LIGHT RAILWAYS

Number 56
Winter 1976
90 cents

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The Light Railway Research Society of Australia

Recommended reading:

THE INNISFAIL TRAMWAY by J. Armstrong and G. E. Verhoeven. A history of the Geraldton Shire Tramway and Mourilyan tramway - two of Queensland's most interesting 2 ft gauge sugar tramways. 103 pages hardbound. Numerous photographs, maps and scale drawings of locomotives and rolling stock, including passenger coaches. (ARHS publication) $6.50

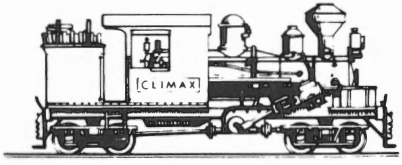
THE SHALE RAILWAYS OF NEW SOUTH WALES by Gifford Eardley and E. M. Stephens. The story of a series of interesting private railways which served the shale oil industry in NSW. Numerous magnificent photographs in really rugged scenery. Extensive text and many maps and plans. 240 pages. (ARHS publication) $9.90

TASMANIA REMEMBERED A hardbound book of 160 pages containing many really interesting photographs depicting aspects of Tasmanian history, including an excellent railway section. (The Mary Fisher Bookshop, Launceston: publisher) $9.95

SAWDUST AND STEAM by Norm Houghton. A comprehensive history of rail transport in the East Otways, including the Forrest railway, timber and mining tramways which connected with it, and tramways of Apollo Bay, Wye River, Kennett River, and Lorne. 106 pages, 12 plans and maps, 60 photographs, three-colour fold-out map. (LRRSA publication) Soft cover $4.20 Hard cover $6.00

Map, UPPER YARRA AREA (Victoria) January 1975 revision. A 1 inch/mile dyeline map showing tramways, roads and creeks. (LRRSA publication) $1.00

Map, TYERS, THOMSON VALLEY AND WALHALLA AREA (Victoria) A one inch/mile map in three colours showing tramways, creeks and roads in great detail. Off-set printed. (LRRSA publication) .20



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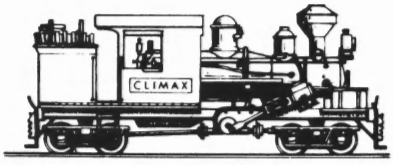


Light Railways
No.56 Vol. XIV
Winter 1976

Light Railway Research Society of Australia

Annual Subscription $4.20 for year ending 31 May 1977. **Meetings, Sydney:** Fourth Wednesday every second month at 7.30 pm: Conference Room Rechabite House, 85 Campbell Street, Surry Hill. Next meeting 23 February 1977. **Melbourne** Second Thursday every second month at 8.00 pm, room 11, Victorian Railways Institute, Flinders Street Station building. Next meeting 10 February 1977.

Whilst every effort is made to ensure the accuracy of articles published in *Light Railways* errors may creep in. Additional information is being discovered all the time, and this sometimes contradicts previous information.

If you see any errors, or can add information, please contact the editor, and so help us to record the full history of Australia's light railways.

Historical references to sums of money in *Light Railways* are in Australian pounds (£). One pound equalled two dollars on changing to decimal currency in 1966.

Articles and news items are always welcome. It greatly assists the editors if they are typed or written on one side of the paper only and double spaced.

Editor's column

Having edited 51 of the 56 issues of *Light Railways* published to date, the time has come for me to retire from this position and hand over to someone with new ideas on how the magazine is to develop. To halt any speculation, I should add that my only reason for wishing to retire is simply because, after seven years of editing *Light Railways* without a break it has become a chore rather than a challenge. I would like to thank all the contributors who have made *Light Railways* possible over the past years. Please keep your contributions coming in, I will hand them on to the new editor when he is appointed.

I am hoping to be able to work on some special publications in the future, none of which I have had the time to see to fruition in the past due to the constant demands on my time by *Light Railways.*

NEW SOUTH WALES DIVISION

The New South Wales Division of the Society is now well on the way to establishing itself as an active organisation, having already held three meetings. At the August meeting the following office bearers were elected; President: Paul Simpson; Secretary: Dick Mason; Treasurer: Alan Watson. The address of the NSW Division is P.O. Box 290, BURWOOD NSW 2134.

Already the Division has planned its first field trip, to be held in December; and is planning to publish one or more issues of *Light Railways.* The Council of the Society in Melbourne has already given its approval to the NSW Division taking over the publication of *Light Railways* permanently if it wishes. NSW members of the Society are urged to support the new Division in all its activities.

Front Cover: TC 10 class 600 mm gauge 0-6-OT locomotive at Krawang, Indonesia in August 1972. This locomotive was built by Hartman (Germany) in 1920.

North west Coastal Tramways

Broome

by Ian Crellin and Frank Stamford

Broome is some 1540 miles (2478 km) north of Perth, and comes as a refreshing surprise after the drive from Port Hedland. The road includes 360 miles of well-graded but corrugated earth which, apart from a few enormous bulldust filled potholes, presents few problems in dry weather. There are no signs of habitation on this lonely road apart from the appropriately named Sandfire Flat roadhouse, 180 miles north of Port Hedland. Broome itself has well laid-out streets, luxuriant tropical vegetation, good beaches and unusual architecture. The great civic pride of its very cosmopolitan population makes it hard to recall a more exotic and interesting Australian town. Most of the town's shops are old general stores which seem to have changed little in the past sixty years.

Regrettably there is now very little of railway interest left in Broome.

Settlement at Broome goes back to the latter part of the last century, although its history goes back to the earliest days of European discovery of Australia. A memorial in Broome commemorates the landing of William Dampier, the first Englishman to set foot on Australian soil, at nearby Cygnet Bay in 1688. Little was to happen here until two centuries later when the pearling fleets were to arrive to harvest the rich pearl beds of the north-west. A small pastoral industry was later established and Broome became its port and a market for its meat.

First jetty

Construction of a jetty to serve the port commenced in the mid 1880s. In 1896 a new jetty was built at Mangrove Point. This was 2953 ft long and 15 ft wide, with a T head 340 ft long and 30 ft wide. One mile 50 chains of 2 ft gauge tramway, using 25 lb rails on steel sleepers, was laid to connect the jetty with the township, with a branch to Streeter's Jetty.[1] This was completed in 1898, and by the end of that year five trucks and one one-ton crane were in use. The number of trucks had doubled by the end of 1901, and in 1902 a passanger car was under construction.[2]

By 1904 there was 2½ miles of track, and rolling stock had increased to include 18 one-ton trucks, 2 four-ton trucks, 2 eight-ton bogie trucks, one passenger car and one crane. Traffic having increased greatly the tramway could hardly equal the demands placed on it, and conversion to 3 ft 6 in gauge was considered urgent.[3]

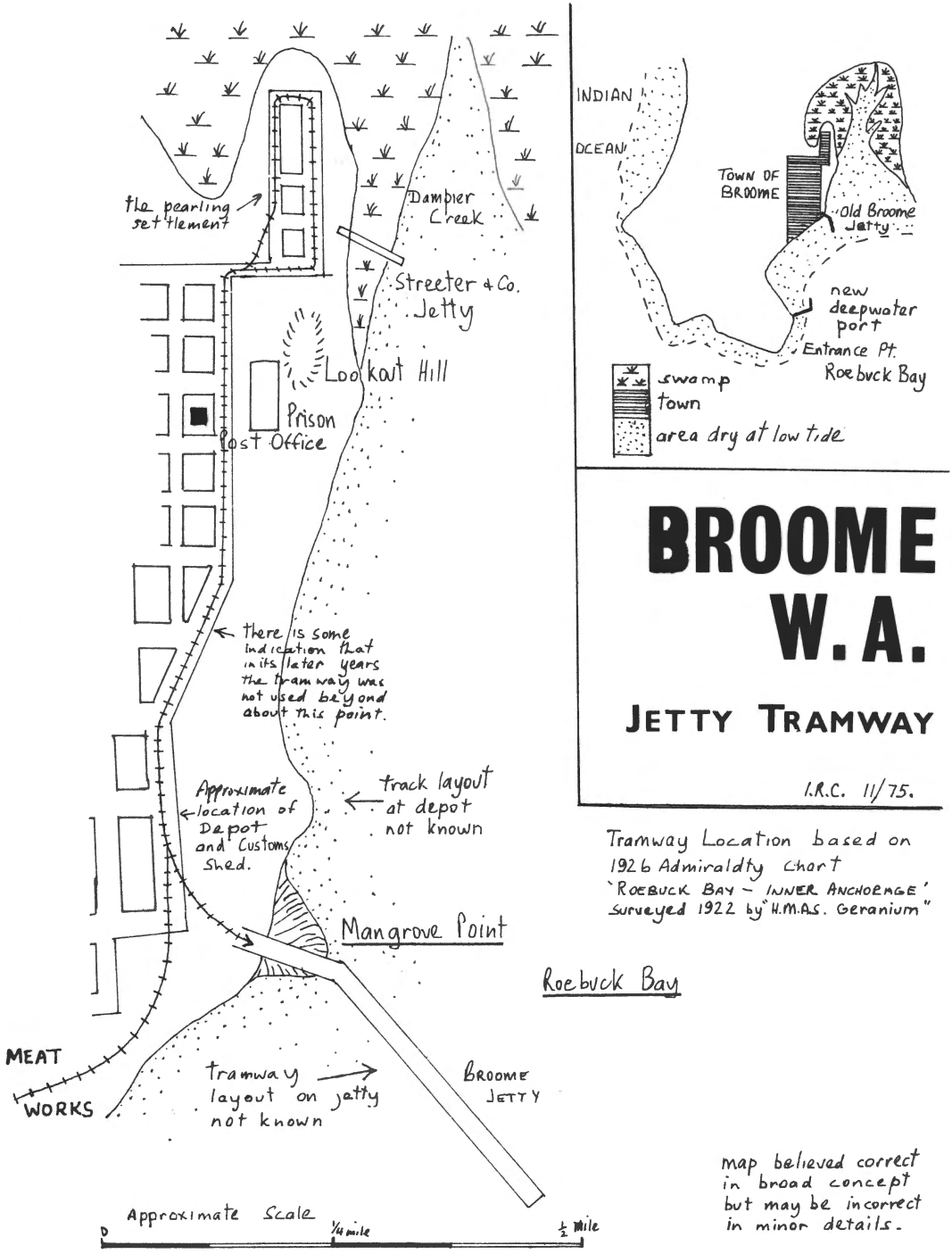
Early motive power on the line was provided by horses. The official opening of the line is reported to be 20 December 1902 although the line had been in regular use for five years at that time. This appears to have happened with several public works in the north-west; perhaps dignitaries to perform the ceremonies were few and far between in those days! At the township end of the tramway at Dampier Creek, several smaller jetties served the luggers, some of which were fitted with tramway rails and push cars to get stores out to the vessels. It is not known if any of these were connected for through working of vehicles from the main tramway.

Gauge conversion

In the 1906-7 financial year relaying of the tramway to 3 ft 6 in gauge with 45 lb rails was commenced. A number of reinforced concrete sleepers and Powellised timber sleepers were used for testing purposes. Eight 3 ft 6 in gauge wagons were sent to the tramway in that year.[4] In the same year the port was visited by 77 steam and 7 sailing vessels.[5]

Gauge conversion was completed in the following year, and at the township end the new line ended in a loop along Carnarvon Street and Dampier Terrace making it unnecessary to run around the train. A new 3 ft 6 in gauge passenger car was supplied in the same year. Thirty chains of the old 2 ft gauge tramway was relaid by the municipality for quarry purposes.[6]

Axlebox lettered 'GSR' on passenger car preserved at Bedford Park, Broome. Photo: F. Stamford



BROOME W.A.

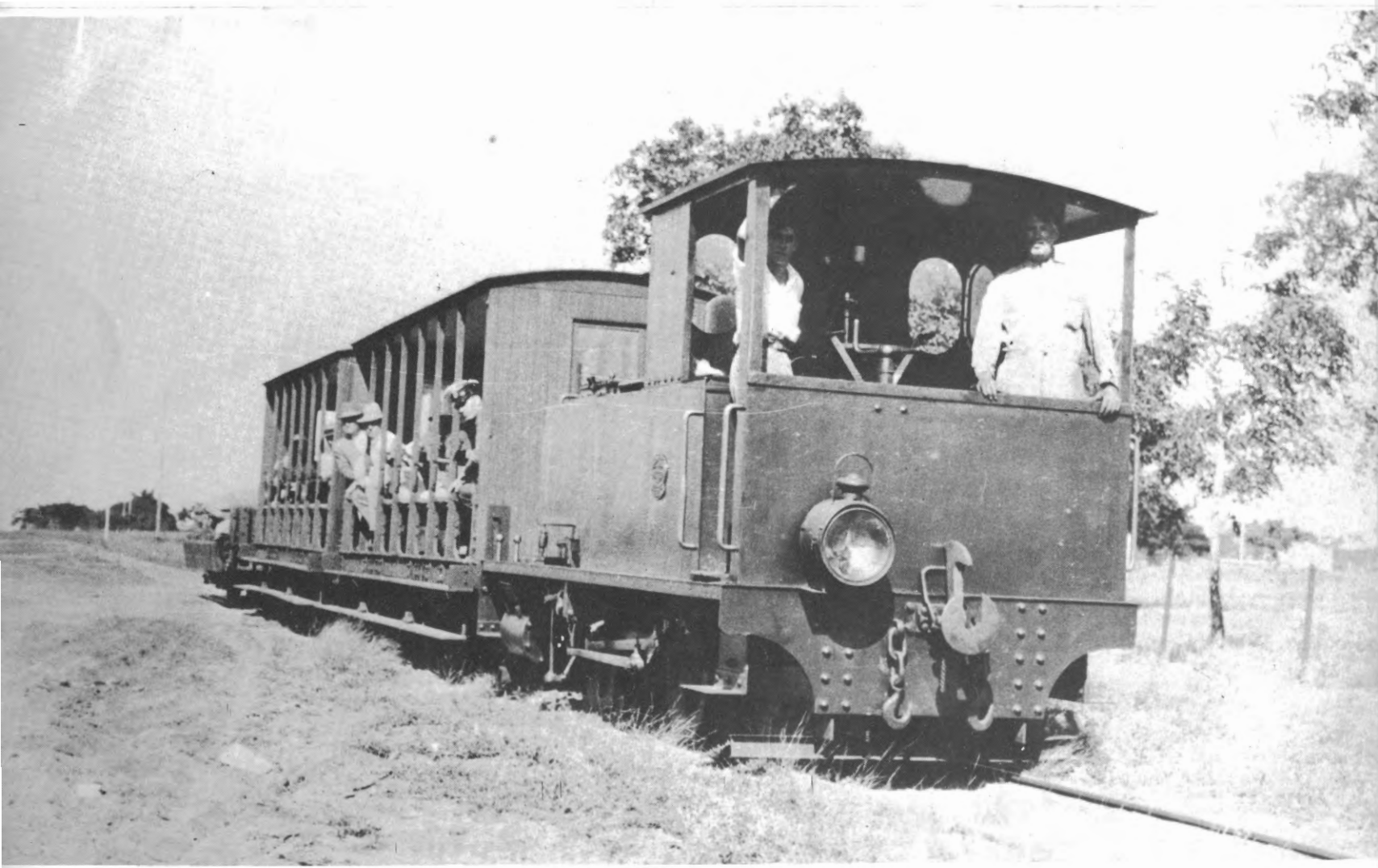
JETTY TRAMWAY

I.R.C. 11/75.

Tramway Location based on 1926 Admiraldty Chart 'ROEBUCK BAY – INNER ANCHORAGE' surveyed 1922 by "H.M.A.S. Geranium"

map believed correct in broad concept but may be incorrect in minor details.

A very early view of the Broome tramway in the days of horse haulage. Photo: W.A. Government Printing Office.



Andrew Barclay 0-4-OT locomotive (B/No. 1754 or 1922) *Kimberley* hauls a train on the Broome Tramway.
Photo: Victorian Railways (H 1717)

Above The Mangrove Point jetty at Broome at low tide. Some 3ft 6 in gauge wagons can just be seen at the end of the jetty. Since the opening of the new deepwater port in 1966 the Mangrove Point jetty has been dismantled.

Photo: Australian News & Information Bureau.

Below Orenstein & Koppel 0-4-OT locomotive (B/No. 4058 of 1910) at Broome.

Photo: WA Government Printing Office.

Horses were replaced in the year ending 30 June 1910 by an Orenstein & Koppel 0-4-0T steam locomotive,[7] builder's number 4058 of 1910.[8] At the same time further sidings were provided at Dampier Terrace and at the depot.[9] In the following two years five new trucks, a meat van, a travelling water tank, and two further passenger cars were supplied, whilst an engine shed and pit were completed.[10]

In 1913 it was reported that a 'New Century' petrol locomotive had been ordered for the tramway, as the steam locomotive had not proved satisfactory due to the poor quality of the water,[11] No mention of this locomotive actually arriving is given in any official reports, but the steam locomotive was overhauled and repaired in 1914, so it was obviously still needed. In the next five years six additional jetty trucks were supplied.[12]

In 1922 or 1923 a brand new 0-4-0T locomotive from Andrew Barclay (B/No. 1754 of 1922) arrived. This was named *Kimberley* and worked at Broome for many years, but by March 1950 it had been transferred to Carnarvon. It was out of use there by November 1957 and subsequently was donated to a local kindergarten.[13]

The Orenstein & Koppel locomotive was out of service by January 1952, and was then stored at Caranarvon pending transfer to Perth for overhaul. It was never returned to service, and the boiler was sold to a Carnarvon butcher in November 1955.[14]

Internal combustion locomotives were used in the early days of the line, including at least two Fordson tractors, but no details are known of these. The inevitable dieselisation occured in the 1950s and by 1966 motive power consisted of two Simplex-Dorman four-wheel locomotives, NW7 of 1950 and NW8 of 1954. The line was closed in 1966 and NW7 was transferred to Derby while NW8 had been dispatched to Port Hedland.[15]

The tramway was largely destroyed in 1942 when the town came under Japanese air attack. Passenger services were not restored until 28 October 1946 when a railmotor (constructed from a utility truck with flanged wheels) provided a service between the opposite ends of town.[16] The authors believe that the passenger service was discontinued in later years and that the track was not used beyond the depot area in the last years of the line.

Rolling stock

In 1966 rolling stock consisted of the following:

1 four-wheel toastrack passenger car
32 H class open wagons
6 G class wagons
4 flat wagons
3 oil tank cars
1 R class bogie flat wagon
1 Q class wagon

In addition there were two pairs of timber wagons (i.e. 4 four-wheel bolster wagons), making a total of 52 wagons.[17]

Present situation

The old Broome jetty could not meet the demands of modern shipping, particularly considering that vessels were left sitting on the mud at low tide when moored alongside the jetty. On 23 July 1966 a new deepwater port facility was opened at Entrance Point, several miles west of the town. The new jetty is serviced entirely by road vehicles. Since then the old jetty has been completely demolished, the tramway dismantled and the rolling stock broken up.

When Frank Stamford visited Broome in November 1974, he found that little remained of this previously busy tramway. A small section of the formation could be seen near the abutment of the jetty. He also found some lengths of rail in the old depot area, along with the partially burnt chassis of a wagon and some remains from a few other wagons. The best relic of the tramway however can be found in Bedford Park near the town's Civic Centre, where a toastrack four-wheel passenger car has been preserved. It is interesting to note that it is fitted with axleboxes marked 'GSR'. The march of progress has spared few of the remains of this tramway.

References

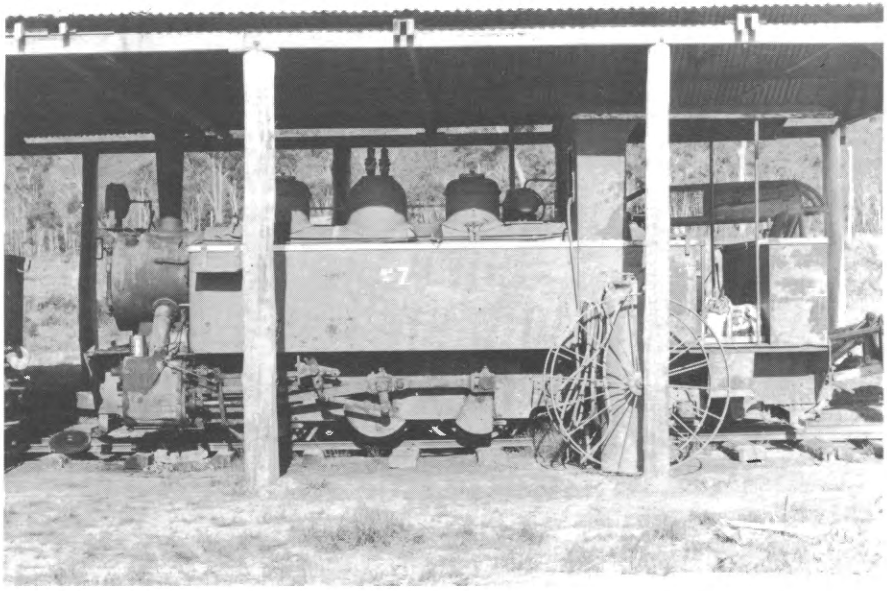
1. *Public Works Department Annual Report 1896-97,* page 33; W.A. Parliamentary Papers Vol. II, 1897
2. *PWD Annual Report 1901,* page 15; W.A.P.P. Vol. II, 1902
3. *PWD Annual Report 1904,* page 26; W.A.P.P. Vol. II, 1905
4. *PWD Annual Report 1907,* page 12; W.A.P.P. Session IV, 1907
5. *Report of Chief Harbour Master,* Year Ending 30 June 1907; W.A.P.P. Session IV, 1907
6. *PWD Annual Report, 1907-08,* p.14 and p.18; W.A.P.P. Vol. II, 1908-09
7. *PWD Annual Report, 1909-10,* p.23; W.A.P.P. Vol. II, 1910-11
8. Information supplied by Adrian Gunzburg
9. As for 7
10. *PWD Annual Reports, 1910-11* and *1911-12,* W.A.P.P. 1911-12 and 1912-13
11. *PWD Annual Report, 1912-13,* p.15; W.A.P.P. 1913 Vol. II
12. *PWD Annual Reports*
13. Information supplied by Adrian Gunzburg
14. As for 13
15. PWD records
16. *Australian Railway and Locomotive Historical Society Bulletin* No. 110, December 1946, p.71; reporting an item in the *West Australian*
17. PWD records

Perry 6634

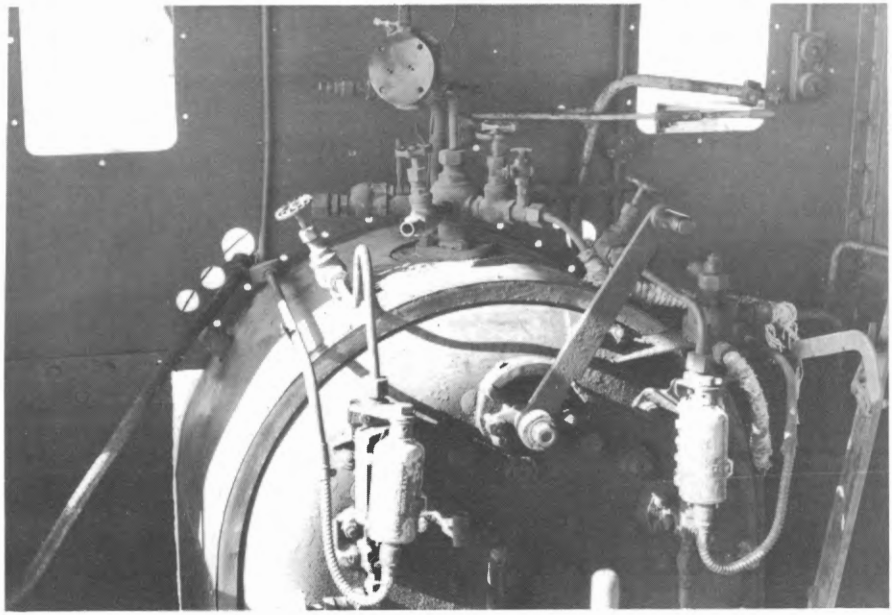
Geoff Murdoch's drawing in the centre pages shows 2 ft gauge Perry 0-6-2T locomotive, B/No. 6634 of 1952, which was No.7 on the North Eton Sugar Mill (Qld) roster. The drawing is taken from official Perry General Arrangement drawings.

Leading dimensions of the locomotive are as follows:

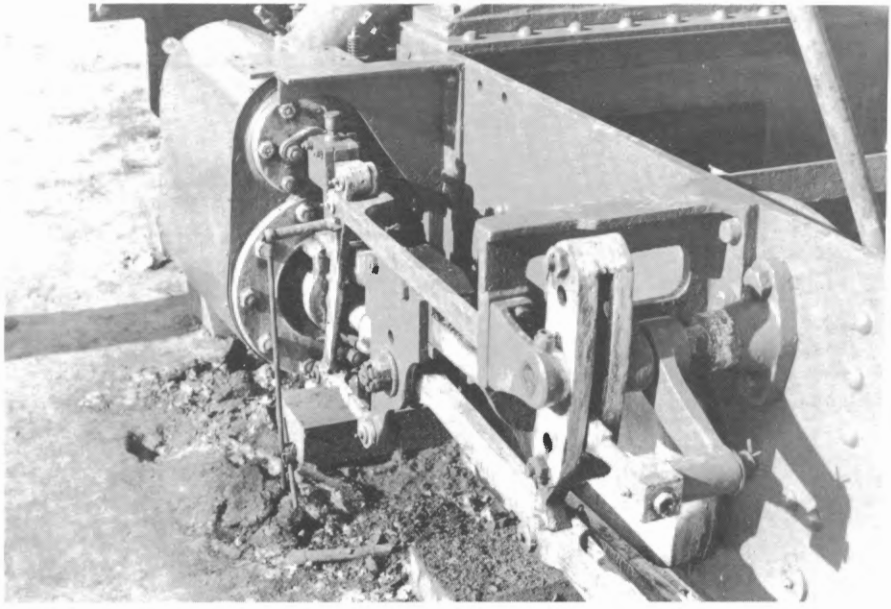
Wheelbase, rigid:	5 ft 9 in (equally divided)
" total:	11 ft 7 in
Wheel diameter, driving:	2 ft 4½ in
" " trailing:	1 ft 8 in
Length over buffer beams:	20 ft 3 in
Tractive effort at 75% boiler pressure:	6,750 lbs
Working pressure:	180 lbs p.s.i.
Heating surface:	340 sq. ft. approx.
Grate area:	7.2 sq. ft.
Fuel capacity:	27 cu. ft.
Water:	500 gallons.

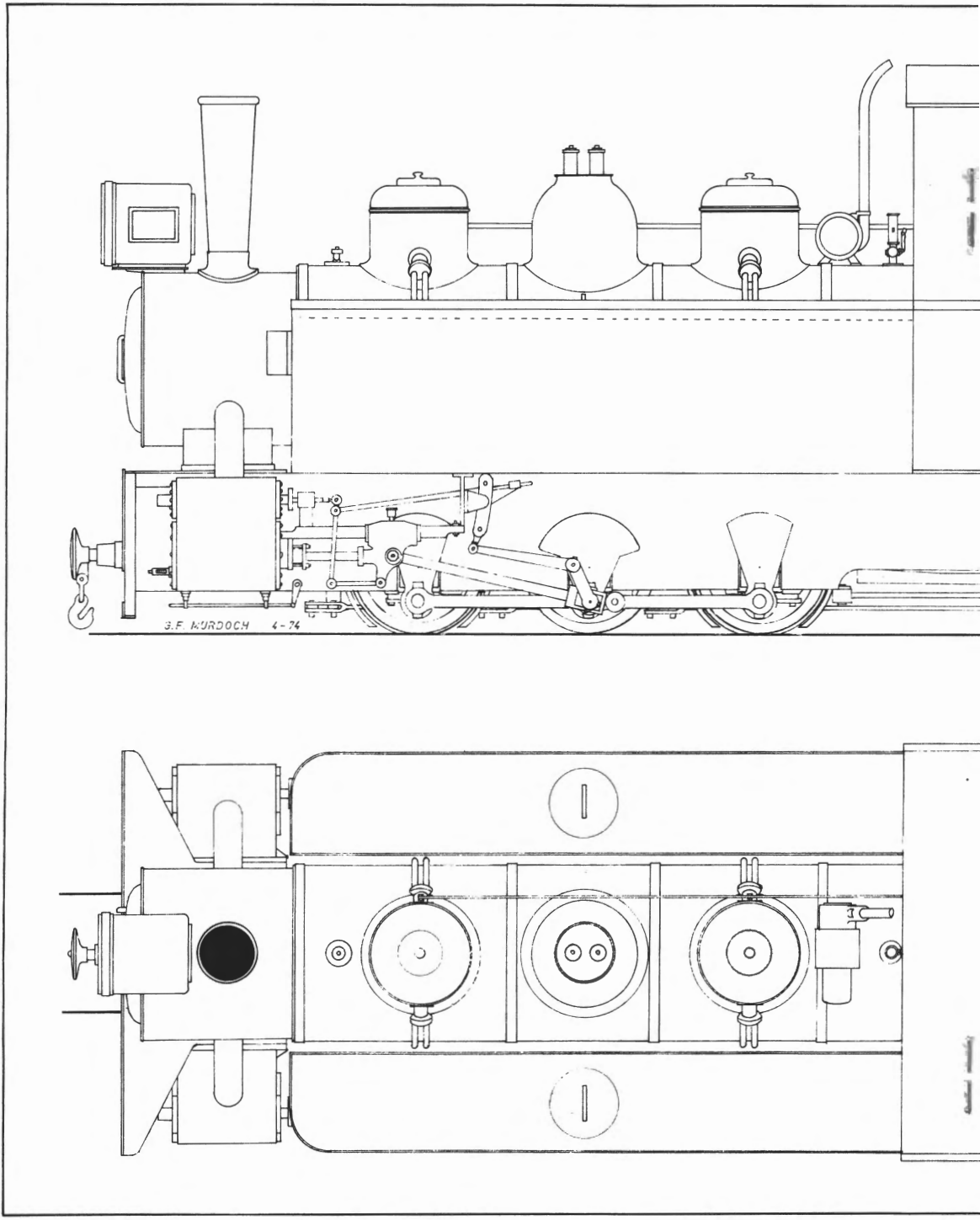


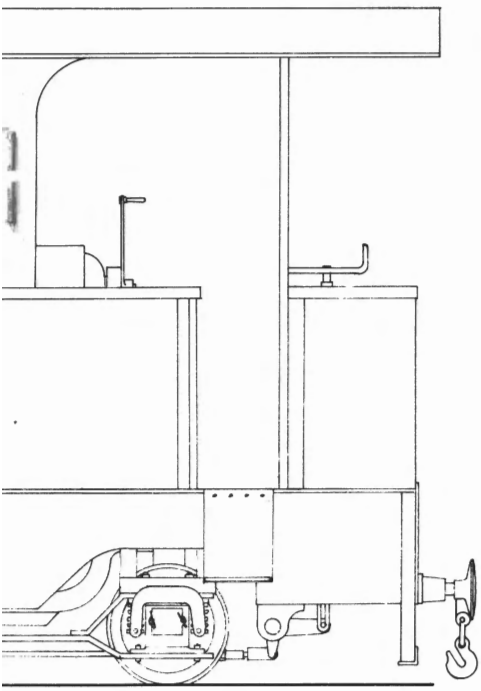
Perry 2 ft gauge 0-6-2T locomotive (North Eton No. 7) at Megalong Valley, NSW, October 1973. Photo: Geoff Murdoch

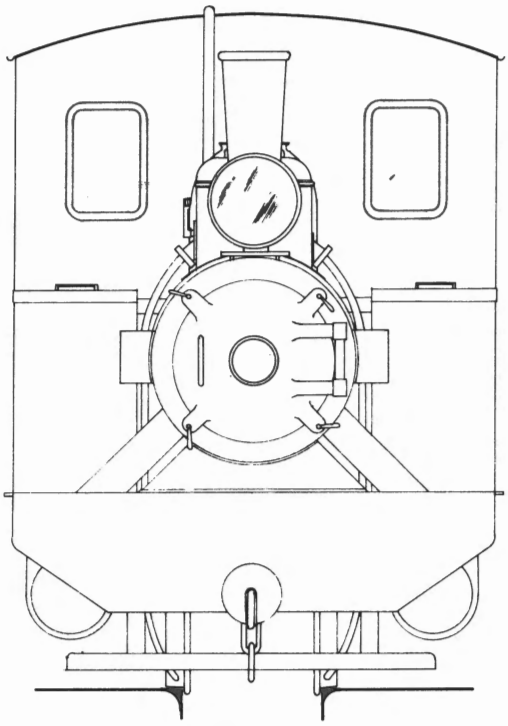


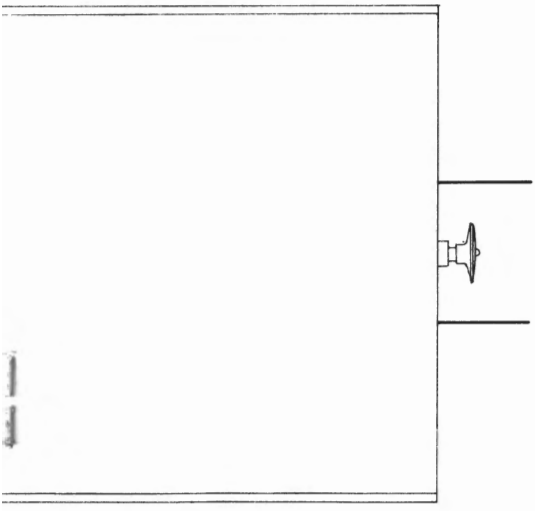
Above Cab view of Perry 2ft gauge 0-6-2T loco (North Eton No. 6) at Megalong Valley, NSW.
Below Valve gear of the same locomotive. Both Photos: Geoff Murdoch





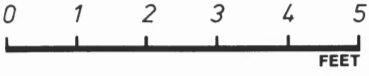






Perry 2ft gauge 0-6-2T

B/No.6634 of 1952



North west Coastal Tramways

More on Carnarvon

Since the original article was published in LR 50 some additional information and photographs have been submitted for publication.

The jetty was completed in 1899 and was 4290 ft long, 15 ft wide, with a head 240 ft by 30 ft. The contract for the construction of the tramway was let in the year ending 30 June 1900. The tramway, which was 2ft gauge, was constructed of 12 lb rails with 4 ft x 4 in x 3 in sleepers, with a 1060 ft bridge over the Gascoyne River. It appears that most of the rolling stock consisted of four-wheel four-ton wagons, with one passenger car which was under construction in 1902. In 1907 a portable manual fire-engine on a four-wheel truck was provided to combat fires which occasionally broke out on the jetty.

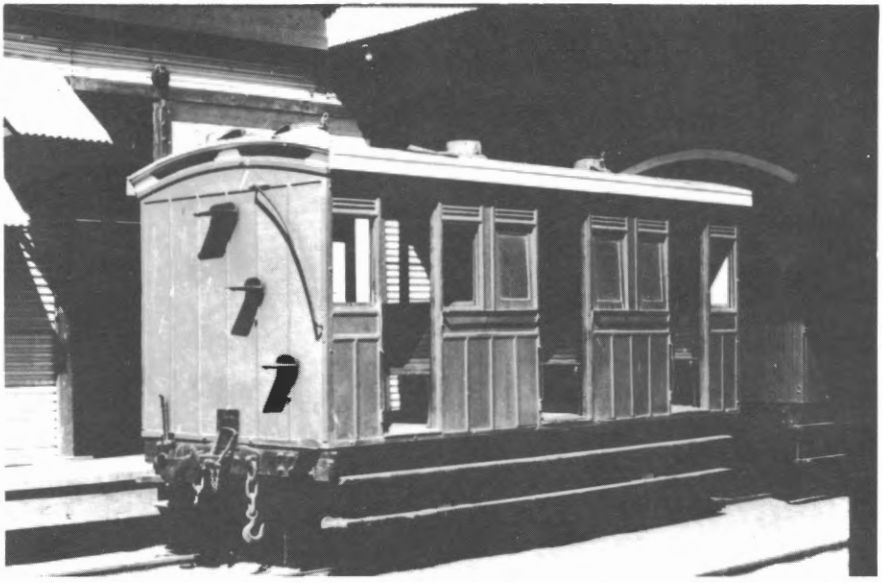
In the year ending 30 June 1908 the line was relaid to 3 ft 6 in gauge using 35 lb rails, with a siding at the base of the jetty for the fire engine, with a shelter shed to house the fire engine. A seperate 2 ft gauge loop line starting near the base of the jetty was laid to the oil store and lighthouse quarters to facilitate transport of stores.

With the conversion to 3 ft 6 in gauge a car barn was erected in the town, the goods shed enlarged, and private sidings were extended into the yards of Dalgety & Co and G. Baston & Co. In the first year of 3 ft 6 in gauge operation ten H class trucks were provided, together with a 'mail cart' and a portable 3 ton crane.

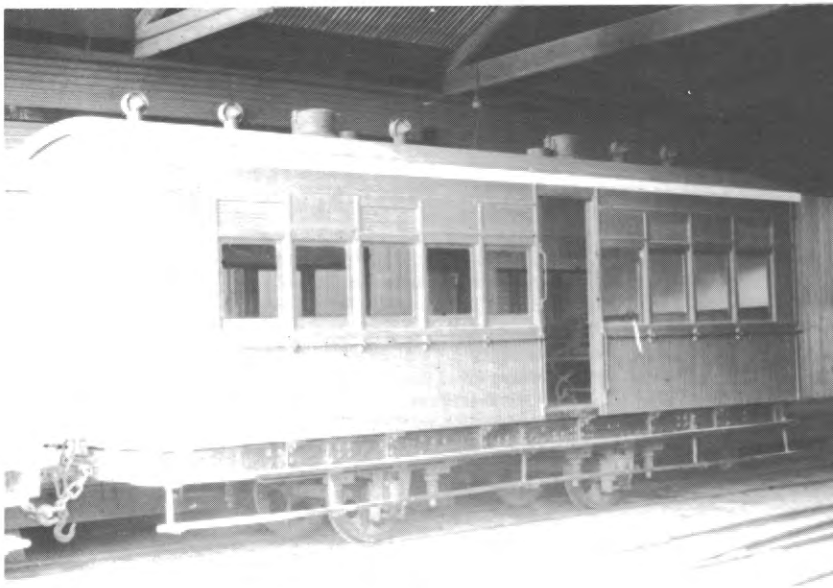
Horse haulage was causing heavy expenditure in labour, due to time lost in transit, with the result that the small 0-4-0ST Baldwin locomotive *Kia Ora* went into service in the year ending 30 June 1909. An engine shed, travelling water tank and two 'large size' passenger cars were provided at the same time. In the year ending 30 June 1912 two timber trucks, two goods trucks and a third passenger car was added to the roster. Seven years later four additional jetty trucks and four more timber trucks were sent up from Perth.

References

All information is from the Annual Reports of the Public Works Department of W.A. for the years ending 30 June 1899 to 1919 inclusive.



Old four-whell passenger coach at Carnarvon, January 1965. Photo: Ian Cutter



Three views of rolling stock at Carnarvon, January, 1965
All Photos: Ian Cutter.

Horses with Headlights

by Norm Houghton

Victoria's gold mines of last century used various methods of extracting and hauling gold bearing alluvium and quartz in the underground workings. Manpower, horsepower and winches either pulled, pushed or carried wheelbarrows, shovels, buckets and trucks laden with stone. In the larger mines of great mining centres the horses were sent down the mine shafts in slings and remained at the bottom for their working lives or until the mine gave out. Their environment was one of perpetual gloom in the days before the mines were lit by gas, so in some mines horses were provided with headlights.

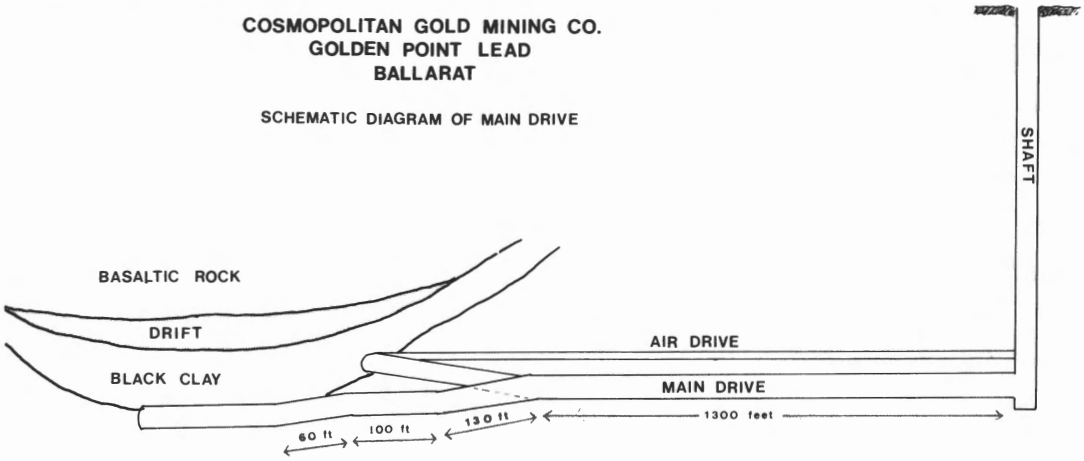
Come with us now as we take a trip 'down under' in Ballarat of 1862 to examine a typical mine tramway system and motive power. 'We will conduct our readers underground, and take them around the drives of the Cosmopolitan Gold Mining Company. Having encased ourselves in high boots and a mining suit we find ourselves standing on the brace or landing at the top of the shaft, awaiting the coming up of the truck that was to carry us below. The shaft is 355 feet deep and divided into two compartments, one for winding up tanks of water and the other for wash dirt. The truck having arrived on the surface an empty one was attached to the flat winding chain by four short chains, one to each corner.

'Having taken our place the word was given and we descended smoothly and rapidly to the bottom. Having reached the bottom and alighted, the wagon was moved onto a tramway, and attached to five or six others by means of coupling chains. Taking our seat again in the wagon, we were drawn by a horse along the tramway at a pretty smart trot for a distance of 1300 feet to the top of the first incline. Meeting at this point with the underground manager, who was expecting our visit, we got out and commenced a circuit of the mine with him. We were led through numerous drives, one after another, having tramways laid down in most of them.

'The main level, from the shaft to the top of the first incline, is through solid rock. The first incline is 130 feet in length and dips at the rate of 36 in 150. A level stretch, 100 feet in length, extending from the bottom of the first incline to the top of the second, is driven in a south-westerly direction through the reef and a second incline, 60 feet long and dipping 13 feet in 60, leads to the gutter.

'We remarked on a very excellent contrivance for obviating the necessity of a turntable. Cast iron points and crossings are used; a slight pressure of the hand on the wagon coming to them, giving the required direction. The plates are only 58 shillings a set and can be fixed in place in one hour. About 32 wagons are in use altogether, employing seven horses to bring them up the inclines and along the main levels. The stables for these horses are dark recesses cut into the solid rock, near the main shaft. The only light the horses ever see is that given by the candle in the lantern hung around their necks or carried in the hand of the miners.

'About 240 truckloads of wash dirt, each measuring 2 ft 9 ins by 2 ft 6 ins and calculated to hold half a ton, are raised to the surface daily. The main drives carried



through the washdirt are very heavily timbered, the sets being only 8 inches apart. The whole of these main drives are large enough for horses to travel along, shunting places being excavated at stated places to enable the horses to stand while the trucks pass them. About 3200 feet of drives altogether have been put in.

'Having returned to the shaft we found a party of visitors, consisting of two ladies and a gentleman, whose curiosity had brought them underground. The two ladies were sitting down in the trucks with candles in their hands, as though they were doing penance. When we looked down at our boots and saw how deep we had been in the mud, and reflected upon the then shoes generally worn by the fair sex, we though it not unlikely the ladies would have to do penance after if not before they returned, unless they came back with their curiosity ungratified. Having thanked Mr Crowle, the underground manager, for his courtesy we returned to the surface.'

Source: Dickers Mining Record, August 1862.

The Mill at Mungarr

by R. K. Morgan

Mungarr, an aboriginal word for Blue Gum, is a siding on the North Coast line of the Queensland Government Railways, 154 miles north of Brisbane and 12 miles southwest of Maryborough by rail. Its importance today is that it is the junction for the line that runs through Gayndah, Mundubbera, Eidsvold and Monto, down the rugged Dawes Range through Many Peaks and rejoins the North Coast line at Gladstone, a wide meandering run of 270 miles.

But its fame wasn't always dependent on this fact. Mungarr was once the scene of a very interesting tramway and its blacksmith's shop could boast, as not many others can, of having built a railway locomotive.

It all began when the brothers Ramsay noted that there were some good stands of timber in the area, and decided to put in a sawmill. A description of the new mill appeared in the *Maryborough Chronicle* in 1874, which reported that the mill was 17 miles up the Mary River from Maryborough, and about two miles west of the river bank. The mill employed about 40 men, 'and a most convenient and suitable tramway runs from the sawmill to the wharf on the river'.[1]

The tramway which earned such a glowing description had rails made of 3 by 5 inch spotted gum timber laid at a gauge of three feet and set in notches in sleepers six feet long, spaced five feet apart. The rails were held in the notches by hardwood wedges and the line was ballasted with gravel and turf.[1] Horses were used as the motive power and the line was laid over the surface of the ground 'with cribbing only over two or three gullies.'[1]

In 1878 the sawmill became increasingly important as the Government railway from Maryborough to Gympie was being constructed, and was to pass right by the mill's front door. At that time the mill was being managed by a Mr Edward F. Armitage, a man of industry and vision, who later recalled, 'When our Mungarr mills began to require about three times the quantity of log, and the haulage was getting further, I advocated building the wooden railway. Mr Ramsay approved and I built the line'.[2] In May of that year, the *Chronicle* carried an item to the effect that 'Messrs Ramsay and Co. are making good progress with their railway. They hope to have the iron horse working on their line in about four or six weeks .... the railway is being built to the same gauge as the Maryborough and Tiaro line.'[3]

The new 3 ft 6 in gauge line was also built with timber rails, is reported variously to have been six or seven miles long,[4] however the first section built was about five miles, which was later extended, and a branch line of about ¾ of a mile laid. The line extended from the mill in a general south-westerly direction into the Yerra scrub[5] and did not include any of the former 3 foot gauge horse tramway.

Whereas the purposes of the first line was to transport sawn timber to the river, and so by boat to markets, the new line was built to bring logs to the mill. As the Government line was to pass by so handy to the mill, it was anticipated that when it was completed, all the sawn timber would be taken out by the Government railways and the horse tramway would fall into disuse.

The first five mile section of the new line was completed in August 1878, but the engine had not yet arrived.[6] When it did, a gala occasion was planned for the opening of the line, which was to take place on Friday, 22 November.[7] A comprehensive report was given of this auspicious occasion in the *Chronicle* under the heading 'Opening of Messrs. Ramsay and Co's. Railway, Mungarr':[8]

'... despite the hot day (97° F) a party of upwards of fifty guests including Hon. H.E. King, His Worship the Mayor, etc., started from the Royal Hotel on Friday by buggy to Scarva, from there ferried across the river to

Ramsay's wharf. The steep hill was climbed on foot to where trucks were waiting in readiness to draw the party to the main line. The distance of 1½ miles was soon covered.

'The mill having been inspected, Mr Armitage (the manager) led the way to the end of the line where the locomotive recently turned out of Messrs John Walker and Co's Foundry waited. Mr Armitage presented the Hon. H.E. King with a bottle of champagne to christen the loco.

'Hon. H.E. King said he had great pleasure in christening this engine the *Dragon* and broke the bottle over a wheel.

'The Mayor seated himself on one buffer in front of the engine, and Mr Walker (builder of the engine?) poised himself on the other.

'With unpardonable incivility, the *Dragon* made a spasmodic jump on starting. The passengers having righted themselves [our imaginations are left to fill in the details of the scene!] the train went off smoothly at about 10 m.p.h.'[8]

Just exactly what rolling stock was used to convey the passengers on this great occasion is not recorded, but in all probability it was simply the bogies which were to be used to bring in the logs. Normally, two bogies were positioned to hold the logs, which rested on the pivotting bolsters, and kept the whole load rigid. Logs up to 66 feet long and weighing up to 5 tons were transported in this manner over three chain radius curves.[9] The rails were made from 4 by 5 inch iron bark timber set in grooves in sleepers and wedged into position, the inside of the rails on the curves were lined with quarter-inch thick iron straps.[8]

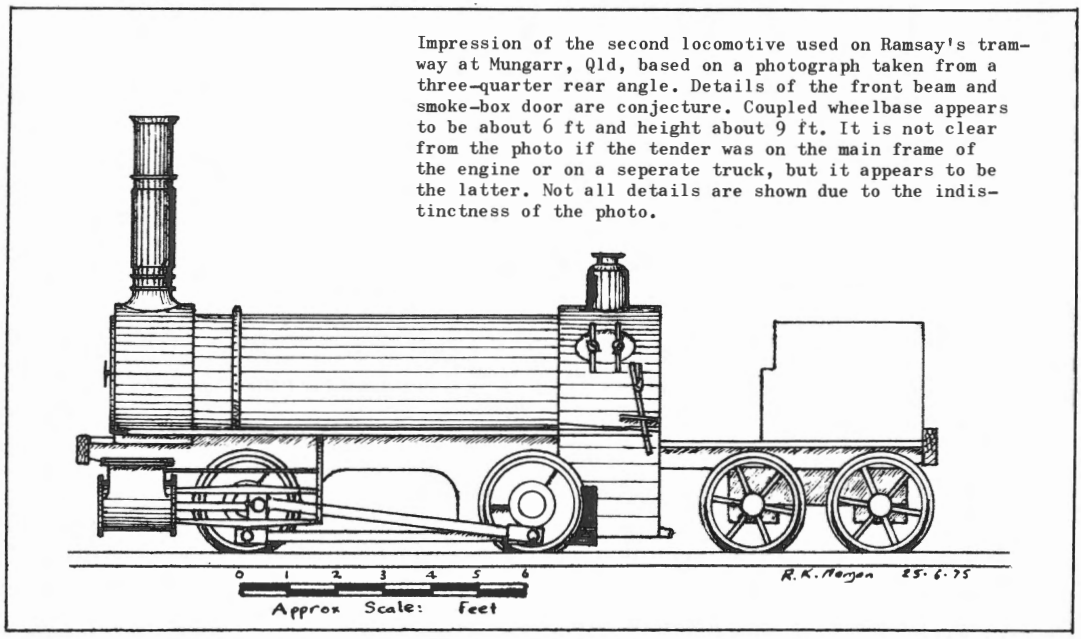
However, the engine and heavy loads caused the rails to wear rapidly and the line had to be relaid three times in four years.[9] Two men were employed constantly in looking after and repairing the line. the *Chronicle* records '[There are] only three cuttings, none over four feet deep. The bridge across Eighteen Mile Creek is 26 feet high, 255 feet long and of 19 spans, with each pier consisting of two piles.'[8] The steepest grade of the line was 1 in 30, and the sharpest curve 3 chains radius.[9]

It is reported that at the end of the line (it is not clear which end) is a short branch off to the right, with a turntable for turning the locomotive, an unusual piece of equipment for a line of this nature. If it was so, it must be assumed there was some means of turning the loco at the other end of the line as well.[8]

The bush terminus of the line was called Kingston, after the aforesaid honourable member.

Early in January, 1879, the Company won a contract for the supply of timber for the Central Railway (the line west of Rockhampton), and in 1880 another for bridge timbers for the same line.[10]

The attractions of the line must have become well-known, for a Mungarr correspondent of the *Maryborough Chronicle* (who, of course, may have been somewhat biased) suggested that the citizens of Maryborough could not do better than to build a Burrum railway themselves, modelling it on the lines of the system at Mungarr. The writer goes on to say, '[The Mungarr line] is strong and durable, although rough; excepting rails, it is equal in every respect and the same gauge as the Maryborough and Gympie line. It cost little to survey. Messrs H. and E. Armitage (Partners and managers of the firm) were their own surveyors and engineers, and made a splendid job of it ...'



The line is carried over any considerable depression, not by embankments, but by tier upon tier of large rough logs placed one on the other, and firmly bound together, sleepers and rails being laid on top at the required level.[12]

The residents of Mungarr and nearby areas were as sporting a lot as could be found in any small Australian settlement, and organised a picnic race meeting for St. Patrick's Day 1879. The management of the mill responded generously to the spirit of the occasion by magnanimously placing their locomotive and rolling stock at the disposal of the organisers to transport the people to and from the racetrack at Kingston.[13] We are not told how many trips were made for this purpose, or if the rolling stock was modified to accommodate the passengers.

Later in 1879, part of the plantation at Iindah owned by Ramsay's was sold to J. & R. Cran of Yengarie, but it would appear that this sale did not involve any of the railway or mill.[14]

Railways all have their troubles, and the Mungarr line had theirs in the form of a number of small boys, who discovered that by moving the switch points they could cause a certain amount of embarrassment and confusion. This they did at one place, but the movement was discovered before there was any serious mishap. The result was an advertisement in the paper offering a reward of 10 pounds for information leading to the conviction of 'the mischievious urchin' who committed the felony, thereby endangering both life and property.[15] No information is given as to whether the reward was ever claimed!

The Christmas season bringing its usual festive mood, the Company managers organised another picnic for 28 December 1880, a site was chosen down the line towards Kingston, and all and sundry boarded the train for the outing to spend a pleasant day in the bush.[16]

Just how solidly *Dragon* was built is hard to judge. The kind of treatment it received in the course, of its duties is also open to speculation. In any case, the little engine began to give trouble not long after it went to work. The management persevered with it for a couple of years, administering such medicine and treatment as was required to keep it going, until in September 1881, when it was three years old it failed completely, and the decision was taken to seek a replacement.[17]

Mr Edward Armitage says of this first loco '... it was not a success. After a year or two of constant breakdowns I scrapped it and had the cheek to build one of our own to my design.'[2]

The building of such a locomotive in a blacksmith's shop in the bush is an outstanding achievement whichever way it is looked at, and another example of the ingenuity and initiative which characterised so many of the pioneers in the Australian bush last century.

Mr Armitage continues: 'I had to get the engines (cylinders) cast at Tooth and Co's Vulcan Foundry Maryborough and the steel tyres from the Government Workshops at Ipswich. All the rest was done at the old smithy at Mungarr, wrought iron and steel work, brass castings, etc., and it was finished and running successfully in six weeks.'[2]

There are some aspects of this engine that are not clear. One statement says, 'The unit had two driving wheels'[5] whereas another report records that at Hyne's mill where the engine was transformed into a winch 'the side rods and leading wheels were discarded ... the trailing wheels are in use as they form the crank.'[2] This would seem to indicate a four-coupled loco, the 'two driving wheels' meaning two per side. An old photo clearly shows a coupling rod under the connecting rod, reaching forward to the leading pair of wheels. What is clear is that the driving wheels were 24 inches in diameter and the two outside cylinders 9 inches diameter by 15 inches stroke.[5]

The photo shows a very simple engine with a low-slung boiler and a tall cylindrical chimney of robust proportions. The smoke-box is several inches larger in diameter than the boiler, and a small steam dome sits on top of the firebox, the sides of which extend straight down behind the rear pair of driving wheels to the grate, which seems to be only inches above rail level. It is not clear if the tank and bunker are on an extension of the main frames, or a separate small tender. One report says the 'engine has eight wheels'.[9] In the photo four axles can be seen, the rear two not coupled, so that the engine was either a 0-4-4T or an 0-4-0 with a four-wheel tender. It weighed 8 tons with full tanks[9] and on Ramsay's line its 'crusing'speed is given as 6 mph., with an 'extreme speed'[9] of 10 mph. However, it was run on the Government line, either officially or unofficially, where it attained 25 mph., and hauled 84 tons up a 1 in 165 grade on a 5 chain curve.[9] On the mill line, the average load hauled was 20 tons.[9]

Mr E. Armitage claimed that his loco 'was the first successful loco to be built at Maryborough (sic)',[18] no doubt basing his claim on the early demise of *Mary Ann* and *Dundathu* (two locomotives built by Walkers for Pettigrew and Co) and *Dragon,* while his engine, after serving its time on Ramsay's line fairly successfully was then converted into a stationary engine, which at the time he made his statement in 1937 was still in use. In fact, it was in use until about 1952, which was rather remarkable.

The Mungarr Tramway, having won for itself some fame for picnics, was selected by the Wesleyan Church in Maryborough for one of these functions in 1882. The party travelled by Government train to Mungarr, and then over the private line to Kingston.[19]

In Mr Armitage's evidence for the Royal Commission into the Traffic Department of the QGR, in June 1883, he stated that on the tramway the wooden rails had to be replaced by iron rails on the curves, thus boosting the cost of the line to over 500 pounds per mile. On the tramway, trains ran an average of 40 miles per day, the equivalent of three round trips. Later, he commented that 'the wooden rails are a total failure, costing 1000 pounds a year to keep in repair.'[9]

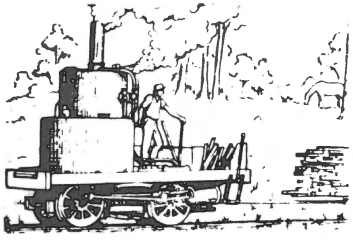
The opening of the QGR line through Mungarr spelt the end for the tramway. Mr Armitage commented on this, 'The Government line ... when completed ... put the Mungarr mills out of action as all log supplies now come by the Government line'.[2] (Did he mean put the Mungarr *line* out of action? The statement is not as clear as it might be).

In conclusion, the works involved can best be summed up with Mr Armitage's own words: 'The line was a great success, for we hauled over it forty-million feet [super feet] of log hardwood.'[2]

My thanks for the information used in compiling this article go to Mr Geo Bond, who really did all the hard spade work.

REFERENCES

1 *Maryborough Chronicle* 3 Jan., 1874
2 Armitage, Edward; *Reminiscences of a Queensland Pioneer,* 1926
3 *Maryborough Chronicle,* 11 May, 1878
4 *Maryborough Chronicle,* 11 May 1878; and 4 January 1881.
5 Letter from L.J. Hyne, Maryborough, August 1955 (grandson of Ramsay)
6 *Maryborough Chronicle,* 27 August, 1878
7 Ditto, 23 November, 1878
8 Ditto, 26 November, 1878
9 Extracts from Minutes of Evidence of the Royal Commission into *System and Management in operation under the Traffic Departments of the Railways,* (17 June, 1883)
10 *Maryborough Chronicle* 9 January, 1879, and 20 April, 1880.
11 Ditto, 20 April, 1880
12 Ditto, 13 March, 1879
13 Ditto, 25 March, 1879
14 Ditto, 6 May, 1879
15 Ditto, 9 August, 1879
16 Ditto, 4 January, 1881
17 Armitage, Edward; *Reminiscences of a Queensland Pioneer,* 1926; and *Maryborough Chronicle,* 24 September, 1881.
18 *Courier Mail,* 8 November, 1937
19 *Maryborough Chronicle,* 22 April, 1882



News, Notes & Comments

VICTORIA

CARIBBEAN GARDENS PTY LTD, SCORESBY

'Caribbean Gardens' is situated near the corner of Ferntree Gully Road and Stud Road, Scoresby. The gardens consist of amusements, picnic area and a lake used for water skiing etc.

Amongst the amusements is a 2ft gauge railway which runs for three miles around the lake. The trains operate around this loop in an anti-clockwise direction. There is a dead-end siding on which the second train is stabled.

There are two locomotives in use at the moment:

The locomotive that is used most of the time is an 0-4-0D built by V. Masters, Labradour, Southport, Qld, bought from Surfers Paradise Ski Gardens in 1966. Fitted with a 60 hp National engine. The control panel has a plate 'Luxford Engineering, Springvale, Vic., serial number LSJ 20/67'. This locomotive is shaped similar to a Victorian Railways B class, but painted in red and white.

The second locomotive which is only used when a second train is required is an 0-4-0P Malcom Moore locomotive, builder's number 1092 and bought about October 1975 from Army surplus, possibly Bandiana. Painted red. This locomotive is normally parked in the dead-end siding with the second train and is apparently expensive to run.

The rolling stock consists of 18 four-wheel fibre-glass carriages, nine on each train and one four-wheel trolley with a plate 'Department of Supply Equipment No. 2335'.

The station is called Grand Central and has a roof which covers both tracks. There is also a 20 metre bridge which spans a floodway.

CHEETHAM SALT WORKS, LAVERTON

Since last visiting the Cheetham Salt Works, Laverton in 1973 some changes have taken place when visited again in July 1975.

Both derelict Day tractors went to the Van Diemen Light Railway Society, Don, Tasmania about May 1974.

Number 1 was rebuilt about 1974 by Cheetham with a Morris engine and was working.

R2 and RL4 were working.

LL2 was stored outside, derelict.

RL3, R1 and 1 Simplex were stored in working order.

Simplex 7351 was under repairs.

PORTLAND HARBOUR TRUST

The Portland Harbour Trust which shunts all the sidings in the Portland harbour area own three rail tractors. At the time of my visits in September-October 1975, the one in use was stabled in the open near the Customs gate to the 'K.S. Anderson' Wharf and the other two were stabled in the open in a chain mesh fence enclosure.

Number 1 is an 0-4-0D chain drive, the same as the early Victorian Railways RT tractors with a builders plate 'Newport 1907'. This was in use in September 1975, but was not in use in October 1975.

Out of service in the enclosure was an 0-4-0D, chain driven, built at Newport in 1960. It has been rebuilt with a Luxford engine/cab.

Under repairs in September 1975, but in service in October 1975 was a larger 0-4-0D probably built by Aresco, but with no builders plate. Fitted with a Cummins diesel engine model NH220B number 7W13209.

WATTLE GULLY GOLD MINES N.L.

On a visit to the mine in September 1975 the tourist train was being operated by an 0-4-0BE built by George Moss Pty Ltd, Leederville W.A., a Gemco hauler, serial number 12344-46/41/65, 60 volts, motor H.P. 2/4/ The number 88 is written in weld on the buffer beam. According to the guide there are another six underground.

YANGARDOOK TRAMWAY, TOOLERN VALE

At the auction of the 'Whistle Stop' equipment in 1974 a group including Messrs Jim Baines and Bill Russell bought the 0-4-0P Malcom Moore locomotive.

The locomotive was transferred to Jim Baines' property at Toolern Vale where he and his friends commenced to build the 'Yangardook Tramway'. This 2 ft gauge tramway will run from Southend (230) through Yangardook (110), Bansions (Head Office 0), Hornet Siding (144), Bunsen Junction (250), Billington Place (380), Sandvale (480) to Endofline (758). There will be a branch from Bunsen Junction through Santin (305) to Russelltown (360). Figures in parentheses are distances in yards from Bansions. At December 1975 the track is laid from Bansions to near Endefline with a siding from Hornet Siding to Engine Shed (174).

The locomotive is a Malcom Moore V8 0-4-0P, builder's number 1090 with the numbers 26 C/3, TD446 and Lot 156 painted on it. There are also a number of skips.

WESTERN AUSTRALIA

MUSSELL POOL MUSEUM, MIDDLE SWAN.

An Orenstein and Koppell 0-4-4OT has been preserved at the Mussell Pool Museum, Middle Swan, W.A. This locomotive is No. 3 from Great Boulder Gold Mines Ltd. of Kalgoorlie.

(*Australian Post* 3.7.1975 and P.L.C.)

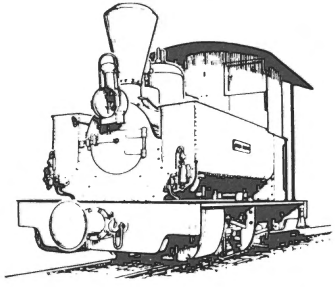
PIONEER MUSEUM, PEMBERTON

SSM 7 has been preserved at the Pioneer Museum, Pemberton W.A.

(*Australian Model Railroad Magazine* January 1976)

According to my records SSM 7 was a 2-6-0 built by James Martin, Gawler, builders number 117, built in 1895. It was bought from the Commonwealth Railways, Nfc 69 by the State Sawmills in November 1946. State Saw Mills passed to Hawker Siddeley Building Supplies who last used the locomotive at Pemberton in January 1968 when it blew a boiler tube.

(All items supplied by Peter Charrett)



LETTERS

TRAMWAYS OF THE WOODS POINT DISTRICT

Regarding the article in LR 53, I am interested in the history of the goldfields in that area, more particularly the mines between Gaffneys Creek and Jamieson, and have written a book, as yet to be published, on the subject. Some points may be of interest to you.

The Sailor Bills Co, and later the United Gleesons Co, operated a horse tramroad at Sailor Bills Creek from about 1875 to 1910. The rails extended from about 1,200 ft in the main tunnel and ran a quarter mile around the hillside to the top of a 500 ft inclined tramway. Skips on the horse tramway were about four tons. Timber rails were replaced by steel early this century. Would any of your members have any information, photographs or maps showing this line?

There were reports of tramroads being constructed around the hills at Kevington for cartage of wood for boiler fuel. I have no details of locations, but some lines extended for a few miles. Timber rails were used.

There was a scheme to build a railway between Mansfield and Woods Point in 1864; the route was surveyed and would have involved 99 crossings of the Goulburn River and one tunnel in 36 miles. The details I have are from contemporary newspaper reports, and I have seen a copy of the survey plans. I think it was intended to be a horse tramroad, but no details of the rolling stock intended were given. The scheme never got off the ground.

B. E. Lloyd
Oakleigh Vic

LAHEY'S CANUNGRA TRAMWAY

Regarding Mr R.K. Morgan's article on Lahey's Canungra Tramway in LR No. 54, and his mention therein of the allocation of a code number 2227 to that company's Climax locomotive, the following information might be of interest.

I refer to the book, *Climax — An Unusual Steam Locomotive,* by Thomas T. Taber III and Walter Casler, published in 1960. In this book the authors, who apparently have access to the surviving records of the Climax Manuf. Co., have set out as much information as they have been able to ascertain regarding every Climax loco built. This information includes builder's numbers, where these are known. However, the Climax records are incomplete, and so in some cases it has not been possible to allocate builder's numbers to certain locomotives. In these cases the authors have instead allocated an arbitary reference or code number in a series starting from 2000. (The actual Climax numbers end after 1694)

So, this is the explanation of the use of the number 2227 for the Lahey engine. But, on refering to the number allocation list in the Climax book (p.78), it is seen that No. 2227 was allocated to a 25 ton 'B' class engine, built for but apparently not received by a lumber company in Colorado, USA, in 1920. A few lines further up the page is No. 2225, allocated to a 17 ton 'B' class loco, built for (quote), Lahey's Ltd. Pine Mill, Brisbane, Australia. From this it seems that the code number quoted by Mr Morgan should be 2225 and not 2227.

A point of interest is that the date of building the engine code No. 2225 is given as 1899. This does not tie up with Lahey's having ordered the loco in 1900, but it might indicate that No. 2225 was built in 1899 but not sold then, and on receipt of Lahey's order it was allocated to them. If the engine was already in existence when Lahey's order arrived, it is likely that it would have had to have been altered to 3 ft 6 in gauge, this being an uncommon gauge for the US, and if this were done it could be an explanation for a longer delivery time than usual, but surely not three years. It would be of interest to find out when this engine actually arrived in Australia.

If the engine was built at some time in 1899, its actual builder's number would probably be somewhere between 183 and 209, these numbers covering that year and a bit into 1900. Of this number range 183, 189, 190, 191, 200, 206 and 209 have all been allocated to identifiable engines.

Another point worth making, although on a different aspect, is that the tonnage figures given above are US tons of 2000 lbs, which may explain the variations given in the figures for the weight of Lahey's third loco, also US built.

W.A. Pearce
Kensington, Vic.

LAHEY'S CANUNGRA TRAMWAY

Some years ago I read files of the *Beaudesert Times* (the nearest local newspaper to Canungra) in an effort to ascertain the history of the last years of Lahey's Canungra tramway. The few facts I gleaned may add a little to Mr Morgan's very interesting article in *Light Railways* No. 54 and Mr Bond's notes.

The, Coomera Valley timber supply was gradually being cut out by 1931 (issue of 19 June), but the tramway was still in use to bring timber in, for the tramway bridges over the Coomera River were reported as being renovated after being [flood?]damaged (20 Feb 1931). A locomotive was reported (27 Feb 1931) as having got out of control descending the range into Canungra when the brakes jammed; they were eventually struck loose and the train halted.

By June 1933, the line was being dismantled, rails brought in, and stacked in Canungra. Logging in the heart of the Coomera had been discontinued 'some time back' (23 June). By August 1934, dismantling had proceeded back as far as the town area, adjacent to the Beechmont Road (3 August)

In the issue of 24 July 1934, there was a report on Shays 697 and 2135, which had been idle for 'many years' on the old loading siding near the railway (QR?) engine shed. (Does this mean that locomotives were not used in dismantling the line?) They were hauled about this date to their 'Present position' (presumably that of the upper photo on P. 24) by tractor. They were then for sale, and Mr David Lahey was reported as saying that one could with slight repairs be placed in commission. It was correctly stated one had come from Mt Lyell and one new from Lima in the U.S.A. The last time one had been used was about two years previously, to bring in torn up rails. Mr David Lahey was reported as saying that a larger locomotive imported from the U.S.A. (Presumably Shay B.No. 2371) for 1200 pounds, though more modern, had not, comparitively speaking, given the same satisfaction as the *two* obtained from Mt Lyell (this is almost certainly a journalist's error; what was meant was the two smaller, older Shays). Unfortunately, no information was given on the fate of this larger Shay, 2371.

The photos on p.17 (top), 18 (both) and 19 (both) should be credited to Mr Romeo Lahey, who lent the negatives to the Australian Railway Historical Society (Queensland Division) about 1958 for prints to be made for the Society collection.

J. W. Knowles
London, U.K.

Light Railways back numbers

No.46 The Rottnest Island Defence Tramway (WA); The Tasmanian 'G' class 2 ft gauge locomotive (incl. scale drawing); News Notes & Comments

No.47 Papua New Guinea's Bootless Bay Railway; Ballarat Tramways 1855-60 (Vic); Letters

No.48 The South Gippsland Tramway (Yarragon, Vic); Letters; News Notes & Comments

No.49 How to Research a Tramway; Climax Locomotive No.1694 (incl. scale drawing); Letters; News Notes & Comments; Silverton Tramway 1974; Tramways of Echuca (Vic)

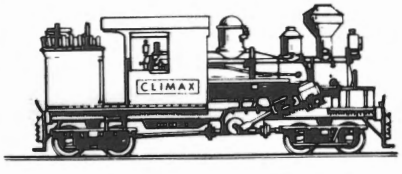
No.50 North West Coastal Tramways - Carnarvon (WA); 'Midland' 1 ft 8 in gauge 0-6-2 loco of the Sons of Gwalia gold mine (WA) (incl. scale drawing); the Mount Keira tramway 1954-55 (NSW); News Notes & Comments (incl. New Federal Mill survey); Letters

No.51 The Misima Island Railway (PNG); Onslow (WA); Two Northern Territory Tramways; News Notes & Comments; Letters

No.52 The Wielangta & Blackman Bay Tramway (Tas); Roebourne (WA); Mount Ellison (NT); Cootharaba (Qld); News Notes & Comments; Letters

No.53 Tramways of Woods Point District 1863-68 (Vic); Square Pegs in Round Holes (Bruny Island, Tas); News Notes & Comments; Letters

Price 75 cents each plus postage: 30¢ on one copy; 40¢ on two, three or four copies; 80¢ on five to eight copies.



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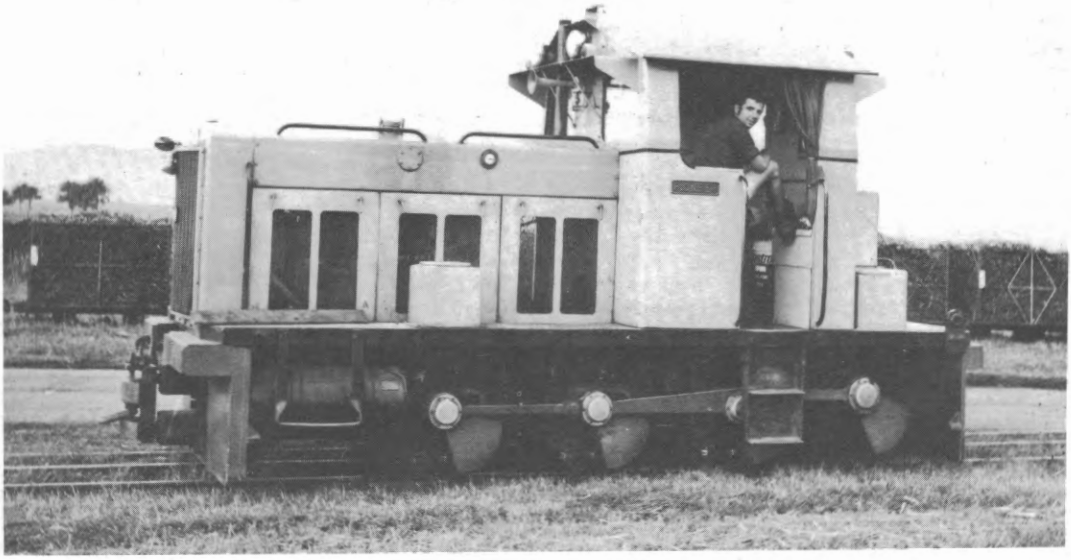

Above *Pioneer,* Com Eng 0-6-OD at Farleigh sugar mill, Queensland, 13 November, 1974.

Below Clyde 0-6-OD locomotives Nos 1 and 2 under repair at Mourilyan sugar mill, Queensland, 16 November 1974. Both photos: Ray Graf