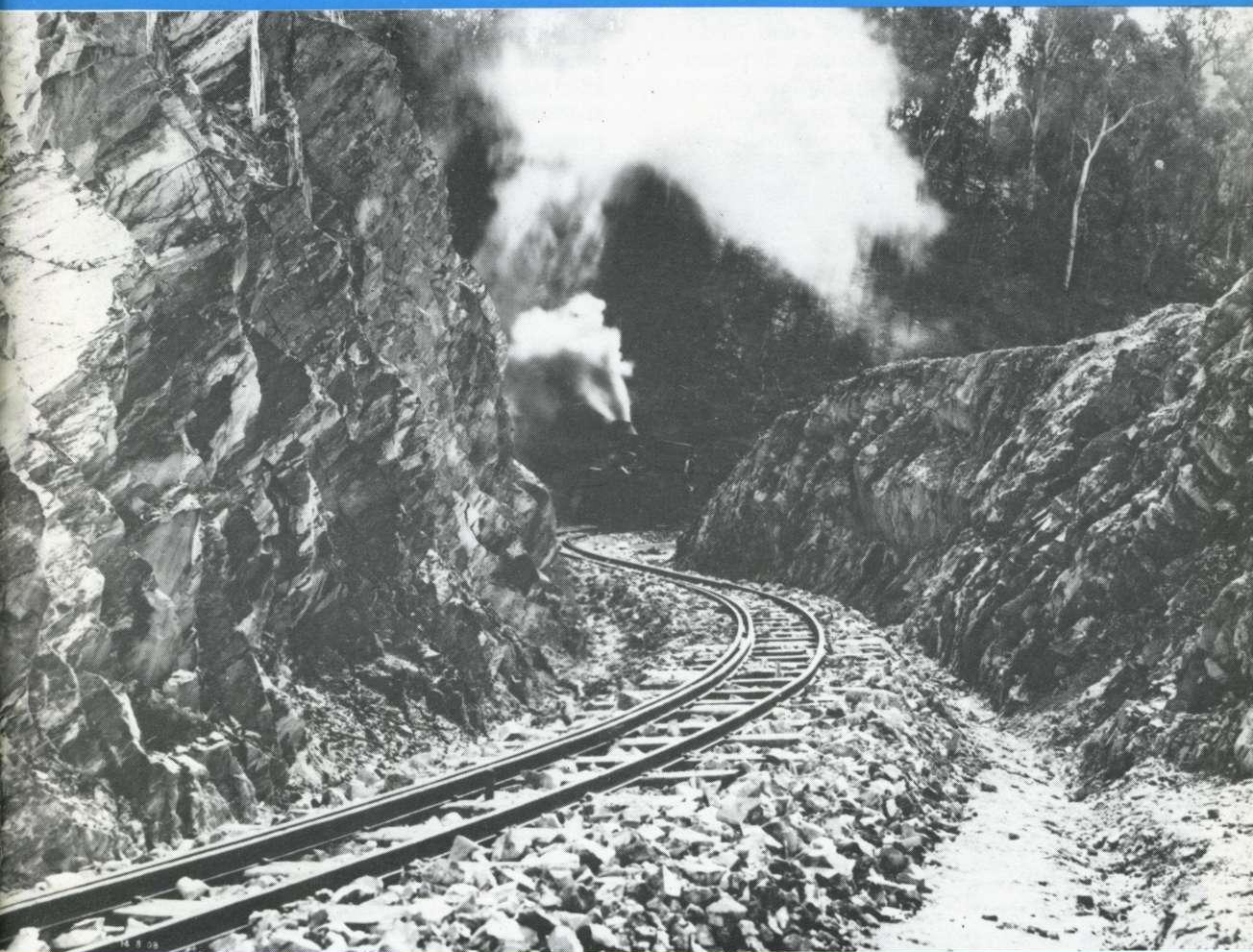


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EDITORIAL

Readers preferences are an important guide for any journal. *Light Railway* readers were asked to complete a survey of their preferences with their 1983 subscription renewals. Fourteen articles which appeared in *LR* 71-79 were selected to give a representative sample of the range of articles offered over this period and readers were asked to rate each as to their outstanding merit. 236 responses were received and these indicated six articles - Delatite Tramways (*LR71*), Geelong Harbor Trust (*LR73*) Warragul-Nilma Tramways (*LR75*), Fiji Tramways (*LR77*), Making Tall Timbers (*LR75*) and Basalt Quarries, Woy Woy (*LR72*) - received a high ranking. Most of these were thoroughly researched and well written articles which gave a wide historical background to the area, the industry and the tramway. An interesting exception was 'Making Tall Timbers' which offered a very different style of article to those which have appeared in *Light Railways*.

The current issue provides articles from different areas which cover a wide range of topics. There is also an interesting selection of letters - a feature of which prompted a number of respondents to the survey write in favourable comments. There is a good selection of material on hand for future issues, including a major article on the SECV railways at Yallourn, Victorian timber tramways and more from Geelong. I trust that the journal will continue to meet readers interests with the quality articles scheduled for Volume 21.

Cover: A Krauss locomotive enters tight curves and cuttings on the Goondah-Barren Jack tramway in New South Wales. The tramway is featured in this issue.

SRA Archives

MEMORIES OF NARROW GAUGE TO "BARREN JACK"

by David Burke

Introduction

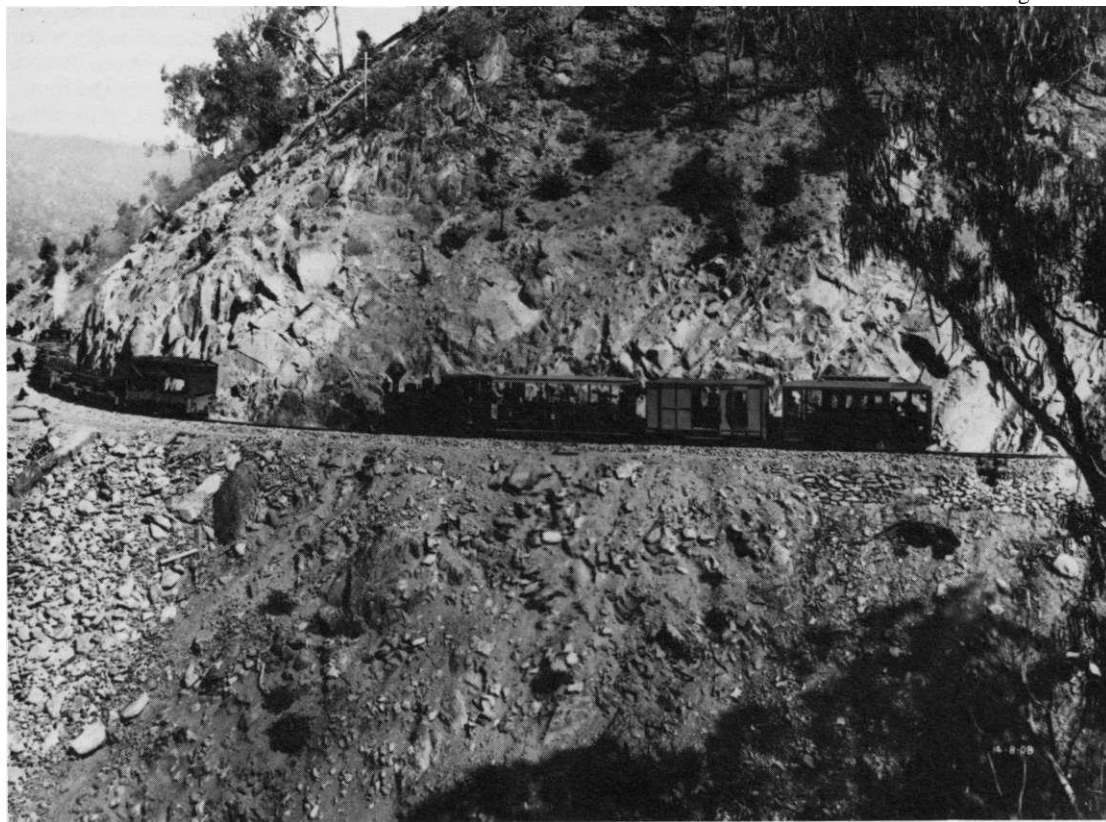
The narrow gauge railway to "Barren Jack Dam" excited considerable interest at its construction in the year 1907. One might call it a "latter day Puffing Billy" as travellers described their experience of riding on the 2ft gauge rolling stock through spectacular mountain scenery.

An entry in the NSW Railway & Tramway Budget of September 2, 1907 advised that the trackwork was progressing toward the dam from its starting point at Goondah, 202 miles from Sydney on the Main Southern Line. The tramway was to measure 28 miles in all, of which tenders had been let for forming the first 8 miles, while other tenders were soon to be invited for the remainder. The rails

were coming from the United States and special locos "to negotiate the sharp curves" had been ordered from Europe.

A further news item of February 1908 announced that the first 8 miles of trackwork were complete, including the crossing of Carroll's Creek. The Krauss engines weighed 11 tons each and were operated by a one-man crew. They had the capacity to haul 40 tons over the 1-in-30 grades at speeds of 12-15 miles per hour (1-in-30 being the ruling grade). Epsom salts were being used to clean the muddy water for loco purposes.

The line cost £50,000 but it was seen as a very cost effective exercise in view of the haulage rate to



The rugged nature of the terrain is evident in this posed photograph of a supply train and passenger train on the Barren Jack tramway. Note the Water Commissioner's inspection car on the rear of the passenger train.

SRA Archives

the dam site being £1.12s per ton by bullock team, whereas the railway reduced this figure to 5s per ton.

One of the government officials who visited the railway said it was hoped that similar narrow gauge tracks might be adopted as feeders in other mountainous parts of the State, eg, Dorriggo and The Comboyne.

Over the years between 1908 and 1921 various articles were written for the *NSWR Budget* (and its successor *The Magazine*) each one marvelling at the capacity of the dinky line and the wild countryside which it traversed before reaching the terminus. In the latter years of the railway it is also noticed that the original spelling of "Barren Jack" has been discarded in favour of the now accepted Burrinjuck.

Here is how the travellers of yesteryear enjoyed their ride on a little railway which in its latter years entertained a brief hope of survival as a tourist line, when its main construction purpose had been accomplished. Alas, this was not to happen and today weeds and gum trees and the ravages of nature obliterate the path once travelled by the shrill-whistled Krauss and its string of midget wagons.

"A TRIP TO BARREN JACK"

By M Charles Lacey

(Tramway Engineers Office)

The "Budget" June 1, 1908

It was not unusual that some of the staff of the great engineering branch of our tramways should seize the opportunity during their Easter vacation of visiting what will be an object lesson to engineers all over the world, and what will represent one of the greatest schemes of water conservation in the world, namely, the Barren Jack scheme.

The day for our departure having arrived, our party, consisting of Messrs E Lecchi, C Kiefer, and the writer, joined the 8.10 pm southern mail at Sydney station for Goondah, a small station 202 miles from Sydney. Our destination was reached at 4.15 am on the Thursday before Good Friday, the rain and cold, however, making our first impression of Goondah anything but favourable. Inquiries were immediately made as to where accommodation could be obtained in the locality, and when informed that none was available, our position, under the circumstances, was embarrassing, especially as there is no passenger waiting room or shelter at the station - a defect which should not be long overlooked. However, the night officer kindly came to our rescue, and provided shelter and a nice coal fire.

As soon as the light of day appeared, notwithstanding the elements, a tour of inspection was commenced. The first thing that most forcibly

attracted our attention was the narrow-gauge line, and it was while gazing wonderingly at this novel track that the acquaintance of Mr Cunningham, Resident Engineer in charge of the Railway, was made, as we had previously communicated with him, he correctly guessed our identity.

The narrow-gauge track is two feet wide, is substantially constructed, and in the yard is laid with both 20-lb and 30-lb per yard T rails, but on the main line 30-lb 30ft rails are the standard. They are laid on hardwood sleepers, the rail joints being placed opposite the middle of other rail, so as to avoid rough riding. Indeed, it was thought that the services of the staff of Thermit Welders, under the Engineer for Tramways, had been brought into requisition, so smoothly did the trains run.

The line, when completed, will be 26 miles in length, 21 of which have already been constructed. There are many sharp curves, 99ft being the sharpest, whilst the steepest grade is 1 in 25. Considering the progress that has been made one naturally expresses surprise and incredulity when he learns that it was only last Christmas twelve months that a start was made to survey the route, which is surrounded with difficulties, difficulties which one can only realise by a personal inspection.

The rolling stock consists of four locomotives, three passenger cars, and a number of trucks, hoppers, etc. The engines, manufactured by Krauss and Co, weigh 11½ tons, and are built on the American style with huge dome-shaped funnels. They are capable of pulling a load of 40 tons, and travel at the rate of 15 miles per hour. The trucks, probably the neatest ever constructed, are 3 tons 3 cwt, and can carry a weight of 10 tons.

The passenger cars, which did not arrive until a day after our arrival, are well-designed for their purpose. They were built at the Government Workshops, Cockatoo Island, and each will hold 24 passengers. In the absence of the latter, a passenger truck was kindly placed at our disposal, and at 9.30 am we proceeded on our journey to Barren Jack.

There is nothing in connection with the first five or six miles of the trip that is attractive, but the havoc done by the drought was noticeable on every side, as, indeed it was, throughout the entire journey. It was a sad sight to see a number of sheep dead and dying through thirst and hunger, the rain then experienced being the first for a long period.

Right: The majestic scenery which greeted passengers on the Goondah-Barren Jack tramway is evident from this scene of the Gorradiabee Valley in July 1914.

SRA Archives



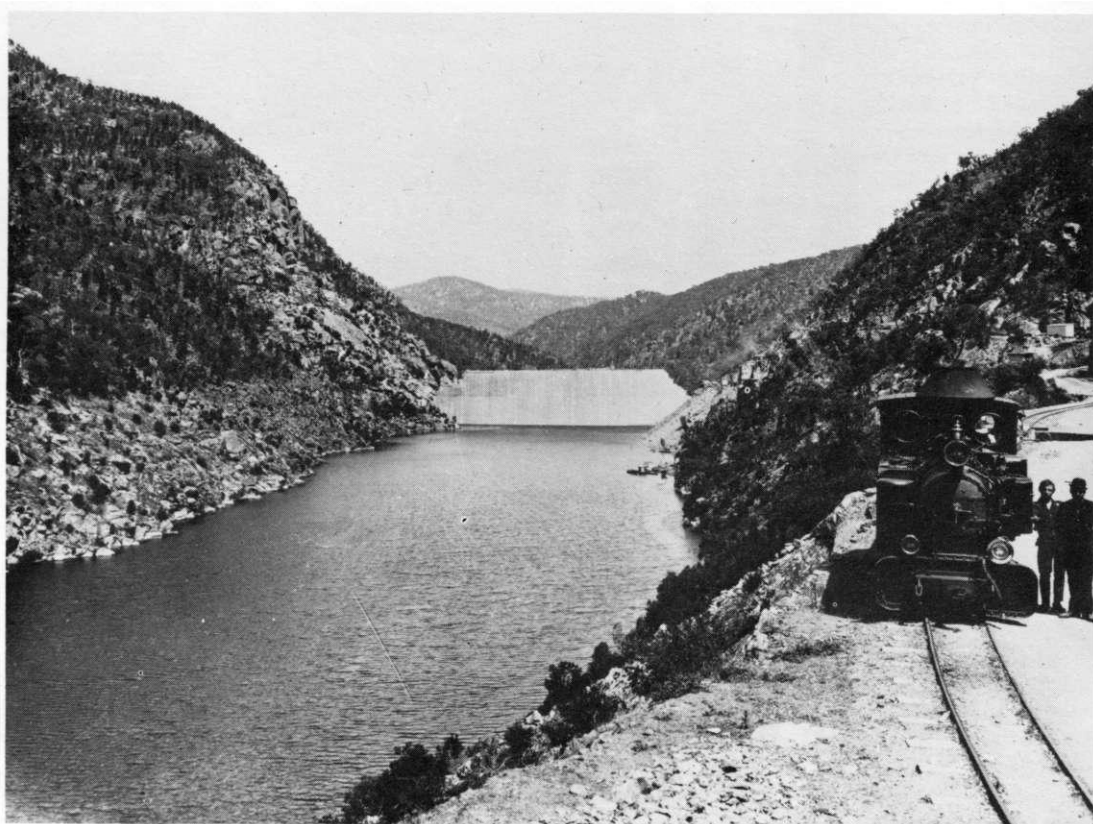
The writer was permitted to travel for a portion of the distance on the locomotive, in order that he could closely observe the track construction, which he can only describe as a model of ingenuity. As we pursued our course, we observed a number of "Australian Natives" (kangaroos) and also wallabies, as well as thousands of rabbits, hares and birds. To see them skirting over the mountains was a novel sight.

We were amused at the striking notices of warning at several street intersections such as: "Stop, look and listen". The train was travelling at the rate of 15 miles an hour and it was marvellous how easily it took the numerous sharp curves.

We exchanged our present conveyance after about an hour's travelling for that of the motor car, which is beautifully equipped with the latest appliances and is most up-to-date. The only apparent difference in it from ordinary street motors was the fact that it was run on rails. This went over the track

at a fast speed, and it was not long ere we reached Lake De Burgh - called after the well-known and popular engineer. This lake is only to be used for watering the locomotives, but it has been well-constructed, the curved dam wall presenting its convex side to the thrust of the water, the flow of which sometimes becomes torrential in character. A halt was made here while Mr Cunningham, who accompanied us in the motor car and supplied us with much information, issued some instructions to his staff.

From this out, we travelled through "a land of green hills, and majestic mountain peaks", and never-wearying views of the country could be obtained. Deep glens and gorges divide the high tablelands, and the valleys, scooped out by the natural forces during past ages, possess a wealth of picturesque and quiet beauty. Some of the gorges are thickly studded with majestic trees, which, for centuries, have grown in solemn silence, unbroken



The Barren Jack railway skirts the Murrumbidgee River with the wall of the dam under construction in the background.
SRA Archives

by man's footfall, like "green-robed sentinels of mighty woods," in fact, that tranquil grandeur is prominent, which renders the mountain scenery of NSW so enchanting.

At the end of the motor journey we had to walk a distance of three or four miles to reach Barren Jack City, where we arrived at 1 pm. Unlike Goondah, excellent accommodation is provided, and it would be superfluous to add that justice was done to the sumptuous repast placed before us. After a change of clothes, the effects of the previous sleepless night and the long journey were no longer felt. We were anxious to explore the town, and this is the light in which it appeared to us.

It did not take long to discover that the name "Barren Jack" City was a misnomer. We found it a model city occupying a most favoured position on the hillside, commanding a splendid view and overlooking a most picturesque valley through which the waters of the Murrumbidgee River flows. All seemed in the most perfect order, everything in its place, like the brooms, brushes, etc, of a perfect housekeeper; and for that prime virtue, cleanliness, it is, perhaps more remarkable than any other. The streets are well-constructed, sewerage is modern and up-to-date, water is laid on, in fact it compares favourably with some of the larger towns in this State. Its public buildings consist of two churches (C of E and Roman Catholic); hospital (just completed) which is under the control of Dr Clouston; a public school (almost erected), public hall, etc and two large rows of galvanised iron buildings, known as "The Barracks," are provided for the single men. No hotels are to be found in the city, and in that respect it is more advanced than any other town in NSW.

"MURRUMBIDGEE IRRIGATION SCHEME"

Kindly contributed to the " Budget" with the authority of the Commissioner for Water Conservation and Irrigation - No. 2 - September 1, 1914.

The gorge of the Murrumbidgee where the dam wall is being constructed and the valley of the Goodradigbee, where the water will be stored, form one of the most beautiful spots in New South Wales. The storage site is approached from the Main Southern line by a 2 ft gauge railway, starting from Goodah(sic) Siding and finishing up at the Burrinjuck Storage wall, a distance of 28 miles. The first 16 miles from the Great Southern Railway runs through comparatively uninteresting country, presenting more or less improved land and patches of virgin interspersed with gaunt ringbarked timber.

The railway passes out of this country and enters Carrol's Creek Gorge, when a bold view of the valley of the Murrumbidgee at once presents itself.

The 2ft gauge railway from this onwards follows a sinuous course, clinging to the sides of the gorge of Carrol's Creek. The narrowness of the gauge allows of many exceedingly sharp curves being negotiated, some as small as 100ft radius, whilst grades of from 1-in-70 to 1-in-100 are common, and in some places as much as 1-in-35.

The locomotives in use have 6 in x 12 in cylinders, and the maximum speed is about 15 miles per hour. There are no deep through cuttings, the rails being practically carried along a narrow ledge cut out of the hillside. At the point where Carroll's Creek debouches into the valley, one of the most glorious views in the State or Commonwealth opens out to the traveller. The peaks and mountain ranges forming the catchment area of the Goodradigbee River raise tier upon tier behind one another, while in the foreground are the flats at the junction of the rivers, showing either emerald green or a rich brown, dependent upon the stage of the maize crops.

Quite apart from the surroundings and the prospective beauty of the lake when completed, is the more important question of the volume of the stored water that will be available for irrigation purposes. The dam, which may justly be regarded as one of the greatest undertakings of its kind in the world, will, when completed, throw the waters back into an enormous lake, reaching one way a distance of 41 miles, in another 15 miles, and for 25 miles in yet a third direction. In dry figures, the storage will amount to 33,000,000,000 cubic ft, or a volume of water about equal to that contained in Sydney Harbour.

The construction of the gigantic storage wall which will retain these waters is interesting both to the engineer and to the layman. It ranks as one of the greatest dams in the world, both in regard to height and volume of water impounded. The wall will have a maximum height of 240 ft, which, by a coincidence, represents the height from the pavement to the base of the flagstaff on top of the tower of the General Post Office, Sydney. The dam wall itself is constructed of what is known as Cyclopean concrete - that is, cement concrete work with large stones up to 15 tons in weight embedded in it. This concrete work will absorb over 50,000 tons of cement, the whole of which is being locally made and supplied.

In order to handle this vast bulk of masonry, the provision of a special plant for the purpose became

necessary. The gorge is spanned along the length of the dam by three cableways, or suspension ropes of 1,100ft, or slightly less than a quarter of a mile in span. These cableways, which are about 400 feet above the bed of the gorge, will handle a maximum load of 15 tons, and are being utilised for conveying concrete, large stones, and for handling and moving the plant on the wall, which consists of an installation of 10-ton cranes. These cableways and the whole of the plant on the work are actuated electrically from a central power station.

"BURRINJUCK DAM"

**(Written for the "Magazine" by A A Bowley
- June 1, 1921)**

We left Sydney on No 5 Mail, which had a load of 245 tons. The engine was an "N" class, No 932, and here I wish to say a word for this class of locomotive. It kept splendid time throughout the run, and took the train up Picton bank at a fairly high speed all the way. At Goulburn a beautifully polished and shining "NN" (No 1027) replaced the "N". It was a credit to the cleaners and to the S.S. Inspector.

We arrived at Goondah at 3.46 am and strolled around to the Water Conservation Commissioner's running shed and workshops, where we found an attendant preparing one of the three engines for the 6 am Pass, to Burrinjuck. The locos presented a neat appearance, and were polished and cleaned to the last rivet. A fourth machine was stowed away, as it is regarded as very dangerous and not safe to use. They are of 0-4-0 type, one having an extended smoke-box. They are fitted with wood-burning funnels and spark arresters, air brakes, "A" class donkey pump, outside link motion, and carry a steam pressure of 180 lbs per square inch. The cab is large and roomy for a 2 ft gauge loco. Central buffer couplings of common single link type are fitted to all vehicles; air brakes are also on every car and wagon in use, and I can assure you that it is necessary, as the tourist will see for himself when on the last portion of the trip.

As a large crowd of passengers had gathered at the local platform, we decided it expedient to ascertain which vehicles would be used, and there-upon journeyed up to the Goods Shed, which also acts as a carriage shed, and took our seats in a comfortable arm chair on the platform of the observation car. This car we found was really the Water Commissioner's inspection car, but based on this occasion for passengers, as other spare rolling stock was marshalled for a picnic special, due to leave on the arrival of the up passenger from Harden. The car seats 12 inside and 6 outside on

the platform, 6 arm-chairs being provided.

The other passenger vehicle reminded one of a horse box that might have been rebuilt from the first railway coach. A guard's van of standard pattern and a water tank completed the train.

Promptly at 6 am we heard a terrible whistle from the loco and the outfit moved off, amidst the cheers of the passengers, a party of picnickers from Yass town and several convivial knights of the road. The track was well laid and ballasted, transitioned, and super-elevated as in the broad gauge. The crew coaled shortly after leaving Goondah from one of two coal states provided; water was taken three times, the writer being fortunate enough to secure a good snap of the last occasion.

The stations are named Goondah, Marilba, Summit, Swifts, Owens and Burrinjuck. They are but halts at the houses of fitters and wood-cutters - pretty little places standing in nice gardens, and quite a number of fowls were kept to reduce the H.C.L. A large number of wild fowl were seen during the trip, and local residents evidently chase them at every opportunity, as it was too difficult to get a snap of them as they rose from the Swamps.

The cars rode very smoothly indeed, but the locomotive rocked badly when 15 mph were exceeded. I believe the safe speed is about 17 mph, and, believe me, they keep just within that limit. On the last part of the section one wishes that they would crawl along, and feels inclined to take out a new life insurance policy. However, after quite a number of breathtaking incidents one becomes accustomed to racing around curves of 1 1/2-chain radius, down grades of 1-in-29 with the mountain on one side, and a sheer drop on the other. It is much more comfortable if one does not try to imagine what would happen if the loco left the track.

The line winds down the sides of mountains and along the banks of the Murrumbidgee River - more like a harbour than a river at this point. Pines and other trees have been planted along the line to help to hold up the earthwork of the per. way. The scenery here is very pretty, and one almost regrets that the trip is nearly at an end. We arrived at Burrinjuck at 8.20 am and moved down the hill in search of breakfast. The accommodation was good but limited, and the town would be made much more comfortable if a modern hotel were built.

Burrinjuck is a popular watering place and holiday resort for the residents on the Main Southern line. The streets require forming and sanitation is not quite up to standard. However, it is indeed a pretty, peaceful place. The wall is about a mile further along the river, and is reached either by rail



Another view of the supply and passenger trains on the Goodnah-Barren Jack railway. SRA Archives

or by the well-kept footpath. There is some fine machinery installed for generation of electricity and compressed air, driving concrete mixing plants and operating the two flying foxes.

When the work is completed the railway will be

removed unless it is found that a sufficient number of tourists warrants it being maintained. It is to be hoped that it will not be closed, as it provides access to a splendid tourist resort, and is a feat of national importance and interest.

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TRAMWAYS AND OXEN: THE NEU GUINEA KOMPAGNIE TRAMWAYS OF ASTROLABE BAY, PAPUA NEW GUINEA

by Bob McKillop

European economic expansion in the late nineteenth century brought with it a rivalry between the major economic powers for new colonies. In 1828 the Dutch had taken possession of all that part of New Guinea as far to the east as 141° longitude and eastern New Guinea and the surrounding islands drew the attention of sailors, explorers, scientists and adventurers from Britain, Australia, Germany, France, Russia and Italy. Events led to the German proclamation of territorial rights over the north coast of Eastern New Guinea and a British protectorate over the south coast in 1884.

Neu Guinea Kompagnie

The German colonial effort in New Guinea was to be administered through chartered companies modelled on the East India companies of the seventeenth and eighteenth centuries. The Neu Guinea Kompagnie was formed by a consortium of Berlin financiers headed by Adolph von Hanseemann of the Disconto-Gesellschaft, one of the largest private banks in the city¹. The consortium formed a company and applied to Bismark for a charter which was granted in May 1885. By the terms of this charter the Neu Guinea Kompagnie was to administer the colony in return for the exclusive right to acquire land, an authority it maintained until 1899.

The initial intention of the Kompagnie was to bring thousands of settlers to the colony, particularly from German immigrants to Australia². The company failed to attract suitable settlers and was forced to turn to the establishment of large-scale plantation enterprises, managed by whites and operated by coloured labourers. The Neu Guinea Kompagnie spent lavishly in its attempts to establish viable agricultural industries on the mainland (Kaiser Wilhemsland), but the efforts met with misfortune and were subsequently viewed as a spectacular failure. However, the investment resulted in the construction of two narrow gauge railways and it is these which provide the focus for our story.

Astrolabe Company

The initial settlements of the Neu Guinea Kompagnie were at Finschhafen (1884), Hatzfeldthafen and Constantinhafen (1885).

Tobacco trials were soon commenced at the latter two sites. In 1888 a new tobacco station was opened at Stephansort on Astrolabe Bay. In the same year the Kaiser Wilhemsland Plantagen-Gesellschaft was formed in Hamburg for the purpose of growing cocoa and coffee and a plantation was established at Jomba. In 1891 a subsidiary company, the Astrolabe Company, was formed to take over the tobacco growing activities at Stephansort and Erima a short distance away.

For a period of five years the tobacco growing ventures of the Astrolabe Company constituted the main commercial activity of the German colonial effort in New Guinea. The company spent lavishly spurred by von Hanseemann's vision of creating a "second Java" in the infant colony. From 1892 the venture produced leaf that sold quite well on the Bremen market, but at grievous cost in men and money.

From 1895 Javanese labourers had been brought to Kaiser Wilhemsland and attempts were later made to recruit Chinese coolies on a large scale. By 1894 there were over 1,000 Asian and 664 Melanesian labourers on the plantations. However, enterprising agents in Singapore and Surabaya shipped out the sick, the unemployable and opium addicts as coolie labourers and they quickly succumbed to the unhealthy conditions of the colony. For the 26,000 indentured labourers employed by the Germans between 1887 and 1903, the annual death rate has been estimated to be 28%.

By 1896 the expenses of the tobacco ventures were too great for the Astrolabe Company and it was merged with the parent company. Tobacco growing was continued at Stephansort until 1901. By 1898 the unprofitable nature of the Kaiser Wilhemsland ventures were beginning to tell on the Neu Guinea Kompagnie which had spent some 11 million marks in the colony by that date.³ The company found relief from the embarrassment of its charter through an agreement with the Imperial Government to surrender rights of sovereignty in return for the sum of 4 million marks, to be paid over ten years, and the right to add 50,000 ha of land to its extensive claims. The agreement took



The administrative building of the Astrolabe Company at Stephansort.

B Hagen, photo: courtesy Mitchell Library

effect from 1 April 1899.

Stephansort Tramway

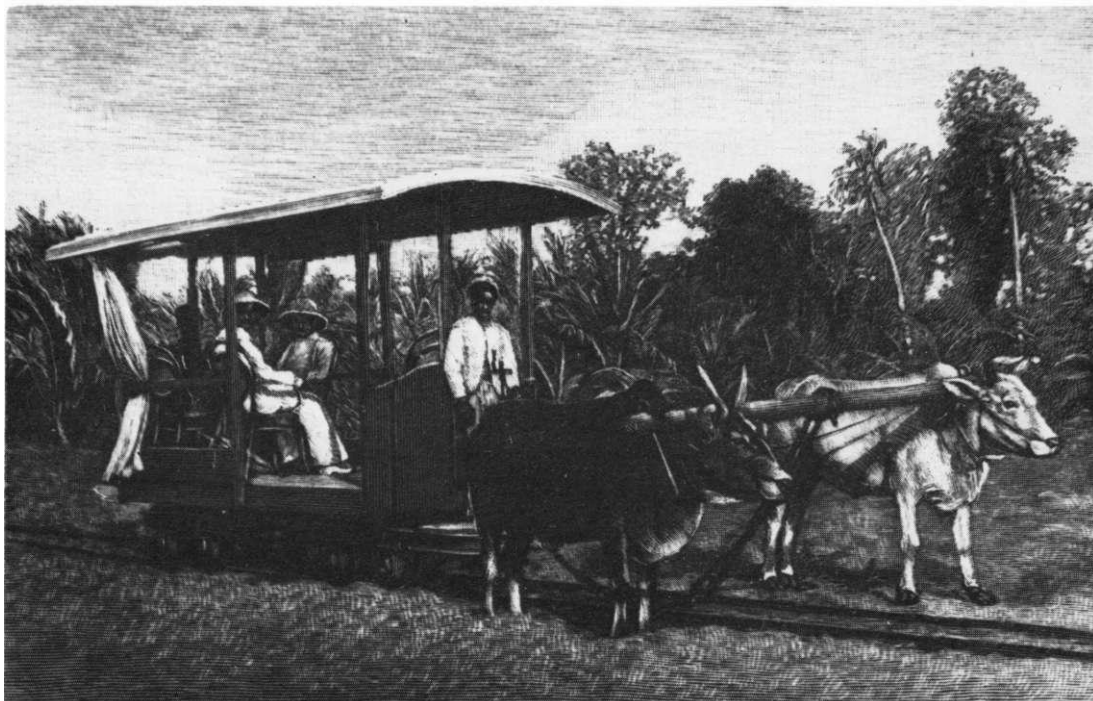
To provide transport to the various plantations of the Astrolabe Company a narrow gauge railway was constructed. The first official reference to the line is in the 1893-94 annual report which states that the railway, which had been imported from Germany, was most efficient in operation.⁴ In 1896 Kreiger reported that the track was of 60cm gauge and the railway was used for "the transport of persons on well furnished carriages as well as the consignment of goods".⁵

The initial line ran from the main company centre of Stephansort to Erima plantation on the left bank of the Jori River some 4½ distant and then continued another 4 km to Erimahafen where port facilities were established. At Stephansort the line ran beside the central administrative building and served large tobacco storage sheds. A map of the station in 1892, the year before the tramway was built, depicts extensive tobacco fields and some 26 buildings together with 3 large storage sheds.⁶ The tramway ran north-west through forest country to

Erima where a "big administrative building, drying rooms and secondary buildings" were established.⁷ The line then ran north-east to Erimahafen. In 1898 Erimahafen was described as:

an insignificant place, consisting of a few dwellings built in Sumatra style, for the manager and other officials, and a few store-houses with the recent addition of a saw mill.. but the place owes its existence entirely to the traffic between it and Stephansort, for it is only an open roadstead where the sea is often very high, but, as the name indicates, the landing is protected by two reefs.⁸

During the initial years there was an air of optimism for the tobacco growing enterprise and the railway would have been kept busy transporting personnel and goods. Some 159,440 lbs of leaf were exported to Bremen in 1894 and there were favourable reports on its quality. Larger storage sheds were installed at Erimahafen in expectation of increased crops and a cigar factory began production in 1894.⁹ It was planned to plant the 1895 Erima crop on the right bank of the Jori River



Ox drawn passenger coach on the Stephansort tramway c1900.

Mitchell Library

and for this purpose rail tracks would be laid along the main paths through the plantations, bringing the total length of tramway to 16km.¹⁰

The total length of the Stephansort tramway system at its peak remains uncertain. The accompanying map, based on German Government charts of 1912 shows tramway lines with a total length of 24km, but some of these "lines" may have in fact been roads. In 1927 the Australian Expropriation Board listed 10½ miles or 16.8 km of tramways,¹¹ but some branches may have been removed by that date.

The tramway system included a number of bridges. A substantial bridge would have been required to cross the Jori (or Gori) River, but it was inadequate to match the fury of flash floods and had been washed away prior to 1912. Subsequently the Stephansort and Erima tramways were operated as separate systems. In 1927 there were seven bridges listed on the Erima system, including a 132ft suspension bridge and seven bridges on the Stephansort system.

Motive power on the tramway appears to have been limited to animal power although there have been some claims that a locomotive was used. *The*

Leader report of 1898,¹² no doubt reflecting official policy, states

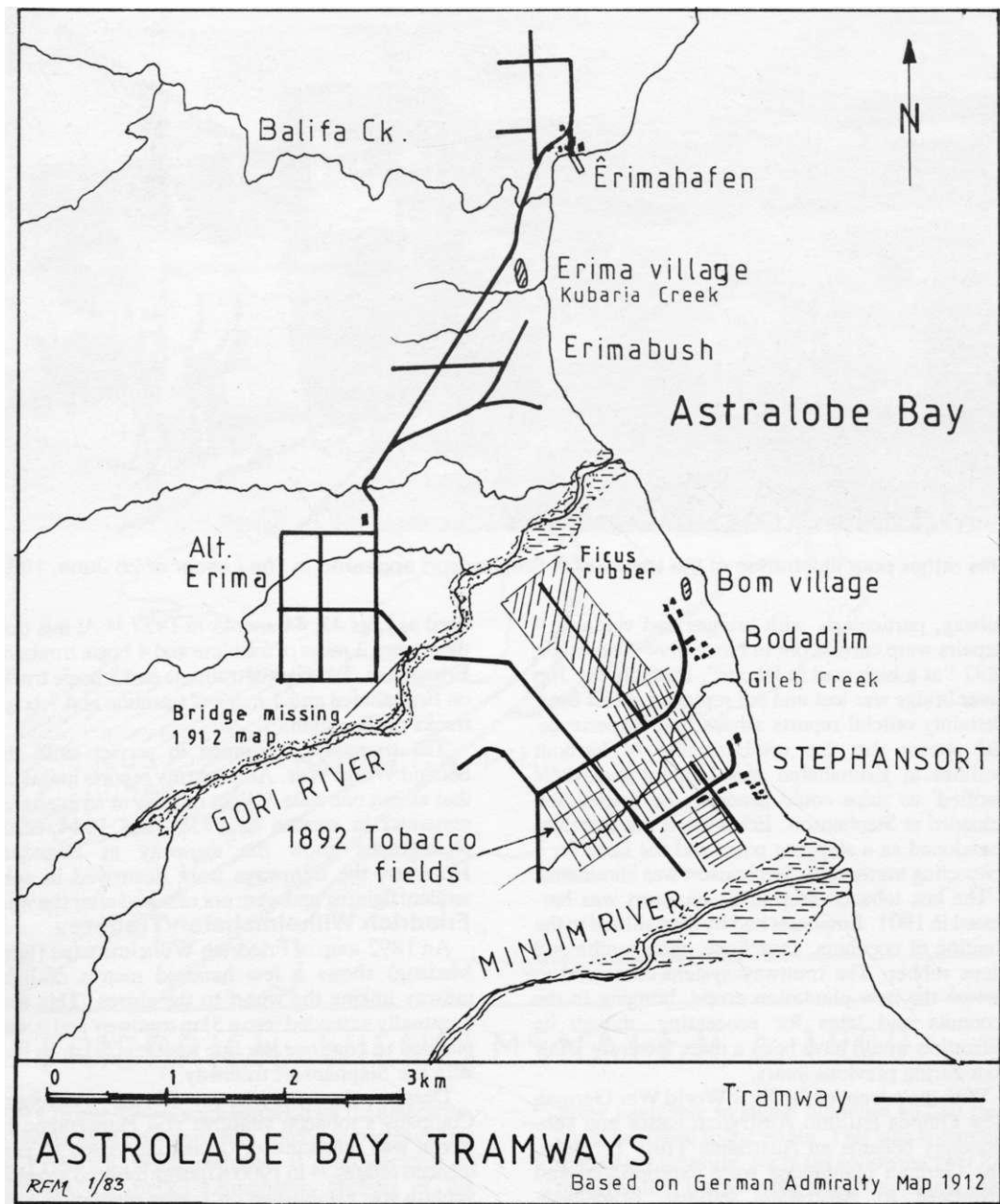
[t]he oxen are much cheaper and more easily managed than engines, and, on the whole, answer very well for a road with so little business, especially as all engines used in the tropics need great care and many repairs.

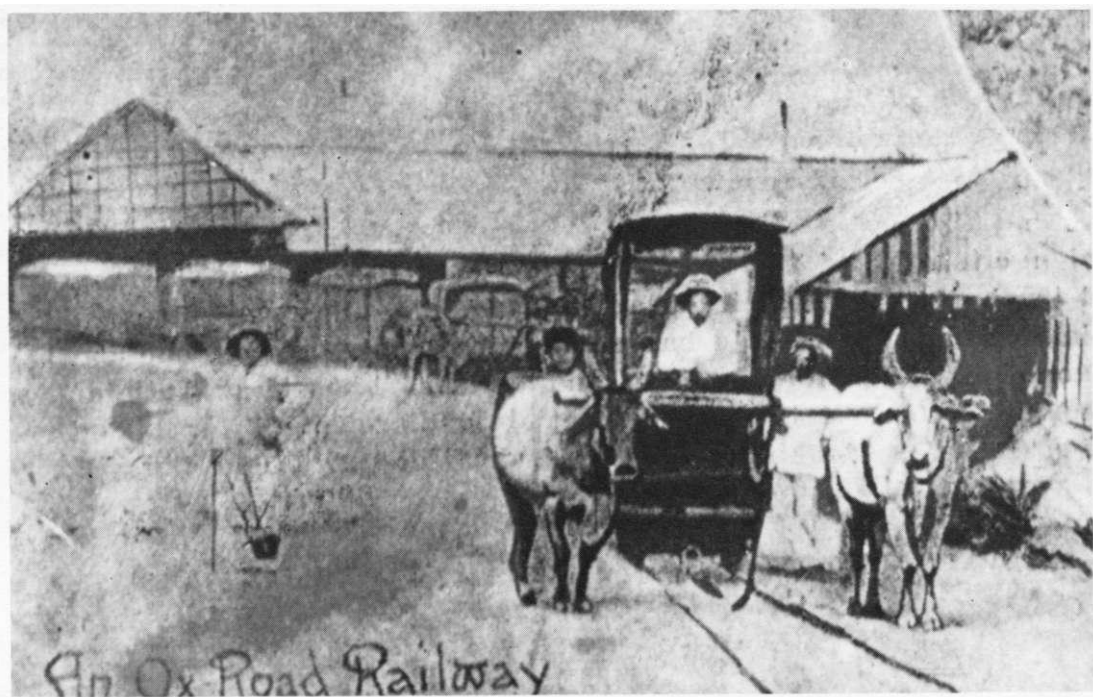
For the Europeans at least, the Company provided rather luxurious bogie passenger cars of the type illustrated. No doubt the occupants had much to say about the indolence of their servants as they swayed along at a leisurely pace behind two oxen driven by a Javanese labourer. However, the major purpose of the tramway was to transport tobacco from the fields and for this task bogie wagons were employed. In 1928 16 of these trucks remained in service on the two systems.

The tobacco crops of the Astrolabe Company never achieved the bountiful harvests which had been anticipated. The 1895 and 1896 crops were affected by drought conditions and the introduction of a tobacco beetle caused widespread damage.¹³ Despite the efforts of the company doctor, the official reports admit that the state of health of the indentured labourers was not good and the efficiency of the workforce was thus greatly reduced. With

these misfortunes the Astrolabe Company suffered a 'financial downfall' in 1895 and large-scale tobacco growing was officially acknowledged as a failure.¹⁴

Despite the managerial and financial difficulties the tobacco plantations struggled on, although the 1897 crop was only 79,300 lbs. In that year 'violent rainstorms' resulted in considerable damage to the





This rather poor illustration of the tramway at Stephansort appeared in *The Leader* of 25 June, 1898.

railway, particularly with bridges and viaducts.¹⁵ Repairs were carried out in November-December, 1897 "at a high cost in labour". Possibly the Jori River bridge was lost and not replaced at this time. Certainly official reports advise that 'experience' had shown that the establishment of harbour facilities at Erimahafen was 'not on the whole justified' as ships could generally be loaded and unloaded at Stephansort. Erimahafen was therefore abandoned as a shipping point and the need for a connecting tramway to Stephansort was eliminated.

The last tobacco crop at Stephansort was harvested in 1901. Emphasis had by then shifted to the planting of coconuts, cautchouc, guttapercha and Ficus rubber. The tramway system continued to service the new plantation crops, bringing in the coconuts and latex for processing, though its utilization would have been a more leisurely affair than during previous years.

With the advent of the First World War German New Guinea fell into Australian hands and subsequently became an Australian Trust Territory. The German plantations were expropriated and advertised to Australian settlers. Erimabush, Erimahafen and Bogadjin plantations were adver-

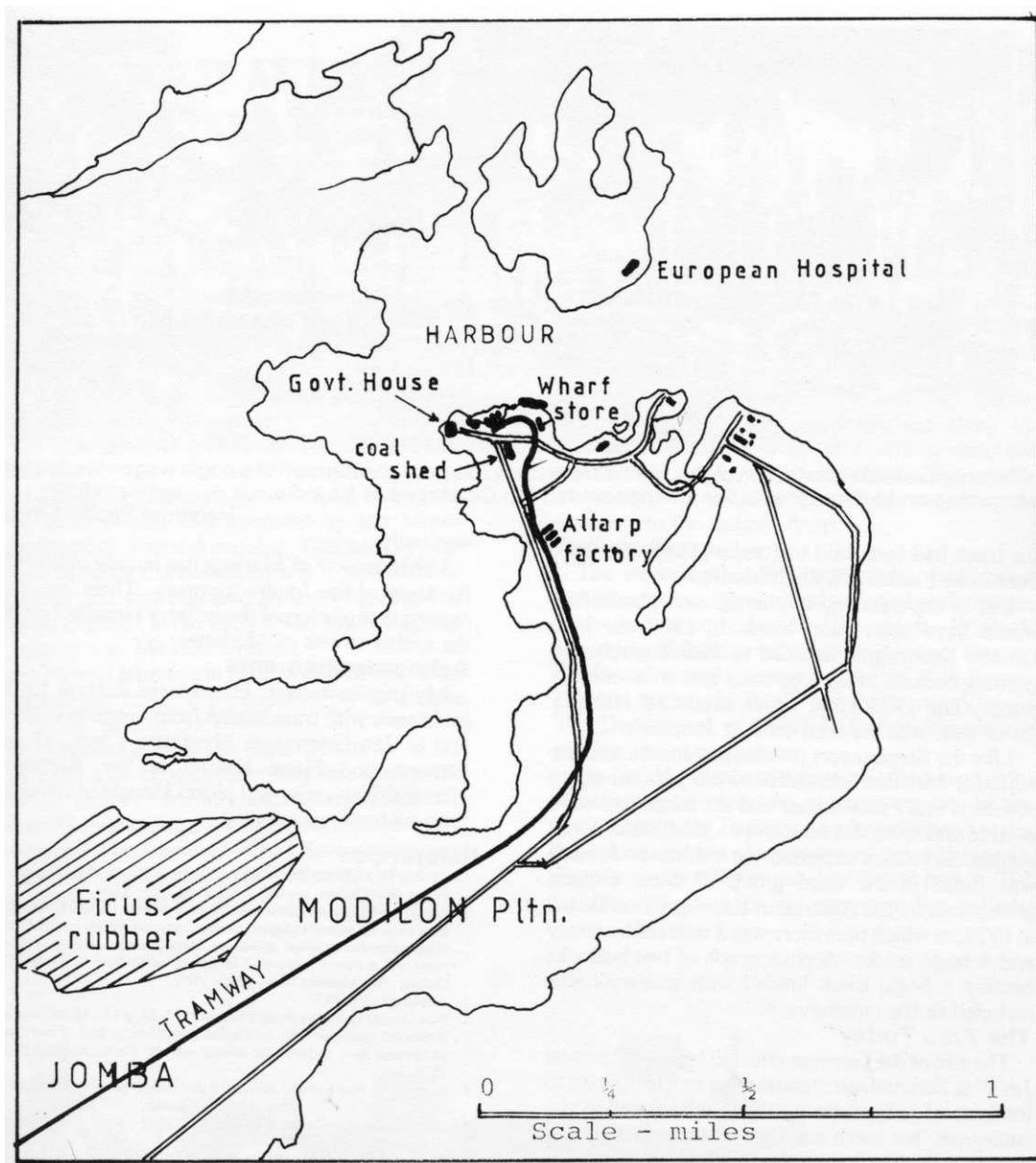
tised as Lots 43, 44 and 45 in 1927.¹⁶ At this time there were 2 miles of tramline and 4 bogie trucks on Erimabush, 3/2 miles of tramline and 5 bogie trucks on Erimahafen and 5 miles of tramline and 7 bogie trucks on Bogadjin.

The tramways continued in service until the Second World War. Allied Army reports indicated that all but one mile of light railway at Erimahafen remained in service in 1938, and 1944 aerial photographs show the tramway at Bogadjin. However, the tramways were destroyed in subsequent fighting and were not restored after the war.

Friedrich Wilhelmshafen Tramway

An 1892 map of Friedrich Wilhelmshafen (later Madang) shows a few hundred metres of light railway linking the wharf to the stores. This was eventually extended into a 5 km tramway and it was planned to continue the line another 23 km to link with the Stephansort tramway.¹⁷

Despite the experience of the Astrolabe Company's tobacco ventures von Hanseemann in Berlin was reluctant to forsake his vision of vast tobacco estates.¹⁸ In 1900 a further tobacco growing venture was established on Jomba plantation near Friedrich Wilhelmshafen (now Madang). Some



FRIEDRICH WILHELMSHAFEN c. 1900

270 Chinese coolies were recruited for the enterprise.

To provide transport from Jomba to port facilities at Friedrich Wilhelmshafen it was decided to relocate the Erima-Erimahafen section of the existing tramway to this site.¹⁹ However, the manager of Jomba was able to make the Gauta

River navigable to steam launches so that barges could be towed to the estate. This was apparently a temporary measure, for in the following year it was reported that track laying was proceeding. As the Erima-Erimahafen tramway remained in place, additional track must have been imported. By 1899



The only available illustration of the Jomba tramway is this poor photograph of a bogie wagon loaded with coconuts on Modilon Plantation. It appeared in the *Catalogue of New Guinea Properties* (1927).

Halstrom Pacific Library

the track had been laid to Jomba plantation some 5 km from Fredrick Wilhelmshafen.

Use of the tramway by the tobacco plantations would have been short lived. In 1902 the Neu Guinea Kompagnie decided to abandon tobacco growing because of the high costs and unfavourable prices. The 1903 crop, which produced 102,875 lbs of leaf, was the final crop at Jomba.

Like the Stephansort plantations Jomba and the adjacent Modilon plantation were planted up to coconuts and Ficus rubber and the tramways were used to transport the new crops. Modilon coconut plantation (which included the rubber at Jomba) was listed in the third group of New Guinea plantations by the Australian Expropriation Board in 1927, at which time there was 3 miles of tramway and 4 bogie trucks. A photograph of two bullocks hauling a bogie truck loaded with coconuts was included in the catalogue.²⁰

The Area Today

The site of the German effort to create a "second Java" at Stephansort stands today as a testimony to the lack of judgement by those who founded the enterprise, but there are also symbols of German engineering excellence. At Stephansort there are signs of the old town now covered with secondary growth: the ruins of once-elaborate stables, disused roads, the sawmill boiler and the headstones at the cemetery of the men, women and children who gave their lives for the new German colony.²¹ The best known of the administrators, Curt von Hagen, is commemorated by a monument which still stands in the bush. The tramway formations and pieces of rusting railway line are visible and one bridge, at least, is still largely intact, some 89 years after it

was built.

Urban growth of Madang has largely obliterated the signs of the Jomba tramway. There are some reports that portion of the railway remains beneath the sealed streets of Madang.

Acknowledgements

My thanks to Mrs. Hannelorre Zalazar for her assistance with translations from German sources; and to Jan Gammage, Dymphna Clark, Donald Denoon and Hank Nelson, of the Australian National University and Norm Houghton for assistance with references.

References

- Jacobs, M 'German New Guinea' in Ryan P (ed) *Encyclopedia of Papua New Guinea*, pp. 486. Melbourne Univ. Press.
- Background on the agricultural activities of the Neu Guinea Kompagnie is based on the author's chapter 'Foreign intrusion and the establishment of agricultural institutions' in Denoon, D and Snowden, C (eds) *A time to plant and a time to uproot: a history of agriculture in Papua New Guinea*. Port Moresby Univ. PNG, 1981.
- Jacobs *op cit* p. 487
- New Guinea Company Annual Report 1893-94, p. 96. All references to the annual reports are from the English translation by Sack, P and Clark, D *German New Guinea: the annual reports*, Canberra ANU Press, 1979.
- Kreiger, M *Neu Guinea: Bibliothek der Landerkunder*. Berlin Alfred Schall, 1899. p 238; Tranl. Mrs. H. Zalazar.
- Nachrichten über Kaiser Wilhelmsland*, 1892-93.
- Kreiger, M *op cit* p. 238.
- The Leader*, June 25, 1898, p. 5.
- NGCAR 1893-94, p. 96.
- NGCAR 1895-96, p. 120.
- Catalogue of New Guinea Properties*. Expropriation Board, Comm. of Australia, Melbourne, 1927.
- The Leader*, June 25, 1898, p. 5.
- NGCAR 1895-96, p. 124.
- NGCAR 1896-97, p. 131.
- Ibid*
- Catalogue of New Guinea Properties*, *op cit* p. 124-129.
- NGCAR 1898-99, p. 165.
- Jacobs *op cit* p. 487.
- NGCAR 1898-99, p. 165.
- Catalogue of New Guinea Properties*. Third Group, 1927, Lot 164.
- 'Taim bilong ol Jeman' by Janetta Douglas, *Paradise*, No. 30 July 1981.

THE TRAMWAY AT GLENLOTH GOVERNMENT BATTERY AND CYANIDE WORKS, SA

by Murray Wright

Introduction

The now abandoned Glenloth Government battery is located on the southern shores of Lake Harris, 12 miles south of Kingoonya and 220 miles north-east from Port Augusta in South Australia. The original, privately owned battery, was opened in 1904. It had five (5) stamp heads powered by a 14 hp steam engine.¹ The battery was closed down in 1935 after producing 2642 oz of gold from 3408 tons of ore.²

In 1935 the original battery was replaced by a ten stamp head owned and operated by the Mines Department of South Australia. This battery was manufactured by Forwood Down & Co of Adelaide and Perth and was powered by a 44 hp *Fielding* crude oil engine.³ From 1935-1940 the manager of the battery was Mr Ern Graham.⁴

The Mines Department battery ceased operation in September, 1955. It produced 6254 oz of gold from 10290 tons of ore.⁵

The Tramway And Its Operation

From 1935 a 21 in. gauge tramway was used at the Glenloth battery. Initially this consisted of two lines and a connecting track which totalled only 135 ft in length. The tramway would have grown over the years as the tailings dump filled up and the lines were extended over the heaps. The final tramway

system, some 560 ft in length, is shown in the accompanying diagram.

The tramway system was used for two different operations. First the "V" trucks were shovel filled from the sand pits where the crushed ore ended up after it had been through the atamp and *Wilfley* table. From here they were pushed along the tramway over the top of the leaching vats, into which their loads were deposited. The second movement was to carry the tailings out along the tramway to the tailings heap.⁶

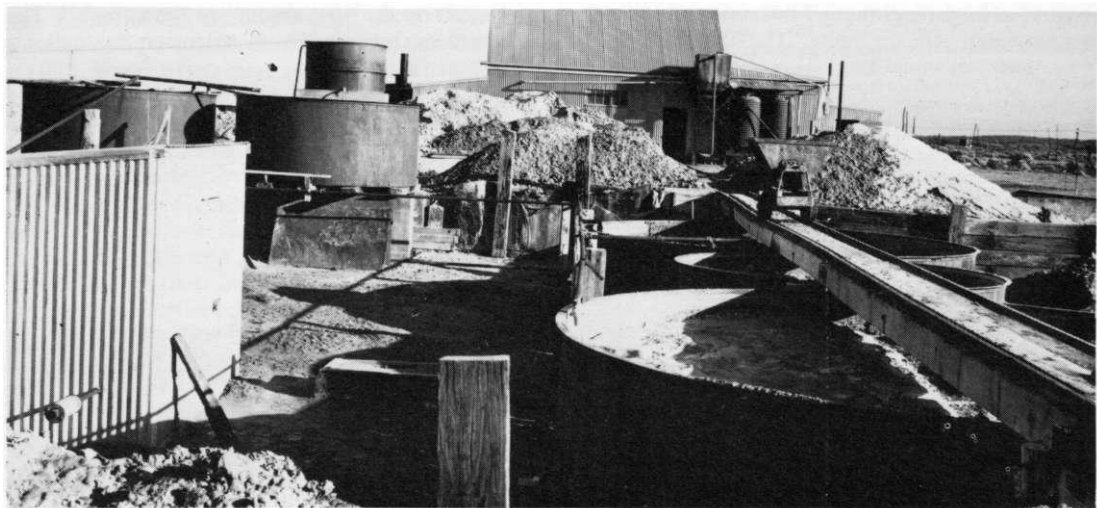
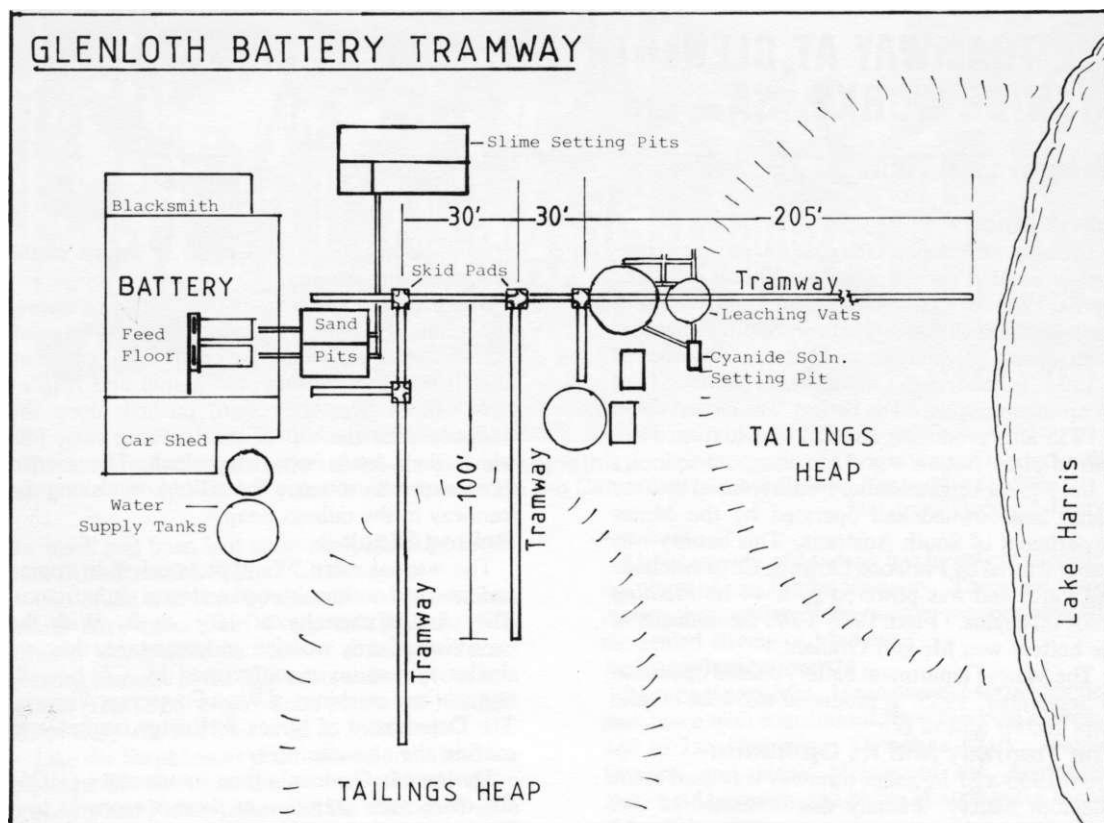
Rolling Stock

The wagons were "V" type, steel, side tipping and mounted on Jarrah wood and steel underframes. They had a capacity of 10½ cu ft. With the exception of their wooden undercarriage, they are similar to wagons manufactured by CF Sewell, engineer and machinist of West Footscray, Victoria. The Department of Mines & Energy is unable to confirm the manufacturer.

During Mr Graham's time as manager (1935-40) there were only two of these wagons in use. They were called *Dobbins*. An interesting aspect of the operation was the turning of the fully loaded wagons on the "flat sheets" or "sand pads". This was done by a made up extension bar called a

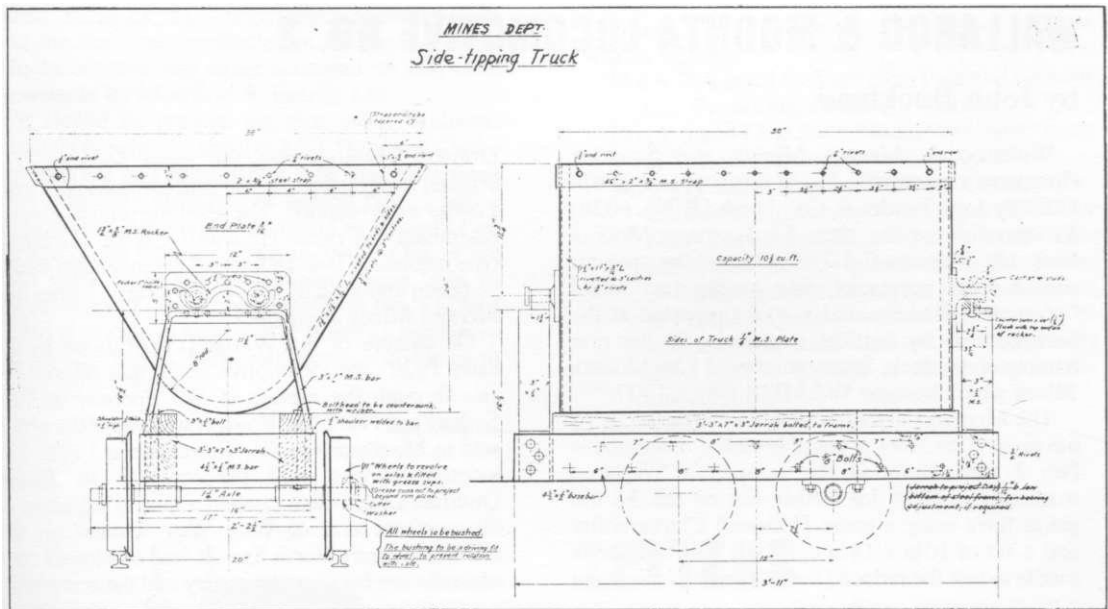


The original Glenloth battery which operated from 1904-1935, c1939. Note the tramway wagon right foreground.
SA Mines Department



The battery at Glenloth with a "V" type side-tipping wagon on the tramway.

SA Mine Department



"strongarm". It was also used to tip the wagons for unloading.

References

1. *Record of the Mines of South Australia*, p.315
2. Department of Mines & Energy, SA.
3. *Ibid.*
4. Mr Ern Graham, personal communic.
5. Department of Mines & Energy.
6. Details from Mr Sid Dedman, former gold miner.



Remains of the tramway going over the leaching vats, then to the tailings heap in 1981. Lake Harris is in the background. M Wright photo

WALLAROO & MOONTA LOCOMOTIVE NO. 2

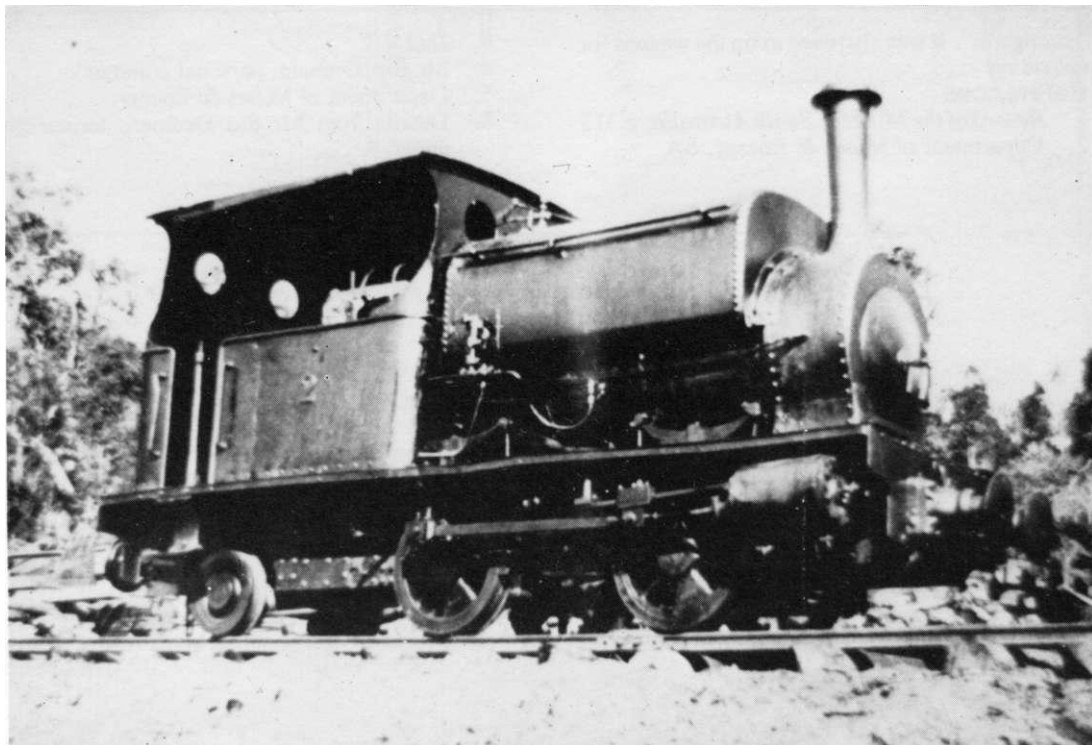
by John Buckland

Wallaroo & Moonta Mining and Smelting Company's locomotive No. 2 was supplied new in 1889 by John Fowler & Co., Leeds (B/No. 6026) for operation on the, then, 5ft 3in gauge Moonta lines. No. 2 was an 0-4-2 ST with lengthy open air cab, a front spectacle plate having two round "porthole" windows and a roof supported at the back corners by vertical stanchions at the rear corners of the deck. It was numbered 2 by Moonta Mines which became W&MMS Coy c.1907.

The Moonta railway lines were converted to 3ft 6in gauge circa 1894 or possibly earlier. Locomotive No. 2 was rebuilt in the company's Wallaroo workshops c.1895 for further use on the 3ft 6in gauge lines using a spare Hudswell Clarke boiler and a set of 10in x 14in cylinders and smokebox saddle to suit the reduced frame spacing (also most

probably coming from the same source). The original Laird type single bar crossheads from Fowler were retained. The resulting rebuild closely resembled the other Hudswell Clarke **Wallaroo** type engines of 0-4-2 ST wheel arrangement which had been imported by both the Wallaroo Mines and Moonta Mines companies.

On closure of the Wallaroo operations in the early 1920s the locomotive stock was offered for sale through the agency of WJ Spencer & Co., Sydney and No. 2 (ex-Fowler) was one of the group sold to Mackenzie & Co. Newcastle in 1924. The locomotive was sold subsequently to Basalt Quarries Ltd., which opened a quarry adjacent to the northern end of Woy Woy Tunnel on the NSWGR Short North line. It was employed on a one-mile line between the quarry and the company's



Fowler No. 6026 working on Basalt Quarries line at Woy Woy. See *LR. 58* for builder's photo in original condition and *LR. 72* for details of operation at Basalt Quarries.

CC Singleton photo, J Buckland Collection

siding (Ed. *see* LR.72). This operation ceased in 1931 and the line was dismantled in December 1932. The locomotive was either scrapped on site, or at Newcastle by Morrison & Bearby Ltd.

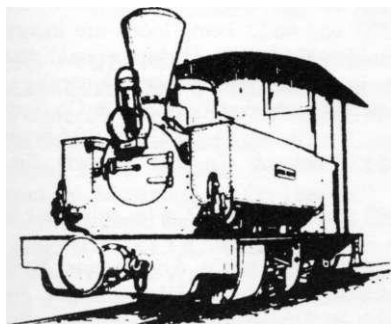
It should be pointed out that when Wallaroo Smelters bought two small 0-4-ST Hudswell Clarke locomotives in 1902 (B/Nos 628 and 629) these were originally identified as second Nos. 1 and 2 respectively, but were renumbered as 10 and 11 on the combined company's list in 1907. One, if not both these little cabless shunters were sold to Mackenzie & Cox and remained with No. 1 (Dubs 1196) in storage in Morrison & Bearby's machinery yard at Carrington, Newcastle until cut up for scrap in the early 1930s.

Disposal of the balance of the W&MMS Co Hudswell Clarke *Wallaroo* type engines in 1924 was as follows:

Nos 6, 7, 8 and 9 to Australian Portland Cement Co, Fyansford, Geelong, Victoria.

Nos 3, 5 and 12 to State Electricity Commission of Victoria, Yallourn North.

No 4 to Federal Capital Territory Commission, Canberra. This locomotive was purchased by NSW Associated Blue Metal Co in 1926 for use at their Bombo quarry. With the closure of Bombo quarry the engine was transferred to Prospect Quarry, west of Sydney in 1929 where it was used until 1935. Its remains were said to be still at the quarry in the early 1950s.



LETTERS

MASCHINENFABRIK ESSLINGEN LOCOMOTIVES

This is a request for assistance. One of my correspondents in West Germany, Herr W. Messerschmidt, is seeking information on and photographs of locomotives built by Maschinfabrik Esslingen that may have operated in Australia.

As it is very likely that such locomotives would have been used by industrial railways, perhaps some reader of *Light Railways* may have information of this nature.

Correspondence could be made directly to Herr Messerschmidt in English. His address is: Rechbergweg 7, D-7928 Giengen (Brenz), West Germany.

**WA Pearce
Kensington, Vic**

EARLY JOHN FOWLER LOCOMOTIVES IN AUSTRALIA

I suppose it was inevitable that no sooner did John Browning's article on Victoria Mill's first locomotive appear in *LR78* that vital new information would appear to confound some of the statements contained therein. This new information is contained in the "missing" first volume of John Fowler builders numbers (up to 7685) which has, in December 1982, been donated to Reading University. This book clearly identifies the product (locomotive, traction engine, stationary engine etc), but details are minimal at best and often only the agent, not owner, is shown.

In relation to the 2ft 0in gauge locomotives used in the canefields of Queensland, northern NSW and Fiji the following are now clearly "definites"; information from sources other than this list and other, later, JF records is shown in brackets:

- 4368/1882 Burdekin Delta Sugar Co. 5 1/2 x 9 in cyls. *Patent*. Note added: Sold to Wittingham Bros.
- 4369/1883 CSR 5 1/2 x 9in cyls. *Patent*.
- 4667/1883 W & J Lockett (agents) (Mourilyan Mill/Millers Machinery Merchants/Presv.) 6 x 9in cyls. *Patent*. (0-4-2T. OC Jackshaft)
- 4668/1883 W Sloane & Co (agents) (Mourilyan Mill - see tender JF4956/possibly 1896 to Bingera) 6 x 9in cyls. *Patent*.
- 4778/1884 Mourilyan Sugar Co. 7? x 12in cyls.
- 4788/1884 Sharpe Fletcher & Co (possibly at their sugar mill, Navua, Fiji/by 1893 to CSR Labasa, Fiji as *John-O-Gaunt*). 6? x 10in cyls. (0-4-2ST.OC)
- 4790/1884 John Fowler & Co, Sydney (agents). 6? x 10in cyls. ST. 2ft 6 in gauge altered 1885 to 2ft0in.
- 4856/1884 Mourilyan Sugar Co. Tender for loco JF4668.
- 5020/1885 CSR per JF&Co, Sydney. 7 x 12in cyls. *Direct Acting*.
- 5032/1886 CSR per JF&Co, Sydney. 7 x 12in cyls. *Direct Acting*. 4-coupled. At Goondi by 1909 where received new boiler JF12133/1909.
- 5207/1886 CSR per JF&Co, Sydney. Tender for JF5032.
- 5287/1886 CSR per JF&Co, Sydney. Tender for 7 in loco.
- 5406/1887 CSR Sydney. x 12in cyls tank loco. (Rarawi, Fiji/1910 to Nausori, Fiji). New boiler JF14151/1913 (0-4-0T.OC inclined cylinders).
- 5429/1887 CSR Sydney. 8/4 x 12 cyls. "Special light design". (Viria, Fiji/1896 to Nausori, Fiji/1952 to Cudgen, NSW) 0-4-0ST. OC.
- 6301/1890 CSR 8/4 x 12in cyls. 0-4-0ST. OC. At Goondi by 1913.
- 6342/1890 Richmond River Sugar Co (Rous Mill). 8 x 12in cyls. 0-4-2T (0-4-2ST.OC from photo)
- 6448/1891 Sydney. 8/4 x 12in cyls (CSR Rarawi, Fiji/cl905 to Nausori, Fiji/1928 to Penang, Fiji. 0-4-0ST. OC)
- 6521/1892 Merchant Banking Co (agents). Pencil note: CSR Sydney. 8 x 12 in cyls 0-4-2ST. OC. At CSR Rarawi, Fiji by 1913.
- 6554/1891 Sydney. John A Robb, Tweed River (Cudgen Mill, NSW) 8/2 x 12in cyls. 0-4-0ST. OC.

The histories of the relevant locos beyond this point are, with a few exceptions, fairly well documented.

References

- (a) *Patent* refers to jackshaft drive locos; *Direct Acting* to 0-4-0T. OCs with inclined cylinders.
- (b) CSR means Colonial Sugar Refining Co.
- (c) 4368 could possibly be the unidentified 0-4-2T.OC jackshaft of which several photos exist.
- (d) 4369 could possibly be Victoria Mill 2 *Brisbane*, 2-4-0T. OC jackshaft.
- (e) 4667: W&J Lockett are usually associated with South America. Unless 4667 was found stamped on the loco restored by Bruce Macdonald, I do not know the source of information for its b/n. The plate it carries appears to be a modern replacement.
- (f) 4788: Sharpe Fletcher & Co. operated a mill at Navua, Fiji, opened c1883. At its sale in 1885 a2ftgauge JF loco was included - presumably 4788. If so, Victoria Mill 3 *Sydney* is unlikely to be the same loco as Labasa *John-O-Gaunt* which was 4788.
- (g) 4790 could well be Victoria Mill 3 *Sydney*.
- (h) 5020 could well be Victoria Mill 4 *Melbourne*. I personally am yet to be convinced that in the poor photo shown on p.3 of *LR 78* the number of *Melbourne* 1, not 4 (ie. it was always 4, not renumbered later)
- (i) 5032: since photos exist of an 0-4-0T with inclined cylinders and a 4-wheel JF tender at Goondi, these are presumably 5032 and 5207. A photo exists of Macknade 2, a similar loco, but without a JF tender, which could possibly be 5020 second-hand from Victoria.

I confirm all past references to 4680, 5164, 5469, 6070 and 6623 being locos are incorrect. Several unidentified early JF locos could, due to the agents involved, have come to Australia:

- 4020/1880 R Blackwood for Brooks & Co, Sydney. 7 x ?incyls. 0-4-2T.OC, 2ft 6in gauge.
- 4284/1881 Brooks & Co. 7 x ?in cyls, 2ft 6in gauge.
- 4445/1882 Brooks & Co. 7 x ?in cyls. tank loco, 2ft 6 in gauge.
- 4448/1882 Parbury & Co. 6 x ?in cyls. *Patent*
- 4529/1883 Parbury & Co. 5 1/2 x 9in cyls. *Patent*
- 4710/1883 W Sloane & Co. 6 x 9in cyls *Patent*
- 4711/1883 W Sloane & Co. 6 x 9in cyls *Patent*
- 4515/1883 Mirrlees Watson & Co. 5 x 8in cyls. *Patent*
- 5938/1890 Mirrlees Watson & Co. 6 x 10in cyls. 2ft gauge.
- 6338/1891 Merchant Banking Co ? x 10in cyls.
- 6339/1891 Merchant Banking Co ? x 10in cyls.
- 6340/1892 Merchant Banking Co ? x 10in cyls.

References

- (a) 4020,4288 and 4445 are all indexed under Brooks & Co. One of them is probably the JF 0-4-2 T. OC 2 ft 6 in gauge used on the Potts Hill reservoir construction, NSW.
- (b) Parbury & Co were agents for the Andrew Barclay locos imported by the AKOM Co, Joadja, NSW.
- (c) Mirrlees Watson & Co were suppliers of sugar milling equipment and equipped Sharp Fletcher's Navua mill, Fiji.

The list has, of course, identified several other Australian locomotives:

- 4370-4373/1882 Gt. Cobar Mining Co., NSW 5 1/2 x 9 in cyls *Patent* (2ft 6in gauge 2-4-0T. OC Jackshaft)
- 4631-4632/1883 Gt. Cobar Mining Co., NSW, 5 1/2 x 9in cyls *Patent* (2ft 6in gauge 2-4-0T. OC Jackshaft)

5154/1885 JF&Co Sydney for Trios. Saywell. 11 in, 0-6-0T.O.C, 4ft 8 1/2 in gauge "tramway" loco (T. Saywell's Rockdale Tmy/South Bulli Colly, NSW)

5006-1885

E. Keane. Class A 6hp geared loco (0-4-0WTG). Delivery to E. Keane, the well known WA contractor suggests that this must be the loco at Honey & Co's Lion Mill, Chidlow's Well, WA in 1895. See *LR* 78 p.20(The Bearpark Colliery geared locos, incidently, were JF2820, 2821/1876 and 5653/1888).

5341/1887 Sydney for MacBrair Osborn & Co, Mt. Pleasant Colliery. 5 x 9in cyls, 0-4-2ST.O.C, 2ft 10in gauge. Built to a very low height (7ft 0in wide, but with only 4ft 5in headroom in the cab)... the "low set" loco referred to on p.21 of Giff Eardley's *Transporting the Black Diamond*, Vol. 1

LONG TUNNEL EXTENDED MINE, WALHALLA, LR.78

Peter Medlin is more than likely correct in pointing out that Bagnall 1801/1906 was probably the second loco at the Long Tunnel Extended Mine. Bagnall records show it was ordered by Mussabini & Co (agents?) who had previously ordered Bagnall 1729/1904, another 2ft 6 in gauge 0-4-0ST. OC. This latter loco may well have also been at Walhalla as, according to CS Small, it was sold by Melbourne machinery merchants, Miller & Co., c1919 to E. Ellis for use at his sawmill at Baire des Pirogues, New Caledonia.

**Richard Home
Surrey, UK**

Ed. Bruce Macdonald confirms that the number 4667 was found on two places on the locomotive he restored.

SUNDAY IS JETTY, VIC. I enclose a print of a private guided monorail in Victoria. It is on the jetty at Sunday Island, off Port Albert. The island is owned privately by a group of shareholders, and the jetty was built by them around 1979. It is 400m long, with stringybark legs felled at Kinglake, and is the longest privately-owned jetty in Victoria (owners' claim - I have no verification).

To transport supplies in and out from fishing boat connections, the wire bin is used with a flanged wheel on the single guide rail, and a rubber wheel outrigger. The trolley is pushed out by a small tractor, and is towed back.

**RB Smith
Surrey Hills, Vic.**



The monorail car on Sunday Island jetty.

RB Smith

PERTH FIREWOOD SUPPLY COMPANY TRAMWAY, LR.76

Subsequent to completing the article on the Perth Firewood Company's tramway additional information surfaced concerning the use of G-class locomotives on the line. It seems that *Fremantle* was laid up out of service after the accident in 1920 as WAGR locomotives have been mentioned as working on the tramway. *Wickopin*, an ex-WAGR G-class, road number 52 (James Martin & Co. No. 116 of 1895) was hired to the Perth Firewood Supply Company by the Government Stores Department, and it is thought to have worked through until the closure of the tramway in March 1921. No. 52 returned to WAGR ownership in 1931 and was written off in June 1955.

I am forwarding copies of the reference material used for the preparation of the article on the Perth Firewood Supply Company for deposit in the LRRSA archives.

**LG Watson
Swan View, WA**

FIJI'S SUGAR TRAMWAYS, LR.77

Congratulations on *Fiji's Sugar Tramways, 1882-1982*, and many thanks for the copy of it - a most useful and interesting little book which we are pleased to add to our library here.

I am glad we were able to be of help as regards a few of the photographs.

Fergus Clunie
Director, Fiji Museum

ERICA TRAMWAYS, LR.79 In *Light Railways No. 79* on page 10, there is a photograph showing the FCV loco depot at Tyers Junction, supposedly in 1927. This date cannot be correct.

I base this assertion on the two cars in the foreground. Whilst the one under the shroud appears to be of 1920s vintage, its un-shrouded neighbour is of much later date, certainly mid 30s style, so I would suspect that the date of this photo is 1937, not 1927.

WA Pearce
Kensington, Vic



Hambledon Mill No. 1 waits at the mill for a rake of empties, July 1981.

Photo: Simon Frazer