattached to the cable again. Part of the cable tensioning apparatus looked like a small pithead gear.

New Peterborough No. 2 works, east of the LNER, was supplied with clay by a ropeway from a terminal west of the LNER and main road. Here the buckets were transferred to flat wagons, two buckets per wagon, for cable haulage to the clay pit. This is one area I have not visited, so I do not know what happens there. Certainly the whole Peterborough neighbourhood and L.B.C. works in general could do with a thorough investigation before it is too late.



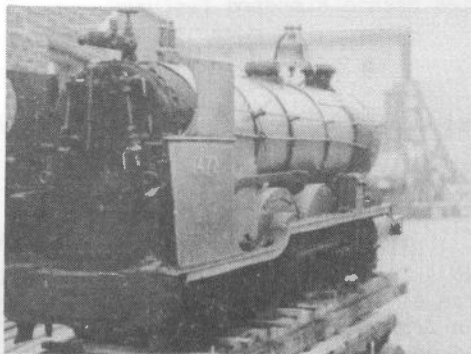
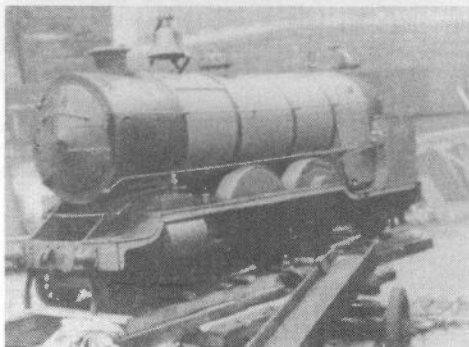
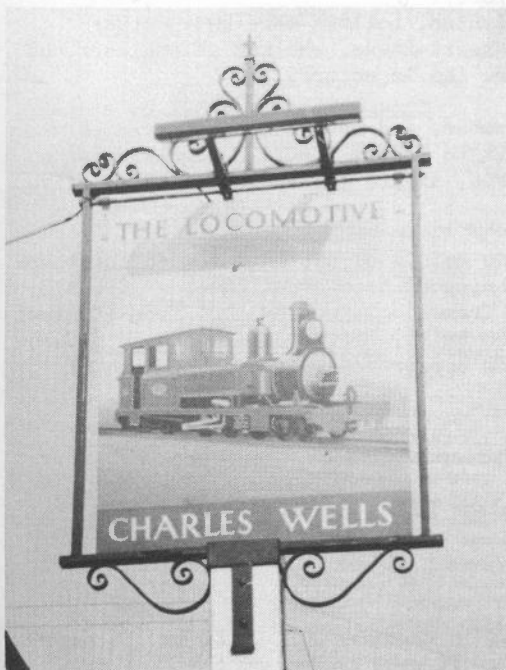
# LETTERS to the EDITOR

From Geoff Welsh, Kettering (Photo Vic Nutton)

'THE LOCOMOTIVE' Potton, Beds.

On the Bedford side of Potton on the A603 Cambridge to Bedford road is a small pub with a large sign. This is a magnificent painting of one of the Leek and Manifold locomotives which has replaced an earlier sign of another unknown loco.

Unfortunately no information on the sign was available once opening time came round but a letter to the brewery was forwarded to the Artist, G. E. MACKENNEY of Aylesbury who wrote saying that the loco was used as being an attractive type rather than through any association with the area.



Details of photos overleaf >



From Sydney Leleux, Keighley.

Living in Northampton I tried to discover details of Bassett-Lowke 15" 4-4-2 locomotives, in an attempt to solve the mystery of Synolda. I was privileged to meet Mr. W. Vaughan who helped assemble Little Giant in 1904. He can remember the following locomotives: others may have been constructed when he was away at a resort or exhibition running a railway.

Little Giant	Class 1	Blackpool, Sutton Coldfield.
Mighty Atom	2	Rhyl
Red Dragon	2}	Exhibition, White City 1908.
Green Dragon	2}	
Sans Pareil	3	Geneva, Oslo, R. & E.R.
(Prins OIAV at Oslo)		
Ville de Nancy	3	Exhibition??
Bert Wynne	3	Rhyl.
-	3	for King of Siam.
Count Louis	3	Fairbourne.

An engine, Rue Baix, possibly went to Luxembourg. He says that Howey's 4-6-2 "Colossus", was the last built, but he believes that a 4-4-2 might have been assembled 1920-22 from accumulated spares. Except for the 4-6-2 and the last 4-4-2s, whose boilers were made by Alchins, boilers were made on the premises by J.T. Lowke, father of W. J. Bassett-Lowke, who was an engineer and boilermaker. The only purchased parts were the injectors.

The locomotives carried no date or number, and were sometimes renamed between seasons, so that they are difficult to trace. Could I suggest that a list, with dates, of B-L engines be prepared, and to try and build up the lives of each loco?

"Little Giant" (only one built) was made mainly of castings bolted together. Production models (class 2 and 3) were fabricated from steel sheets. Class 3 was the most highly developed type. Main frames were cut by hand from  $\frac{3}{8}$ " steel sheet, a month's hard work for one man. As built, "Little Giant" tended to throw her fire. This was cured by fitting a ring blower and superheater, both of which became standard features.

See No. 39 September 1965 for previous correspondence on "Synolda".

2 photos by courtesy of Keith Rogers show the Belle Vue loco on 24/12/65.

...

From Mike Jackson, Margate

Referring to the letter from Mr. Goss in magazine No. 51, I may be able to add a little info on the 'Mexican Mallet'. It used to run on the nine mile line of the Compania Minera de Penoles-Avalos, in Mexico. The line used to run from a place called Avalos to the mines. It was first opened around 1904 and was still in use in 1967. Apparently the first motive power on the line was two 0-4-4-0 Mallet Compounds, from Orenstein & Koppel; an 0-4-OT from the U.S. firm of Porter, works No. 7063 of 1927, arrived later.

Of the two Mallets, No. 1 was transferred to the Cripple Creek line, and No. 2 is retained as a spare to the diesel that now works the mining line. I see from Mr. Goss's letter that a Porter tank also works on the Cripple Creek line, this may be No. 3, the Porter from the mining line. The mining line is now (or in 1967 at least) diesel-operated.

Delving back even further into earlier copies of the 'Narrow Gauge'; in No. 45, in the article 'NG LOCOS OF HUDSWELL CLARKE & CO. LTD.', by Mr. R. N. Redman, he mentioned four locos being delivered to the Furbero Railway, of Mexico. The Furbero line was built by Oil Fields of Mexico S.A. in 1913, but was later sold to the Mexican Eagle Oil Co. The line ran for about 50 miles to the oilfields at Furbero from Cobos, which is a few miles from Tuxpan, on the Gulf of Mexico. According to my information these four locos were all 0-4-OTs, but I have a photo, showing one loco, obviously British built, named 'San Marcos' which is an 0-6-0, with a four-wheeled tender, and apparently oil-fired, as were the HC locos; could this be one of the locos mentioned in Mr. Baker's letter in magazine 46?? Mr. Baker says Bagnalls supplied three 0-6-0 locos, with 4 wheel tenders and oil-firing, and were named 'POTRERO', 'EL MESON' and 'SAN MANCUS'. This would seem to tie in with the information that I have; perhaps 'SAN MANCUS' is a mis-copied 'SAN MARCOS'. Two US-built Davenport 0-4-OTs were supplied in 1921 to the Furbero line, and steam was finally eliminated in 1945, diesels taking over, with five 'Kalamazoo' petrol railcars for personnel transport. The line was still in operation in 1962.

Finally, may I congratulate you on a consistently excellent magazine; I'm away from home ten months a year, in the Merchant Navy, and being mainly on oil tankers, get little chance for 'poking round' so your magazine is read very thoroughly, and is always of great interest, both in its content and production.

...

From Rodney Weaver, Kenilworth

I propose that a clear definition of "narrow-gauge" and "miniature" railways be adopted in view of the confusion and double-thinking that exists over the subject at present.

My proposed definitions are these:-

**Miniature Railway:-** A ground-level railway with a gauge between 7" and 14½" regardless of type when locomotive operated.

**Narrow-gauge Railway:-** A railway with gauge between 15" and 4'6" regardless of type, or a railway on industrial premises without locomotives having a gauge of more than 12".

My reasons for suggesting the change is that there are too many anomalies in the present, rather arbitrary way of distinguishing the two types. Many hold that a railway must be miniature if the locomotives are scale models, or have the appearance of scale models. Now the Isle of Man Railway was equipped with Beyer Peacock 2-4-OT locomotives whose basic dimensions were obtained by scaling down the drawings of the Metropolitan 4-4-OT and could quite fairly be described as "freelance 8" scale Metropolitan Railway locomotives". Therefore the I. o.M.R. is a miniature railway and should never appear in lists of narrow-gauge locomotives! This is quite ludicrous, but there is more to follow: within three miles of the terminus of the I.o.M.R. was the Groudle Glen Railway, which used unquestionable narrow-gauge equipment. This was always classed as a miniature railway!

In theory one should be able to distinguish between railways built to serve as railways and railways built to represent other railways, but this is far from satisfactory. One can list several cases of "miniature" railways that are not, and do not pretend to be, models of anything. On the other hand, there are the odd railways accepted as narrow-gauge which could be termed "miniature". If it is not possible to adopt a simple, technical definition the next best thing seems to be an arbitrary ruling based on a readily-distinguishable feature such as the gauge.

## Letters to the Editor

Why 15" gauge as the dividing line? It is the gauge at which full-size and model engineering meet. It is the narrowest gauge on which real public railway operation has ever been successful. With the exception of some early locomotives all 15" equipment has been designed primarily to do a job of work with appearance as a secondary consideration, as has practically all equipment on wider gauges. On the other hand, very little of this nature has been attempted on narrower gauges with the obvious exceptions of the Hilton Valley Railway and TINKERBELL. Quite apart from these considerations, I do not accept that nine tons of Davey Paxman 4-6-2 are less of a locomotive than five tons of Bagnall 0-4-OST. Let us treat all locomotives and rolling stock on their merits, on their fitness to do the job for which they are intended, and forget about "overgrown toys" and other derisory terms.

### Editors note:

Is it so important -

If its steam its OK to me, - under 4'8" it may appear in these pages!!

...

### From Fred Pugh - Reading

#### SARDINIA '66

Referring to my article on the narrow gauge scene in Sardinia published in your November issue (No.52), I would remind you that I wrote the notes a few months after my visit three years ago, and ask for further space to bring them up-to-date.

In contrast to the sad news reaching us concerning the narrow gauge lines in virtually every country of Europe (Portugal is a happy exception), very little has changed in Sardinia since 1966, and if the following minor adjustments had been made to the notes they could have been headed "Sardinia Today".

F.M.S. The long-expected retrenchment has started, and can only be interpreted as the beginning of the end. The Siliqua line was cut back 29km to Narcao early in 1969, while the latest timetable (Autumn 1969) shows passenger services withdrawn between Iglesias and Monteponi. This is rather surprising, for there is no freight on this section, and it will have to be retained for access to the depot and workshops at Iglesias. It can only be a matter of time before the rest of the system follows suit.

On a happier note, the coal trains are still working between S.Antioco and Carbonia, and are still steam hauled.

F.C.S. Cagliari Section. The new workshops at Monserrato are now in use, and, although the diversion into the main station is not yet complete, the original station in Cagliari has been abandoned, and the line cut back a kilometre or so to a temporary (but adequate) terminus short of the worst of the level crossings referred to. The freight trains are now diesel-hauled steam being restricted to shunting duties at Monserrato and Mandas.

My notes on the Macomer Section of the F.C.S. and the S.F.S. still apply, even to the steam loco on shunting duties at Macomer.