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Rocky Point Sugar Mill Tramway

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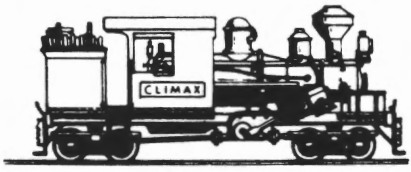

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CONTENTS

Light Railways is the journal of the Light Railway Research Society of Australia. The Society's members are undertaking research into the history of light railways in Australia and her territories. These include railways and tramways serving the timber industry, sugar mills and mines, construction tramways, industrial railways and narrow gauge passenger-carrying railways.

Articles, letters, book reviews, maps, photographs and drawings on topics of relevance to *Light Railways* are required for future issues. Comments on previous articles offering corrections or additional information are welcome for inclusion in our "Letters" columns. Written material should be typed with double spacing. Material should be sent direct to the editor.

Cover: Sugar tramways provide the theme for this issue. *Eudlo,* a Fowler 0-6-0T (B/No. 16207 of 1925) of the Moreton Central Mill, at the Nambour exchange sidings in August 1963.
Photo: Glen Johnston

25 YEARS

by Mike McCarthy, President, LRRSA

February 1986 marks the 25th Anniversary of the Victorian Light Railway Research Society, the organisation from which the LRRSA was to evolve. This Anniversary will be celebrated by special events in Melbourne over Easter, 1986. On such an important occasion it would seem appropriate to dwell on the milestones and achievements of the Society over the past 25 years. However, a comprehensive account of the Society's history, including a reprint of the first 12 issues of *Light Railways,* will be published early this year, so I will leave it to that publication to tell the full story. Instead, I would like to discuss some of the issues facing the Society and the objectives we should set ourselves in order to grow over the next 25 years.

First we must continue to increase our membership. The lifeblood of the Society lies with its members and without adequate numbers our magazines could not be published and research would not be fostered. An increase in numbers should result in more active researchers and will also assist to keep costs down.

A special effort should be undertaken to increase membership in states other than Victoria. This is not to say we do not want any more Victorian members; far from it! But, at the moment, membership is concentrated in Victoria where there is little light railway activity other than preserved lines and, in the near future, there will be few topics left to research. I do not believe I am overstating the case by saying the long term survival of the Society is dependent upon increased membership in other states where there is an enormous potential for research.

"Second Division" of LRRSA tour on the SECV's Rubicon-Royston 2ft gauge tramway, 7 May 1967. The incline is ¾ mile long, with an average grade of 1 in 3, steepening in places to 1 in 2. John Withers is pointing to the cable, and to his right is Mark Plummer, Secretary of the Society from 1966 to 1969. Mark was responsible for the publicity drive in 1966 which resulted in the Society's rapid growth. *LR.20,* pp. 30-31, has a report of the tour. Photo: F Stamford

In regard to the question of light railway research, the next 25 years will see the disappearance of one of the most important sources of information on many defunct light railways: the people who worked on them or lived close by. An important immediate aim should therefore be to interview these people while we still can. This applies particularly to Western Australia and Tasmania, both rich in light railway history, where little seems to have been done to record the recollections of people associated with the lines.

I would also like to see a comprehensive index prepared for *Light Railway News.* This may seem to some as being too narrow an objective, but *LRN* provides an important ongoing reference to light railway happenings and in the future it will be a vital source of material for articles published in *LR.* If only it had been around in 1886, a lot of unanswered questions related to the last century would have been resolved!

Light Railways has achieved a very high standard of which members can feel justly proud. This standard must be maintained and, if possible, improved upon. In particular, full referencing of articles should continue to be encouraged. Strong support should also be given for articles which not only tell about the railway, but also its impact on the environment in which it operated. This has been one of the strengths of *LR* in recent years and provides for not only a more complete and interesting narrative, but also dovetails our research efforts with others involved in related topics of historical research.

We need to continue to publish books containing definitive histories of light railways. In particular, we should explore means of attracting and successfully publishing manuscripts from all states, not just Victoria. I would like to see the Society publish one book a year as a general objective.

The Society has emerged from its first 25 years in a very healthy state. If the objectives outlined above are met, there is no reason why the next 25 years cannot be even more successful. All members can assist in meeting these aims, whether it be by signing up a new member, writing an article for *LR,* submitting news items to *LRN,* assisting as a council member, or maybe by offering to prepare an index for *LRN!* The success or otherwise of the LRRSA over the next 25 years is in your hands.

THE ROCKY POINT MILL TRAMWAY

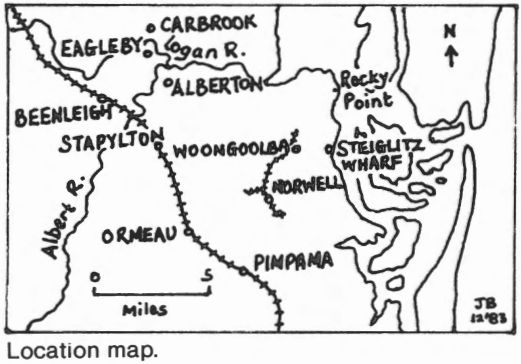
by John Browning

Introduction

Rocky Point Sugar Mill is unique in many ways. The only mill of the Beenleigh district, it remains the smallest in Australia. It is the only mill still owned by a proprietary company, controlled by the Heck family which first established it over a century ago. It is the only Queensland mill still operating which has completely closed its tramway system, but it shares with the Maryborough Sugar Factory, which has never had a tramway, the feature of an internal yard rail system without locomotives. (The New South Wales mills have closed their tramways and have completely dispensed with rail vehicles for cane haulage.)

Early History of the Mill

Carl Heinrich Heck, a grist miller by trade, was born in Prenzlau, Prussia (now in East Germany) in 1934. Like many other Germans in the troubled years of the mid-nineteenth century, he decided to emigrate, arriving in Australia in 1866. Settling near Alberton, in an isolated corner of south-east Queensland, he soon set up a grist mill, the first in



Location map.

the colony. However, within months he was also growing sugar cane, which was taken to the Rehfeldt sugar mill at Alberton for crushing.

In 1878, he moved south-east through the swamps to Rocky Point on the coast, where he is believed to have initially held 40 acres. In common with many

A loaded cane train arriving at Rocky Point from Norwell, 1 November 1947.
Photo: late KJC Rogers, courtesy ARHS Queensland Division

other small farmers who hoped to supplement the income they gained from maize, vegetable and rice production, he established a small sugar mill. The Hecks' first mill was a primitive affair which could only crush about one ton per hour. It was very much a family operation. There was just one set of 18 inch rollers fed by hand, and the juice was concentrated in open pans and stirred until the sugar could be crystallized, after which it would be discharged into tanks. The bagasse (waste fibre from the cane) was removed by hand in barrows, a task performed by the Heck womenfolk. The efficiency of the mill in extracting sugar must have been very low.

In 1886, the Hecks moved three miles south-west to Pimpama Island, near the area then known as Steiglitz (and from the time of the Great War as Woongoolba). The Hecks brought their mill with them, but in view of the primitive equipment and the increasing competition from northern millers, sugar milling was probably only marginally economic.

The survival of the sugar industry in the district was probably only possible because the many small millers diversified their activities enough to be able to cushion themselves from such crises as the virtual collapse of the industry at the end of the 1880s. As the sugar business only had to contribute a part of their income, it was possible to operate at a low level of return, or even occasionally, a loss. Even this level of success was only possible because of the family nature of the enterprise and the extremely long hours which family members were prepared to work. But not all mills escaped. In 1885, there had been 40 mills in the Logan area, by 1888 there were 18, and by 1900 only nine remained. One development aiding the survival of Rocky Point was the purchase in 1886 of the vacuum pan from W. Gibson's Clydesdale Mill at Hemmant (the Gibsons moved to Bingera, near Bundaberg). This was only the first of many purchases of second-hand equipment which helped

the mill to survive.

Some time shortly after the turn of the century, operation of the mill was taken over by Carl Heinrich's son, Wilhelm Henrich Heck. His determination to make the mill more economic was successful. CH Heck died in 1915 at the age of 81.

The Early 20th Century

A major change in the business took place when WH Heck was able to purchase the machinery of the Nerang Central Mill at Benowa, in the Gold Coast hinterland. This mill had been closed down by the Queensland Government, which owned it, in 1917. The price was a bargain — £5000 — probably because Heck was the only tenderer. The Nerang Mill was closed because it was not crushing enough cane to be economic. Needing 20,000 tons per annum, it struggled to maintain a figure of 7000 tons of cane. Closure forced its suppliers to turn to other crops, leaving Rocky Point the largest in the district with an annual crush of around 4000 tons, double that of its nearest rival. The new plant was erected at Woongoolba over a period of years, and on completion could handle 12 tons of cane an hour. In 1921, 5162 tons of cane were crushed, but in 1924, the figure had risen to 16,238 tons. The capacity of the mill had been increased to 40,000 tons, giving a reserve against future expansion of the crop.

The raw sugar produced at the mill in those days was placed in bags of 160lbs each and taken to Steiglitz Wharf on German Wagons (two-horse drays). From here it was shipped to the New Farm refinery in Brisbane. There was a short hand-worked tramway on the Steiglitz Wharf as well as a goods shed where sugar and other merchandise could be stored. The Hecks owned the boats which carried their sugar to New Farm. An early vessel was the 22-ton *Iolanthe* which made a twice-weekly return trip to the refinery, and was also used for moving the equipment from the dismantled Nerang Mill. Later the *Florant* of 50 tons was purchased. This vessel was sold in 1934.

Tramway Construction

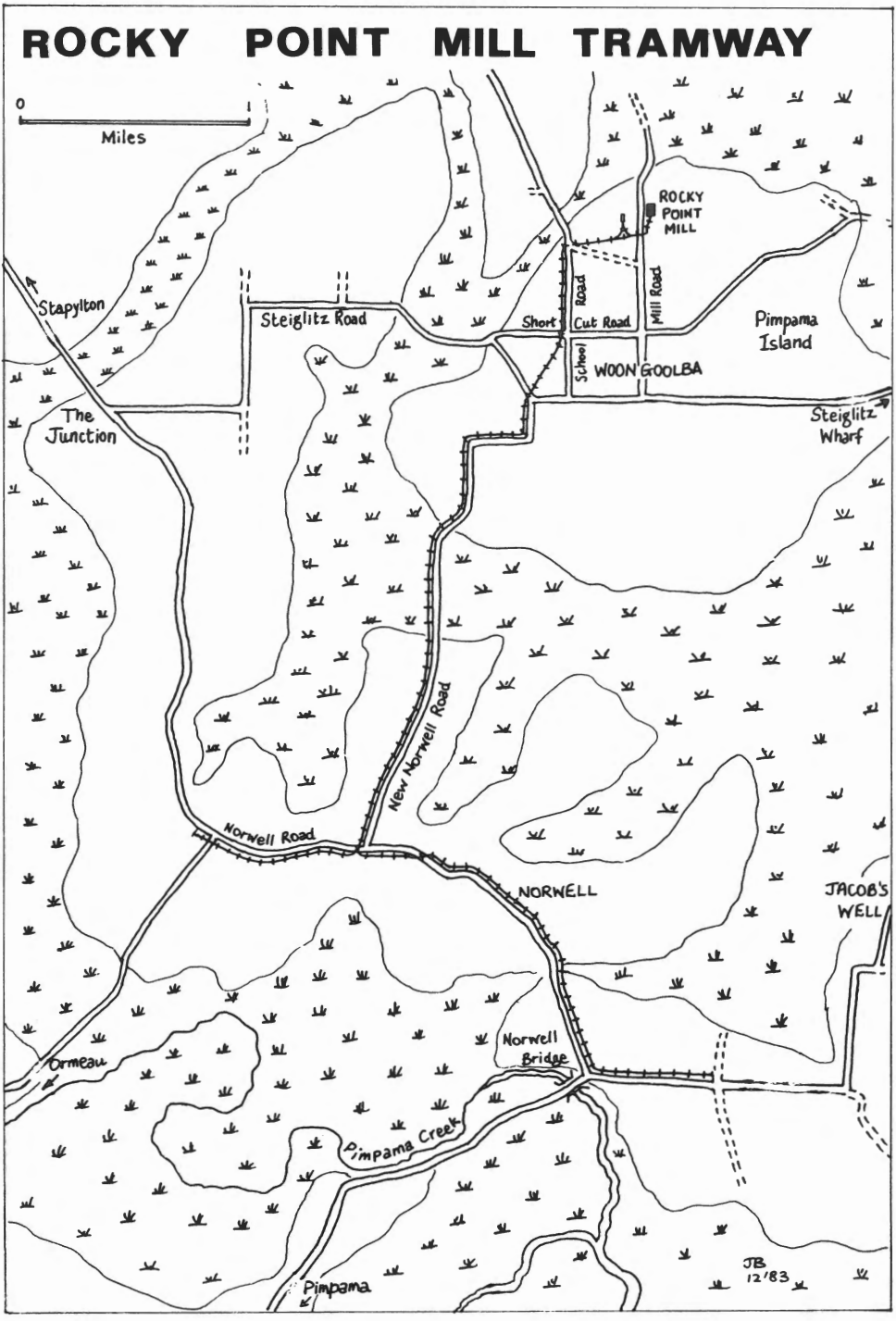
The purchase of the plant from Nerang came at an opportune time. In 1919, The Junction Mill near Norwell, sited at the junction of Alberton to Pimpama Island Road and Norwell Road was closed. The more efficient Rocky Point was able to absorb the cane from The Junction. By 1924, there were still four other mills operating in the Logan district, at Steiglitz, Alberton, Carbrook and Eagleby. These small mills gradually proved uneconomic and were closed down, the last in 1943.

The need to bring cane from Norwell to the mill at Woongoolba caused somewhat of a problem. The German wagons then in use were unsuited to crossing the swamp which lay between Norwell and Woongoolba, yet thousands of tons of cane had to be transported to the mill over the bad roads. The idea of a tramline as an answer to their transport problems was soon mooted by the Norwell farmers. Many mills in Queensland and northern New South Wales had locomotive-worked tramlines, some dating back to the 1880s; indeed the Nerang Mill had had a tramway system. Tramways were an economic answer to the need to transport large tonnages of cane through country where roads hardly existed, or where they could hardly be expected to handle heavy loads especially in wet weather.

The Nerang Mill purchase of 1917 had included the cane trucks and mill yard tracks and it had not been long before this equipment was utilised at Rocky Point. The trucks were in a poor state of repair and had to be reconstructed. Some track was laid near the carrier, and to lessen delays to the farmers delivering cane on German wagons, a derrick was erected so that after weighing, the cane could be unloaded and placed on cane trucks to await manhandling to the mill as required.

It was probably this use of tramway equipment at the mill which in 1922 prompted a group of farmers at Norwell and Pimpama to approach William Heck and ask him to build a tramline from the mill to Norwell. However, it was clear to Heck that a considerable increase in cane from the Norwell area would be needed to justify the cost of even a modest tramline. An assurance was sought from the Norwell farmers that in addition to the 176 acres of land already under the plough, 600 additional acres should be brought into cane by 1923. This was agreed to.

In considering the best route to be followed, there was little question that the best possible route would be along the roadside. At this time, much of the district was subject to tidal inundation, and an expanse of salt marsh and swamp lay between Woongoolba and Norwell. The road followed slightly higher ground but even so was subject to flooding in wet weather. It crossed the swamp at its narrowest point south-west of Woongoolba by a causeway a few hundred yards along. A proposal for the tramline to run along the road reserve was therefore put to the Beenleigh Shire Council. Apart from the prosperity which the sugar industry brought to the district, the Council saw that the tramway would lessen the wear and tear on council roads. It



was also pointed out that the tramway might be of assistance for conveying materials needed for road maintenance work. The necessary Order was approved by the Governor-in-Council in March 1923.

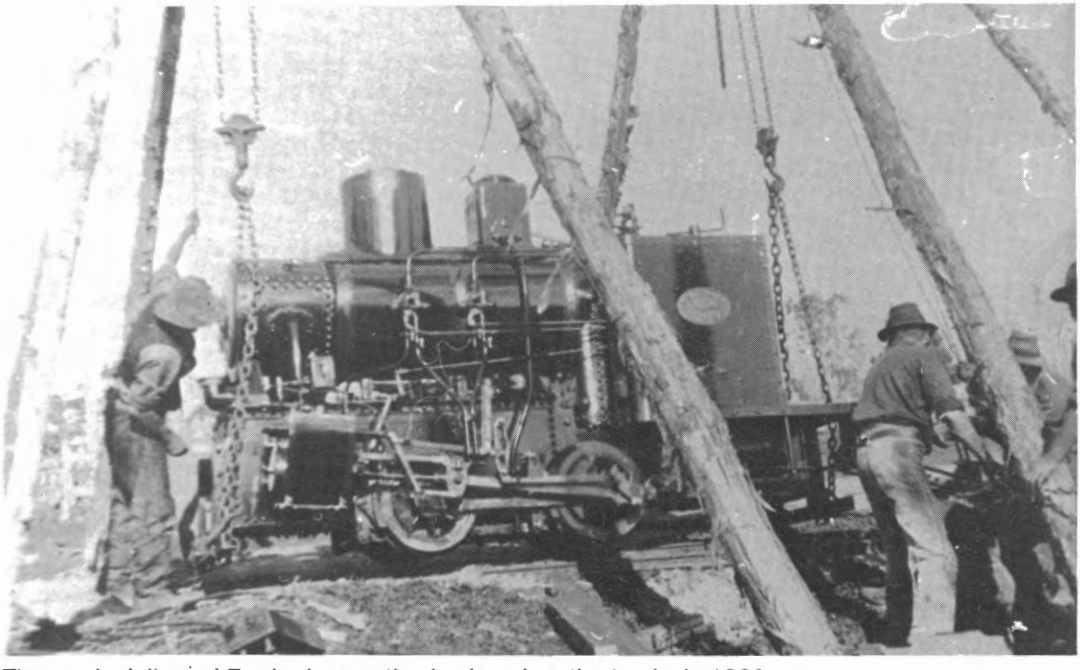
Construction proceeded during 1923, supervised by Shire Engineer Muntz. Labour was provided by local farmers, organised by the mill under the direction of Hermann Zornig. The sleepers were cut at the Heck's sawmill adjacent to the mill. As built, the line followed the road for most of its length, a distance of 3¾ miles, with a branch of 1½ miles.

A special ceremony marked the opening of the tramline by JG Appel, MLA, on August 16th, 1924. The Chairman of the Beenleigh Shire Council, Mr BG Peachey, stated that he had first suggested the possibility of such a line ten years before and expressed his hope that following the completion of the "first section of the line", it would before long be carried through to the South Coast Railway. This statement suggests that the Shire Council and mill owners had differing ideas of the purpose of the line. It is possible that the designation of the section to Norwell Bridge, the furthest point from the mill, as a "branch line" was partly to reassure the Shire Council that the shorter section of "main line" would be continued in the direction of Ormeau Station.

The Route

The northernmost part of the line was at the cordwood stack to the north of the mill and a line ran along the east side of Mill Road to connect it to the rest of the tramway. Two lines served the carrier, with loaded trucks entering by one line and a simple traverser being used to transfer the emptied trucks to the parallel line. There was also at least one storage siding in the mill yard proper. A single track crossed Mill Road to enter the mill yard, although it appears that a second track was in use in latter years.

After crossing Mill Road, the line passed on the right the weighbridge, weighbridge loop and the turning triangle, on the apex of which stood the loco shed. The line ran directly west for about 20 chains across an open paddock with swampy ground and trees to the north. On arriving at School Road, it crossed it and turned to the left to run along its western side in a southerly direction for 30 chains. Upon crossing Short Cut Road at its intersection with School Road, the tramway diverged from the road to run in a south-westerly direction for 25 chains, running behind Woongoolba State School, and cutting the corner of the road on which it stood. Emerging opposite New Norwell Road, it crossed



The newly delivered Fowler locomotive is placed on the tracks in 1923.
Photo: George Bond collection

Empty trucks stored near the mill, 1947. Photo: late KJC Rogers, courtesy George Bond

Steiglitz Road, the main street of Woongoolba, and ran along the western or right hand side of New Norwell Road. This side of the road was followed for its entire length, turning sharply to the right and left a couple of times as the road described a number of doglegs. Almost two miles from the mill, the swamp was reached. Today the road crosses a major drain here, and much former swamp land has been put under cane as a result of the land reclamation schemes of the 1960s. The area was timbered with ti-tree but today the landscape is generally featureless with the exception of occasional stands of trees indicating the whereabouts of the remaining wetter areas.

After a while, the wooded hills beyond Ormeau loom ahead and, three miles from the mill, Norwell Road is reached at a T-junction. Here the branch to Norwell Bridge struck off to the left, but the main line turned to the right. It crossed Norwell Road and ran along its southern or left hand side and around a few bends with the hills now to the left, until about 3¾ miles from the mill, Eggesdorf Road was met on the left. Just beyond here was the terminus, marked today by a slight widening of the road formation.

The branch line ran from its junction along the south side of Norwell Road for about 10 chains before crossing to the northern or left hand side on a curve. The road and tramway wound along through the settlement of Norwell keeping to the higher ground all the way for 1½ miles until the T-junction with the Pimpama — Jacob's Well Road was reached. Just to the right was Norwell Bridge, where Pimpama Creek was crossed by the road. At first, the terminus was at this road junction, about 4½ miles from the mill. Within a few years however, an extension was laid along the northern side of the Jacob's Well Road for about half a mile to the junction with what is now called Skopps Road.

The tramway was practically level for its entire length, and the only features of note apart from the crossing of the swamp on New Norwell Road were the occasional culverts where drains were crossed. There were a number of sidings, at each terminus, and to serve the various farms around Norwell.

The track was laid on the ground along the side of the road reserve using light rail of about 20lb per yard and with a generous sleeper spacing. Thus it

was not to prove particularly well suited to withstand the fairly frequent flooding which saw sections of the track periodically submerged.

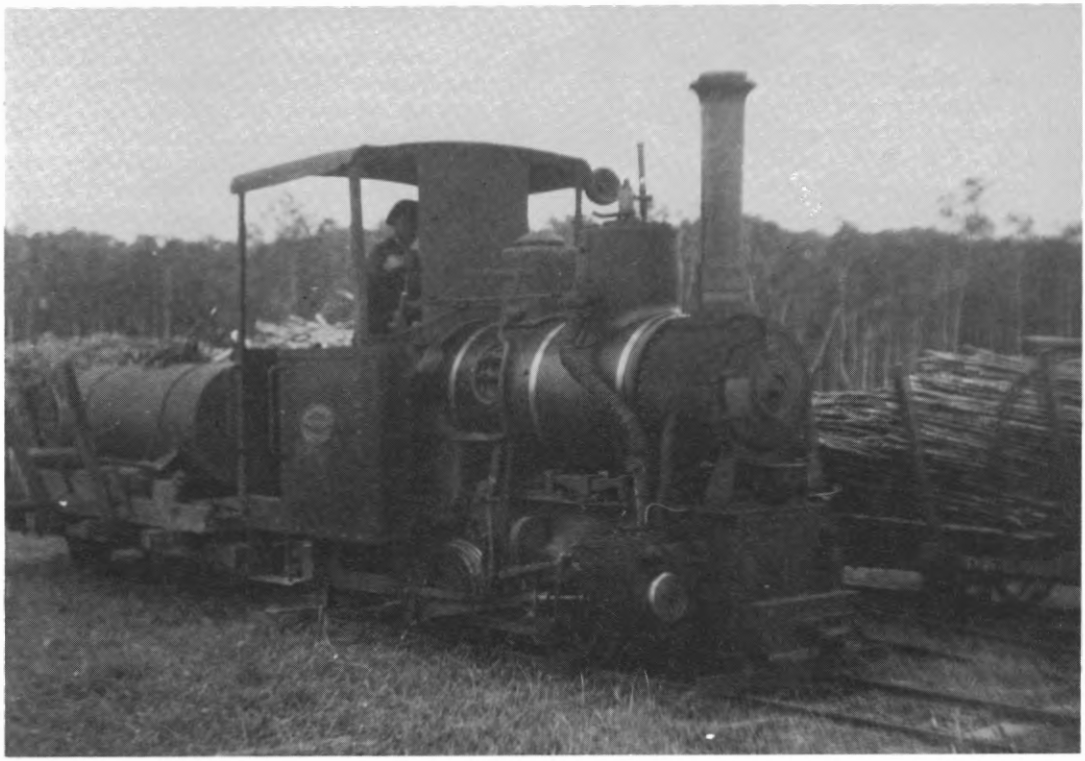
Operating the Tramway

When the tramway began operations, the mill only worked for one shift per day. However, within a few years two shifts per day were introduced and tramway operations settled down to the pattern that was to continue for the rest of the line's existence. The morning shift came on at 6am, and after preparing the loco and making up a rake of about 20-25 empties, a train was ready to leave for Norwell at about 7 o'clock. A leisurely trip was made, with empties being delivered and fulls collected from the sidings. The trucks were loaded by the farmers who brought the cane bundles weighing about 2½ tons each to the siding on German Wagons. Only one farmer, Charlie Berndt, used a spur line onto his property and portable track, thus enabling his cane to be loaded onto the trucks infield, the usual practice at many other mills. The cane train arrived back at the mill about midday and a second trip was made, this time along the branch past Norwell Bridge.

Upon arrival at the mill, the loaded trucks were stored in a siding near the weighbridge until required. Then the trucks were rope shunted over the weighbridge by the loco running on a parallel track. At the time there was only one track across Mill Road, the trucks were also rope shunted across the road. The approved method was for the loco crew to get up speed and then to "pull the pin" on the loco before a collision took place at the point where the tracks converged. The rake of trucks was thus propelled across the road in rapid style, to the peril of any road traffic. It was encouraged for this operation to be carried out during the hours of darkness wherever possible, on the theory that at this time there would be no road traffic to collide with. Apparently there never was a serious accident, although there were probably some near misses!

The loco shed was on the west side of Mill Road at the apex of a turning triangle. It was a small corrugated iron shed and outside was a timber coal bunker. Coal for the loco was brought by rail to Ormeau Station and then carted by road. Repairs were done at the mill, usually by the loco driver. There is some suggestion that the locomotive may have been sent to the Brisbane works of Sargeants for heavy repairs on one occasion, but this has not been confirmed. The first loco driver was Ernst Giegold who had previously worked at the Carbrook

The locomotive shunting near the weighbridge, November 1947. This photo appears to indicate that, in later years at least, there were two tracks across the mill road.
Photo: late KJC Rogers, courtesy George Bond



In 1947 it was expected that the locomotive be kept clean, as evidenced by the polished boiler bands and the sheen on the boiler cladding. Photo: late KJC Rogers, courtesy George Bond

Mill and later became Engineer at Rocky Point.

Apart from cane, the tramway was used to bring in cordwood for the mill from Norwell but most of the wood fuel was carted to the mill on German Wagons. It appears that no trains were run for passengers except the one which operated on 16 August, 1924 when the locomotive collected the Norwell farmers and brought them to the mill for the opening ceremony. One incident worthy of mention took place in the 1930s, when the locomotive became derailed and tipped over onto its side, apparently while involved in a "race" with a motor truck along New Norwell Road.

The periodic flooding of the line in this area was a serious problem causing deterioration of the track which called for continual maintenance. Derailments were specially common on the sharp curves on New Norwell Road. These problems became particularly bad after the Second World War when the then proprietor remembers being called out to render assistance to derailed trains, fairly frequently, and at all hours.

Rolling Stock

It is very unlikely that consideration was given to using anything other than a steam locomotive on the new tramway. It must be said that a small petrol locomotive would have been very suitable for the work. However, the first really successful petrol locos used on sugar tramways in Australia had only left England early in 1922. These were two *Simplex* locomotives slightly larger than some used by the British Army in France during the Great War, and it is unlikely that news of these had filtered through to the remote and obscure swamps of the Logan.

In any case, it was a steam locomotive that was ordered from England. The supplier was John Fowler & Sons (Leeds) Ltd., who built many locomotives for Queensland cane tramways. Allocated builder's number 16249 of 1923, it was one of Fowler's smallest locomotives to come to Australia, with two cylinders only 5½ inches in diameter by 10 inch stroke, and four driving wheels 20 inches in diameter. Water was carried in a well tank between the frames. Above waist level, the cab

The loco shed at Rock Point mill, 1947. Photo: late KJC Rogers, courtesy George Bond

was merely a canopy on four supports with some extra protection being provided by a steel plate about 2 feet in width extending from the top of the firebox to the cab roof. A tall tapered chimney with brass camp was fitted, and a square sandbox behind the steam dome deposited sand on the rails between the driving wheels. Nominally of 18 hp and with a tractive effort at 75% working pressure of 2040 lbs, the diminutive locomotive carried 85 gallons of water in its tank and in working order weighed 5.4 tons.

During 1923, the locomotive was brought from Steiglitz Wharf, where it had been unloaded from Heck's vessel *Florant,* in a crate on a large horse-drawn wagon. It was painted black with brass boiler bands. The fuel and water capacity were found to be rather limited even for the small Rocky Point tramway, so this was increased by the provision of a small tender made by placing a cylindrical water tank on a cane truck chassis. Arriving before the tramline opened, the loco was probably used in the latter stages of construction.

There were about 100 cane trucks and it appears that those obtained from Nerang Mill formed the basis of the Rocky Point trucks, which were constructed at the mill. However, the cane was loaded longitudinally, rather than the transverse loading used at other mills. This meant that the Rocky Point trucks were quite different in design from the usual pattern and had four sloping stanchions at each side to cradle the cane. This had the advantage of preventing cane dragging along the ground, a curse to handling at other mills. However, the trucks were longer than the normal type and the overhang tended to contribute towards derailments on sharp curves.

Rocky Point used a much more slender "loading gauge" than that used by other mill tramways where locomotives may be up to 7 feet wide, and the whole stalk cane loaded transversely on the trucks was sometimes wider still. The Rocky Point loco was only about 4ft 6ins wide and the trucks were narrow because of the longitudinal loading. It has been suggested that this was necessitated by the roadside nature of the line, but it appears that longitudinal loading was used on the mill yard

tracks before the tramway was built.

Decline and Closure

The Rocky Point tramline was never extended to serve other parts of the mill area, to connect with the South Coast Railway at Ormeau nor the Steiglitz Wharf. So the expectations of the Beenleigh Shire Chairman, expressed in 1924, for a local developmental line linked to the main line railway system were to remain unfulfilled. In fact most of the cane not grown at Norwell had only to travel a short distance to the mill and there was little demand from the farmers for other tramlines. Cane to be sent by tramway would have to be transferred by hand winch to German Wagons at the siding, an inconvenient and time-consuming procedure. In any case, it seems probable that mill owners and growers alike would not have been prepared to invest the capital required to develop a more comprehensive tramway system. The small amounts of cane involved, comparatively speaking, could be handled well enough by small-scale motor transport which would link the canefield directly with the mill yard.

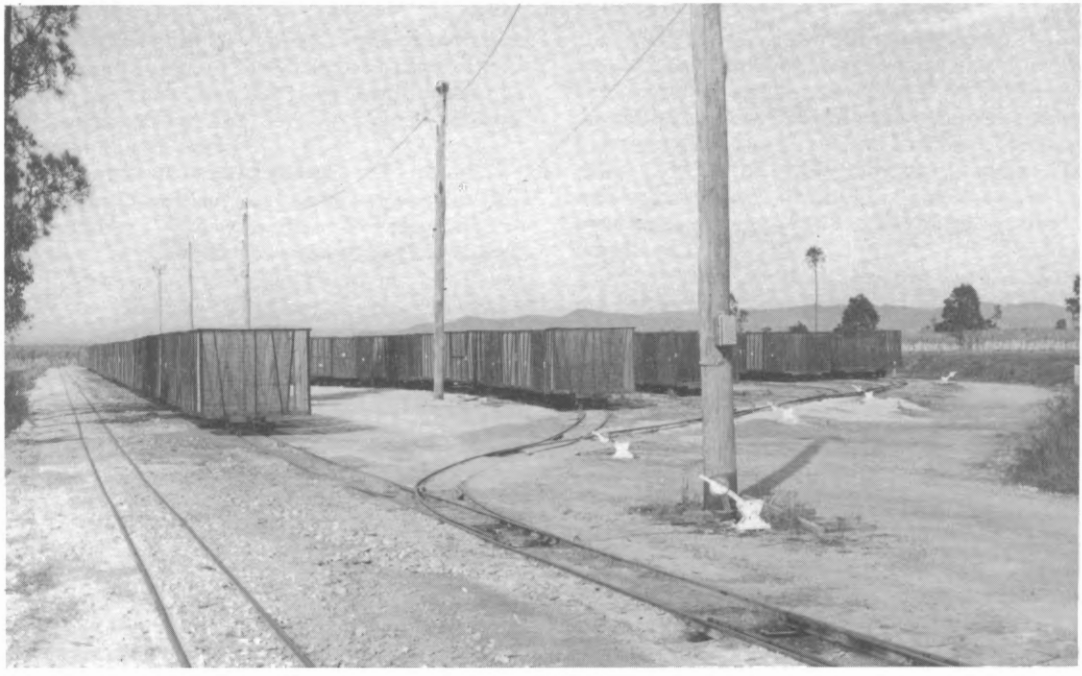
By the late 1940s, the continuing toll of flooding of the line and arrears of maintenance meant that derailments became more common. The Norwell farmers could now take advantage of improved motor transport and better local roads. In 1951, the tramway closed, little lamented, and to the relief of mill management.

Most of the track was lifted and sold, but not until some had been collected from a roadside stack by thieves who were apprehended when they tried to sell it to the mill's scrap merchants! The loco was also sold, but the trucks and some rail were retained for future use.

Developments at the Mill

Rocky Point Mill continued to develop during the period of the tramway's operations and since. In 1932, WH Heck & Sons Pty. Ltd. was set up to run the business. William Heinrich Heck died in 1944 and Frank Heck took over the management of the mill. The present General Manager is Frank's son, William M Heck. Second-hand machinery has been judiciously acquired at very economical cost. In fact it was the proceeds of the sale of the tramway rail which enabled the acquisition of equipment following the closure of the Mount Bauple Mill, near Maryborough. Further purchases were made from the Gin Gin Mill following its closure in 1974.

When the Peak Scheme for sugar production was introduced in 1929, the mill's peak was 1777 tons of sugar. By 1953, it was 3200 tons, and in 1961 it was 6000 tons. The industry has gone through



The new mill yard was constructed in 1979 to cope with increasing tonnages. Photo: Author

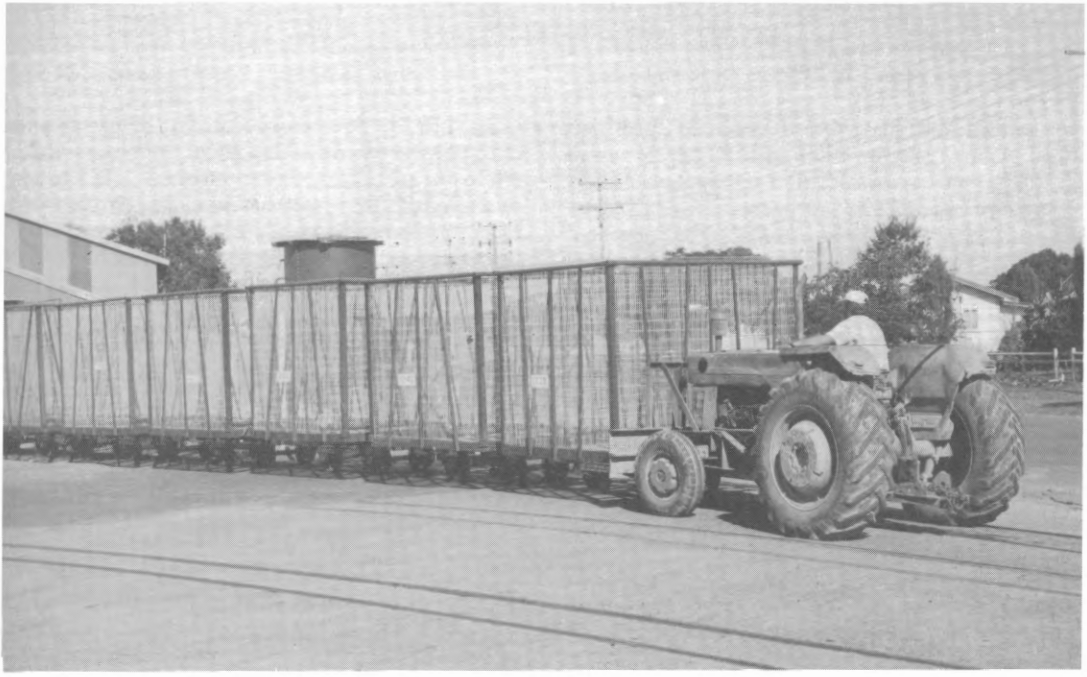
successive expansions since then, and Rocky Point has been able to share in this because of the development of drain and flood gate schemes through the co-operation of mill, Shire Council and State Government. This brought previously useless land under cane so that by 1965, the peak was 20 000 tons. In 1980, the figure was 34 500 tons. The 1924 crushing rate of 12 tons per hour has risen more than proportionately, and in 1982 was 150 tonnes per hour.

Contemporary Tramway Operations

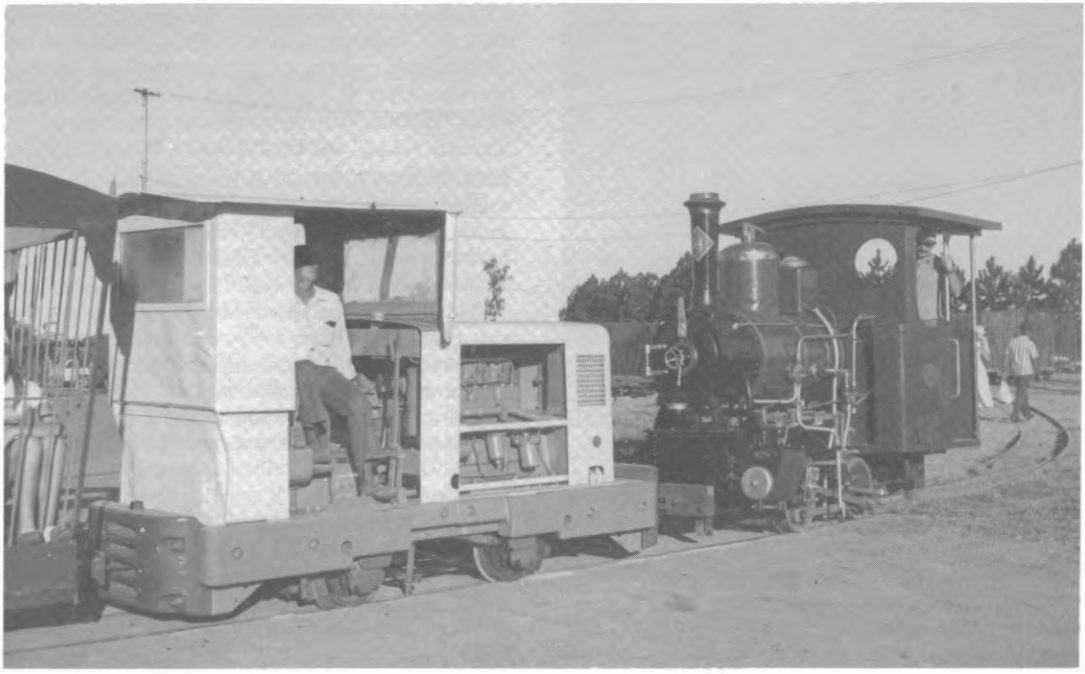
Even after the closure of the tramway, an interesting feature of the cane handling arrangements at Rocky Point has been the fact that tramway operations have continued in the mill yard. Some cane continued to be unloaded from road transport vehicles onto cane trucks on arrival at the mill yard. During the 1950s, the old derrick used for this purpose gave way to a gantry hoist obtained from Mount Bauple Mill. A few years later, some farmers began to carry loaded trucks to the mill on lorries and place them on the rails at the mill yard. This step necessitated the introduction of the conventional transversely loaded design of truck, and numbers of small wooden trucks were purchased second-hand, mostly from the Bundaberg district. A new mill yard was laid out in loop configuration to the south of the mill to cater for the increasing amounts of cane handled in this way.

Today, cane bins, in use by 1968, are used. They are carried on semi-trailers to the yard, and on arrival are winched onto the rails, in effect enabling cane to be stored until required. This system enables the mill to have a 24-hour cane supply without tying up expensive road vehicles awaiting to discharge cane. The cane is tipped from the bins into the carrier in a manner similar to that seen at mills which operate a full tramway system. However, there is no locomotive, and the shunting of the bins is done by tractors. Farmers generally use holding sidings at their loading points. 3 and 4-ton bins are used and user farmers have been levied to pay for the recent construction of these bins on the steel chassis of older second-hand vehicles. There are now more than 800 bins in use. The only other rolling stock consists of a few trucks cut down for the movement of heavy equipment such as mill rollers around the workshop and mill area. All but a few farmers deliver their cane in rail bins, while the remainder is delivered by a container "multi-lift" system and is tipped direct into the carrier.

For the 1979 season, a new large reception and holding yard was laid out to the south of the old yard. This development is designed to overcome



The 'yard shunter' moves a rake of new bins constructed on second-hand underframes, 1981.
Photo: Author



The Rocky Point Centenary celebrations. The ANGRMS Ruston and the Fowler make acquaintance, April 1979. Photo: Author

the problems of congestion which had occurred as tonnages increased. The old electric hoist, still used by the bin repair crew, has given way to a neat line of loading docks. The new yard alone contains about a mile of track.

The Centenary and After

The mill's little Fowler engine was sold in 1951 to machinery merchants Beier & Ridgeway, but pending the finding of a buyer, it sat in the loco shed for many years and was not removed until after October 1961. It appeared briefly at Pleasure Island, a tourist attraction near Southport, before being placed on display, painted yellow, at Gilltrap's Auto Museum at Kirra Beach. The locomotive was brought back to Woongoolba, on loan, in 1976, and was restored by employee Tom Hurley at the mill. Unfortunately, years of neglect made its repair to steamable condition prohibitively expensive. The loco was restored in a dark green livery with brass boiler bands. A cab was fitted rather different in design from the original.

This restoration was done to coincide with the mill's Centenary, to be celebrated on April 21st, 1979, so the fact that it could not be steamed was a matter for some disappointment. Tom Hurley began work on a four-wheel "tender" with a petrol engine which was to provide motive power for the steam loco. However, a more appealing solution was found when it was decided to invite the Australian Narrow Gauge Railway Museum Society to bring their 7-ton four-wheel Ruston & Hornsby diesel (279567 of 1949) to the celebrations. The loco had come from Rocky Point's closest surviving neighbour, Condong Mill in New South Wales. Newly painted in its original livery at Condong (cream with apple green ballast weights and red buffer beams), it was used in the middle of a train of which the other vehicles were the Fowler and a primite four-wheel vehicle originally built for a tourist attraction, Children's Adventureland at Samford. Passengers were carried a distance of one kilometre to the bottom of the mill yard and back. The Ruston & Hornsby diesel was soon after moved to the Durundur Railway at Woodford.

The mill naturally wanted to retain the Fowler, but its owners insisted that it had to be returned to display at Gilltrap's Museum. Eventually, an agreement was reached whereby the Fowler would be displayed under cover at the museum, and the other cane loco at Gilltrap's would be sent to Rocky Point for restoration. In December 1979, the exchange was effected and Hudswell Clarke 0-4-

The Fowler on display at the mill in 1981.
Photo: Author

2T *Maroochy* (1078 of 1914) arrived at Woongoolba. This loco had no connection with the mill, having worked at Moreton Mill, Nambour. Tom Hurley soon had it stripped down, revealing that it was in worse condition than the Fowler had been. There was talk of converting it to a tender locomotive. A visit at about this time also revealed that the 4-wheel petrol locomotive which had originally been intended as the motorised tender for the Fowler was still "under construction".

Unfortunately, little progress was made with the restoration of *Maroochy* after Tom Hurley left the mill in 1980, and it was sold as scrap in 1981. Fortunately, its dismantled remains are still in existence in private hands at Redbank Plains, near Ipswich. However, the little Fowler had such a pull on the Hecks that "their loco" was eventually purchased from Gilltrap's Museum in 1981 and was placed on display in an area planned to be developed as a historical precinct. However, this did not mark the end of its travels. Early in 1984, it arrived on loan at "Dreamworld", a tourist development at Coomera, between Woongoolba and the Gold Coast, where a 2ft. gauge steam railway operates. Here the Fowler was put on open display with a "dummy" driver, coupled to a log bogie on the "sawmill siding" adjacent to Rocky Hollow Station.

List of Sources

Australian Sugar Journal: Oct 1922; March 1923; Sept 1924; Nov 1971; Feb 1976.

Brisbane Courier: 16/2/1923; 19/3/1923; 18/8/1924; 22/8/1924; 2/7/1927.

Sunday Mail: 23/1/1972.

Courier-Mail: 5/1/1973.

"Rocky Point Sugar Mill Tramway" by K. Rogers in *Australian Railway Historical Society Bulletin* No. 121, November 1947.

"Australian Sugar Tramways: The Challenge of the 1980s", by I.R. Crellin *Light Railways No. 66,* October 1979.

"Valiant Heritage" by Murial Langford, "Lone Survivor" by Malcolm I Thomis: in *Rocky Point and the Heck Family: 100 Years of Sugar Milling in SE Queensland.* Published 1979.

The Story of the Steam Plough Works by Michael R. Lane, 1980.

Light Railway Machinery, Locomotives, John Fowler & Co (Leeds) Ltd., 1926. Reproduction Catalogue: Industrial Railway Society, 1972.

Photographs (and many of the above written sources) in the collection of George Bond.

Interviews with Frank Heck, Vera Heck, Tom Hurley and George Bond.

Acknowledgements

The author would like to express his thanks to all those who assisted with the preparation of this article including George Bond, David Mewes, Ray Ellis, Tom Hurley, David Bailey, Paul Simpson, John Kramer and especially Frank & Vera Heck. Special thanks are also due to my wife Anne for her forbearance and encouragement.

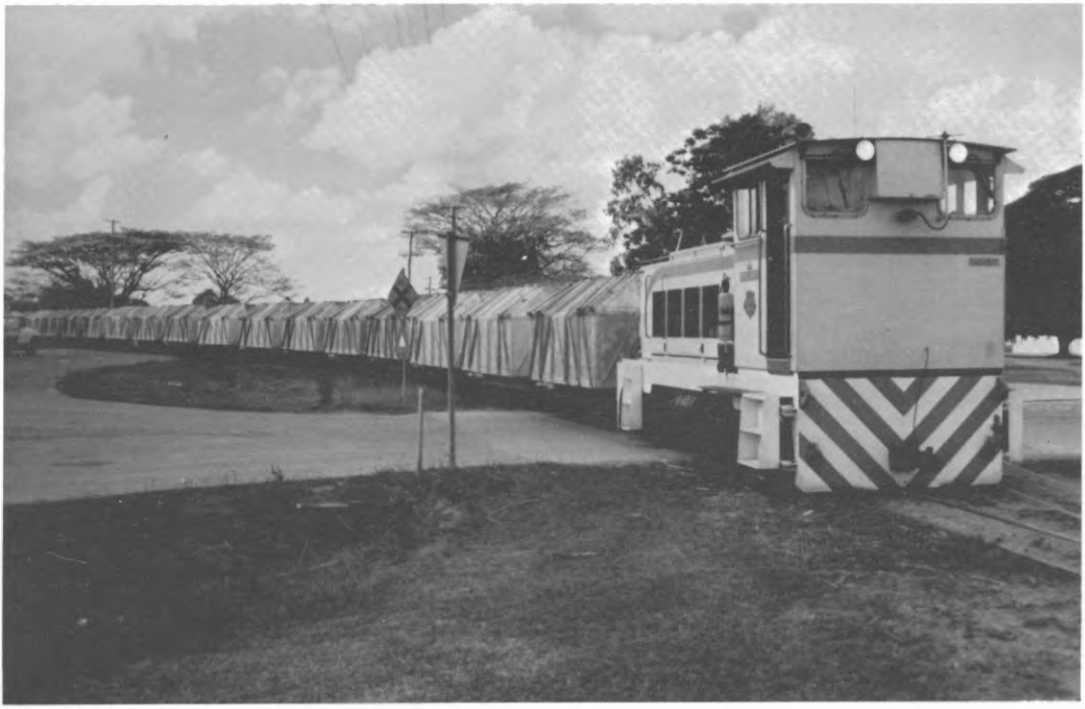
PHOTO SECTION - SUGAR TRAMWAYS

The Australian sugar industry, in common with those of other tropical countries, faces a major crisis as changing dietary habits and the policies of European governments have forced prices to record lows. Many farms and sugar mills have been forced to close and only the most efficient producers have been able to maintain production. An important contributing factor to the efficiency of the Australian sugar industry has been continued research and development, with subsequent investment in the tramway systems enabling reductions in transport costs.

LRRSA member John Kramer, travelled from Ayr to Mossman in August 1985 and photographed a fine selection of different types of cane locomotives for this section, while John Browning has provided the captions. Additional photographs have been provided by the Sugar Research Institute and Mossman Central Mill.

This Motor Rail *Simplex* 4wDM (10232 of 1951) was heavily rebuilt at Macnade Mill a few years ago. Here it sits outside the navvies depot on August 27th, equipped with appropriate tools and ready to handle tomorrow's maintenance train.

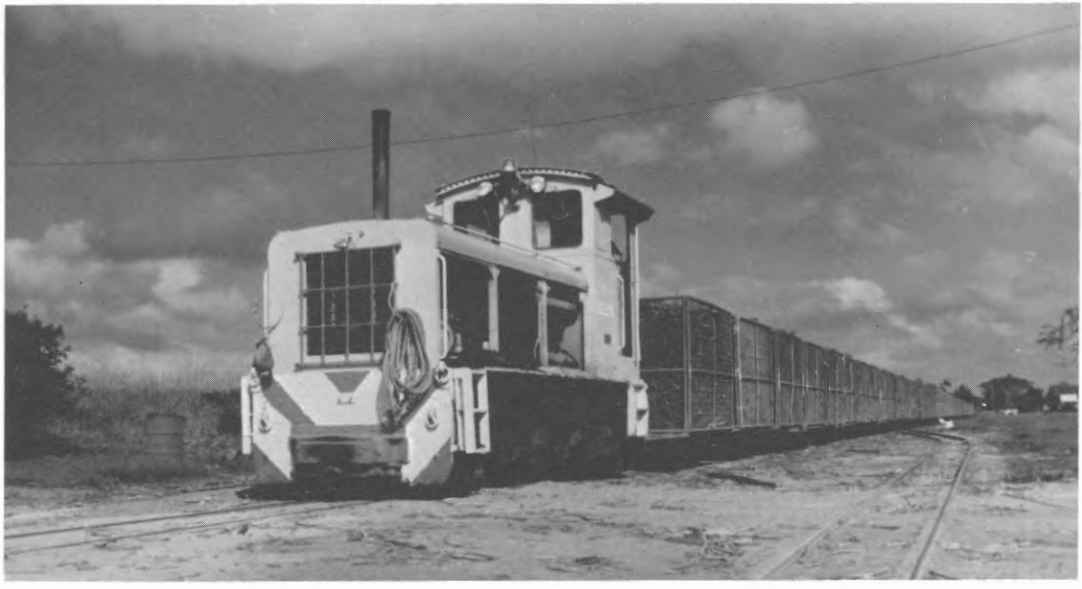
1067mm gauge Walkers 0-6-0DH (B/No. 583 of 1968) propels bins into the full sidings at Pioneer Mill on 30 August 1985. This locomotive was originally supplied to the Aramac Shire Tramway.



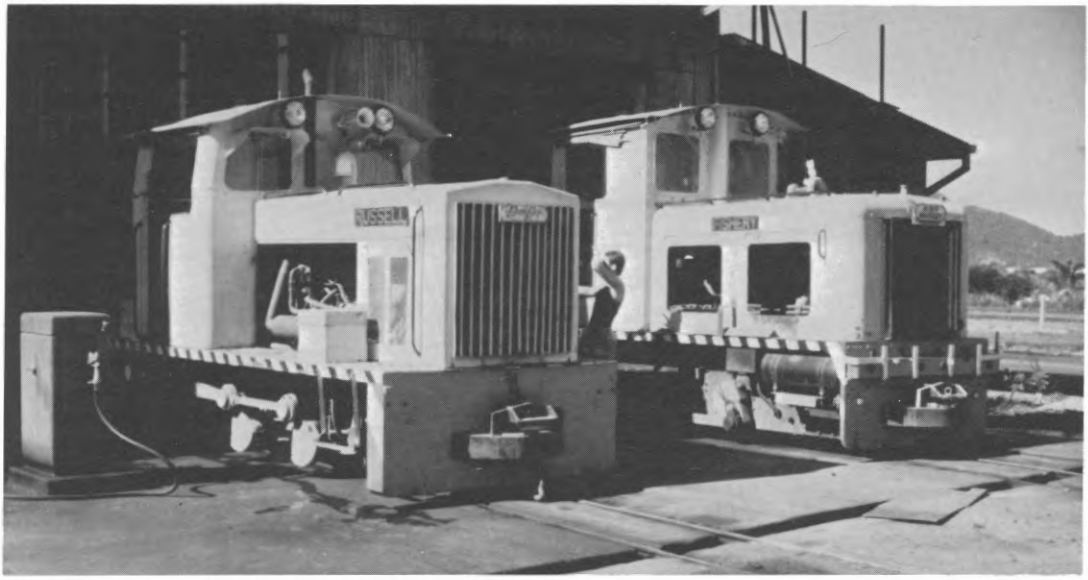
Victoria Mill's EM Baldwin B-B DH *Wallaman* (6400-3-4076 of 1976) returns to the mill with empty sugar boxes from the bulk sugar terminal at Lucinda Point on August 28th. This locomotive has been the regular "sugar locomotive" since its delivery.

Mourilyan Mill No. 7 shunts bulk sugar boxes in the mill yard on August 23rd. This 0-6-0DM was built by Commonwealth Engineering (AJ2359 of 1962) for the Queensland Railways Innisfail Tramway, but has been rebuilt by Mourilyan as a diesel hydraulic. Both loco and rolling stock were acquired from the QGR in 1977.

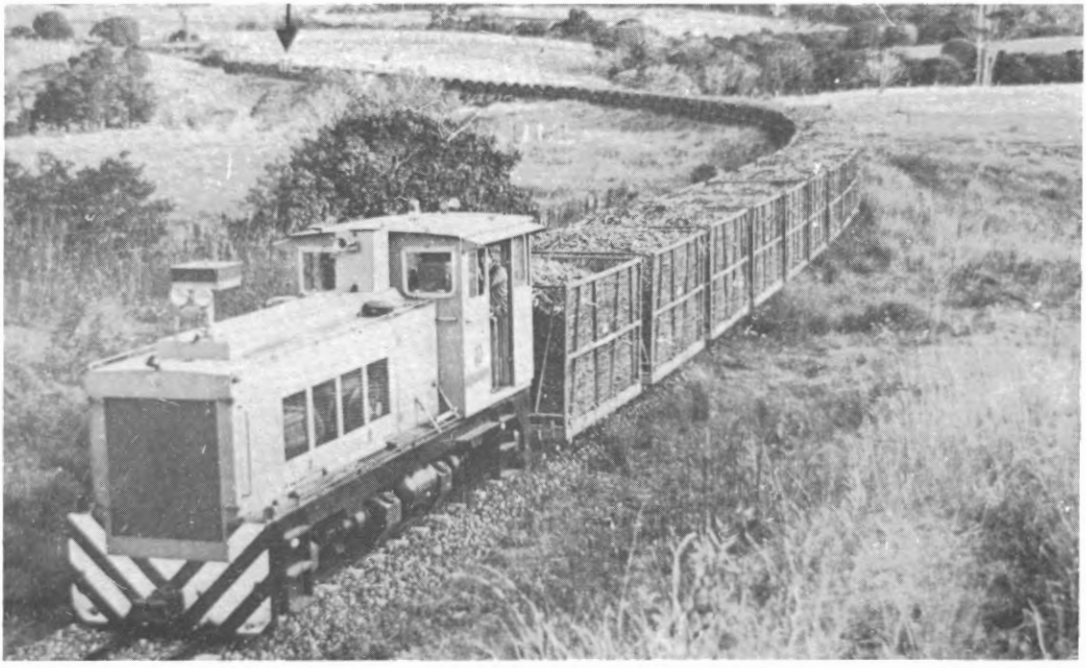
Hambledon Mill number 8, a Clyde HG-3R 0-6-0DH (64-379 of 1964), pauses near the Cook Highway north of Cairns on August 21st. It is fitted with a low-profile cab for working under a low QGR bridge at Redlynch. Behind is a remotely-controlled brake wagon used at the end of the loaded rake on the return journey to the mill.



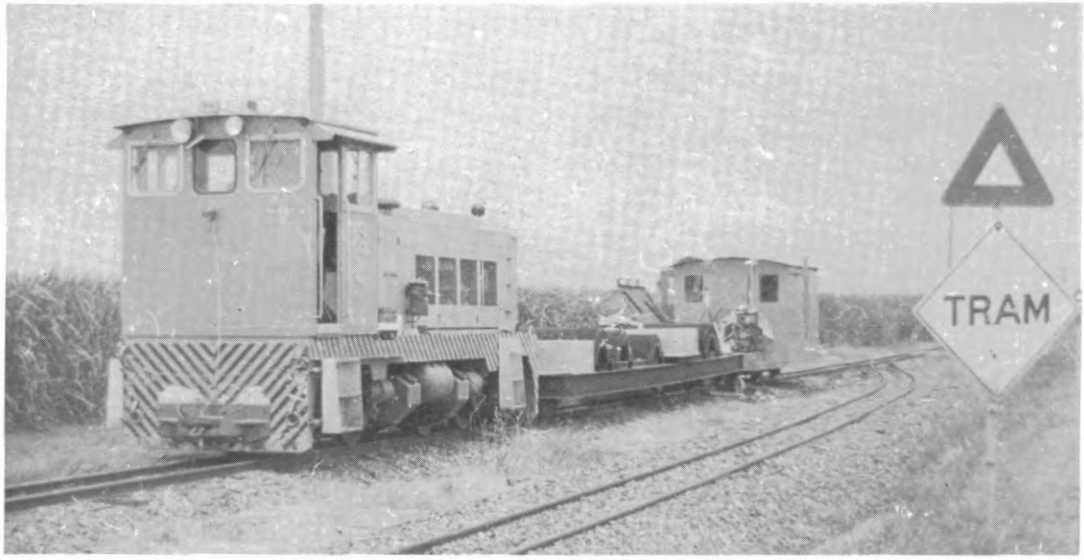
Victoria Mill's *Victoria* hauls a rake of cane towards the mill yard on 28 August. This Drewry 0-6-0DM was built by EE Baguley & Co (2404 of 1953) and was originally supplied to Hambledon Mill for comparative trials with a Hudswell Clarke 0-6-0 steam locomotive.



Mid-afternoon shadows lengthen as two Babinda Mill locomotives rest outside the loco shed. *Russell* is an Australian-built Commonwealth Engineering 0-6-0DM (A2027 of 1958) and *Fishery* a British-built Baguley 0-6-0DM (3387 of 1954), but their common ancestry is evident in this photograph.



A long bogie double consist cane train with a slave locomotive near the centre of the train (arrowed) was used in tests conducted by the Sugar Research Institute between 1975 and 1977. The photograph is believed to have been taken while testing on the Farleigh Mill tramway, near Mackay.
Photo: Sugar Research Institute



The suspension system being developed by the Sugar Research Institute for design of a large 20-tonne wagon for cane railways was fitted to a skeleton wagon tested under operating conditions on the Marian Mill tramway, near Mackay. Photo: Sugar Research Institute

Tourism is seen as a potential source of revenue by some sugar mills. Mossman mill's *Ballyhooley* express was a pioneer in this field. Here the crew — Kevin Jarred, John Scally and Jenny Watson — ready Bundaberg Foundry 0-6-2T (B/No. 6 of 1952) for another journey.
Photo: Mossman Central Mill Company

EARLY AUSTRALIAN ELECTRIC LOCOMOTIVES

We publish below the first of a series of articles on early electric locomotives used in Australia. This initial article is a reprint from the *Australian Mining Standard and Electrical Record* of 5 May 1909, which has been provided courtesy Norm Houghton. Submission of additional articles on this theme is invited.

Editor

PART 1
UNDERGROUND ELECTRIC HAULAGE IN VICTORIA

About nine years ago the first electric underground locomotive in Victoria was installed at the Great Southern No. 1 mine at Rutherglen, the manufacturers of the electrical plant being Messrs Clayton-Joel and Co, and results were obtained with it that proved conclusively that electric locomotives could handle wash dirt very much more economically than either horse or manual haulage. This plant was supplemented later by a locomotive and dynamo manufactured by Messrs G. Weymouth Prop. Ltd, and the whole plant did excellent work until the mine closed down.

The Chiltern Valley Gold Mining Co, Chiltern, was the next to instal a plant, and put in an 18kw 230 volt generator and three locomotives each of 10 h.p., also manufactured by Messrs G. Weymouth Prop. Ltd. These locomotives are 16in gauge and will go into the ordinary mining cage (5ft x 2ft), thus facilitating transit to the surface for cleaning, inspection and repairs. They weigh 32cwt, have a maximum draw-bar pull of 700lb, and a speed of 5 to 6 miles per hour, the average load being 60 trucks of wash dirt on a down grade of 3in per 100ft. The motors are 2-pole series, and a double worm geared, the worm being double threaded and cut from cast steel, and the wheels of gunmetal, the gearing being enclosed and run in an oil bath. It was contended that satisfactory work could not be done with a smaller gauge than 18in and with locomotives weighing 5 to 10 tons. That this is not the case has been proved by the fact that all underground haulage plants in this State are 16in gauge. Mr J. Cock, the manager of the Chiltern Valley Co, recently published some costs of the various methods of underground haulage at his mine, of which the following is an abstract:-

Size of truck used, 30in x 21in x 18in, 6.5 cub ft.
Weight of washdirt contained in ditto, 5.75cwt.
Haulage distance from shaft, 4000ft.
Number of truck haulage or to be hauled per shift, 1200.
Weight of washdirt contained in ditto, 345 tons.
Weight of washdirt hauled per week, 6210 tons.

Particulars of electrical plant required and in use to perform duty on above basis.

1 Steam engine, 12in x 12in, 145r.p.m., boiler pressure, 50lb per sq inch.
1 Dynamo, 18kw (belt-driven, 650r.p.m.).
50 Incandescent Lamps, each 16 candle-power, sufficient for surface and lower level lighting.
3 Electric Locomotives, each 10h.p.; average speed 5 miles per hour at tension of 220 volts.
Cost of plant and installation, £1200.

Weekly cost of working and maintenance of electric plant as above basis:-

	£	s.	d.
Electric engineering	1	10	0
Firewood (8 cords at 11s 6d)	4	12	0
Wear and tear of appliances, including renewal of lamps for surface and below	1	1	0
Oil, etc., for engines and dynamo and locomotives	0	12	0
Locomotive drivers (3 men at 42s)	6	6	0
Interest on cost of plant, £1200 at 4 per cent per annum	0	18	6

Cost per ton of underground haulage by electricity for a distance of 4000ft from shaft, .57 of a penny.

Note - The above does not include cost of wear and tear of trucks.

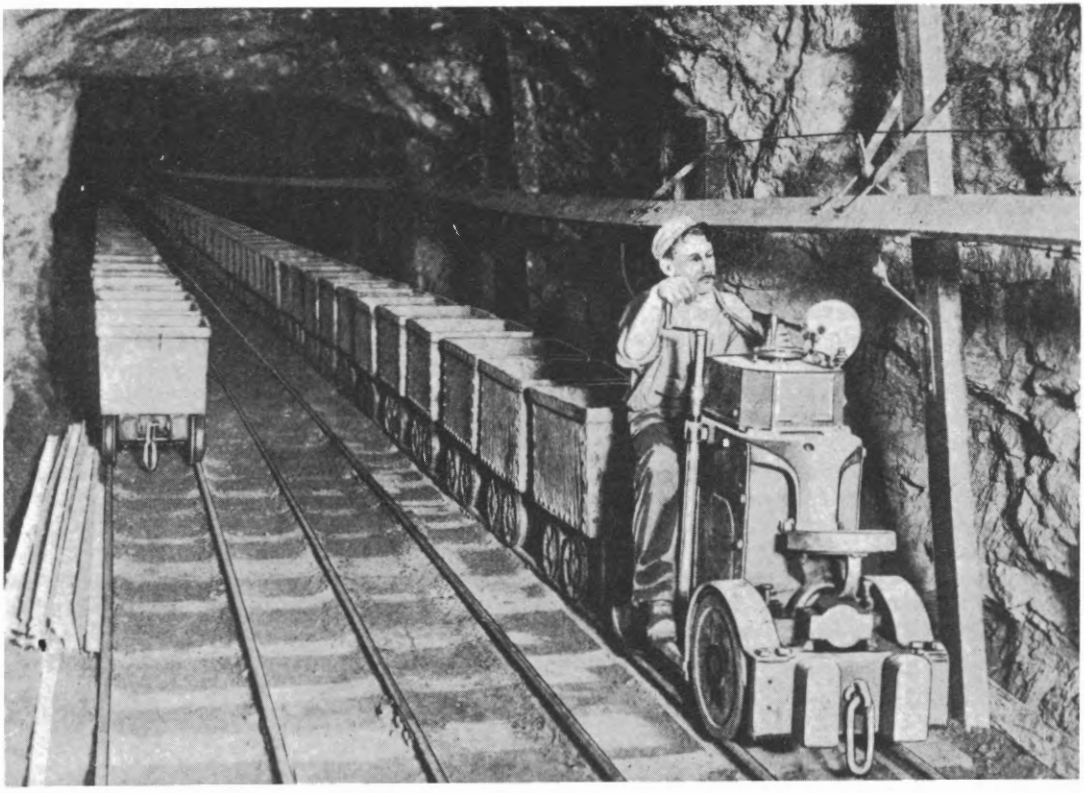
Statement showing cost of underground haulage by horses at 6210 tons per week, a distance of 4000ft from shaft.

Plant not including stables below:-

21 Horses at £20	420	0	0
Harness for ditto	40	0	0
Cost of plant	460	0	0

Weekly Cost

Horse feed for 24 horses	12	0	0
Shoeing and wear and tear of harness	1	10	0
Wear and tear of horses	1	13	0
Candles	1	10	0
18 drivers at £2	36	0	0



A Weymouth electric locomotive operating underground.

Interest on £460 at 4 per cent per annum 0 7 0
£53 0 0

Cost per ton for haulage of 6210 tons 4000ft by horses, 2.0d.

For same distance and quantity by manual labour:-

Weekly Cost

90 men at 30s	135	0	0
Candles	6	15	0
Cost of trucking 6210 tons 4000ft	141	15	0

Comparative statement showing cost per ton for conveyance of dirt to shaft from 4000ft distant:

By electric appliance	0.57d
. . Horse haulage.....	2.05d
. . Manual labour	2.48d

Note - If the lighting of the surface works was taken into account there would, with electric appliances, be a reduction per ton of .07, which shows that electricity costs ½d per ton for 4000ft haulage.

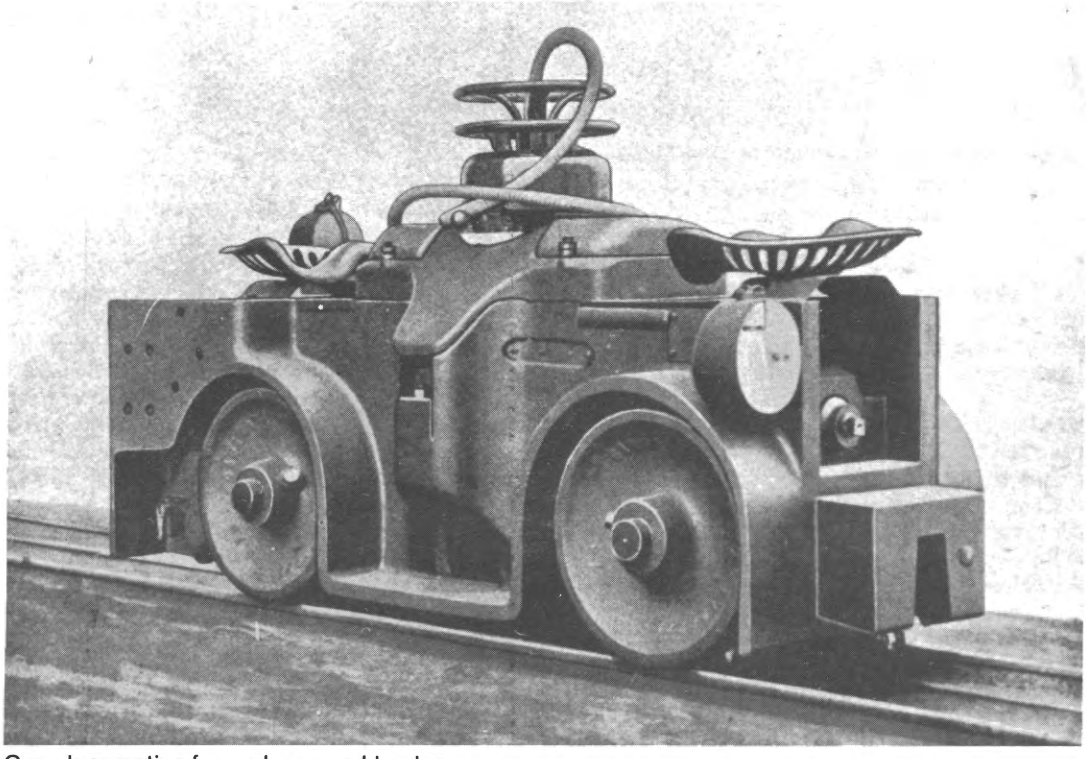
Mr Hilton, the company's engineer, says: "This plant has been in constant operation night and day for the past seven and a half years. The locomotives have been maintained in good repair and are as serviceable as new, while the generators are apparently as good as the day they went in. The upkeep of the plant has been very light considering the conditions of working and the work done. The western lower level contains 7600ft of motor road and the eastern end 5850ft, totalling over two and a half miles. The weekly average weight of washdirt hauled is 6500 tons per week, an average of 500 miles each (there are two working). The time the locomotives remain in commission (without repair) varies, the longest period being five months, during which time it covered over 10,000 miles."

The next company to take up electric haulage was the Great Southern Consols, who installed a Ganz generator and three Ganz locomotives, each of 9h.p., with a speed of 6 miles per hour. These locomotives have been in successful operation for the past five years. Recently this company has added to its electrical plant one 90kw, 230-volt

Siemens generator, direct coupled to a 133b.h.p. Allen compound condensing engine with Nicholas condenser, Edwards type motor-driven air pump, also 4h.p. motor-driven centrifugal circulating pump, also a 30h.p. motor driving a No. 5 Roots blower, also a 50b.h.p. motor, rope driving 4 puddlers.

Mr Gross, the manager, writes: "Our underground haulage consists of (3) 9h.p. series locomotive motors, two of which are constantly working, the third one being kept as a stand-by. They take a load up to 60 trucks at a speed of 5 miles per hour. We are now hauling dirt with them a distance of 1¼ miles at one end of the mine and nearly 1 mile at the other. Since installing electricity in this mine as a motive power, it has had a marvellous effect as far as economy is concerned; it would be impossible to haul the dirt to the shaft such a distance at anything like a reasonable cost were it not for the electric power. Then again we have the advantage of the lighting. We have the lights carried to the various shoots, which is a great saving in candles with a better light for the employees. I might also mention that the locomotives are run past the various shoots on the level, so that they are hauling the dirt from the extreme end of the workings. This can be done with all safety, as the electric wire is carried overhead just clear of the cap piece by insulators specially made for that purpose."

The Great Southern Co of Rutherglen also installed a plant, putting in 3 Weymouth 10h.p. locomotives, a 60kw 230-volt Weymouth generator direct coupled to a 90b.h.p. Allen engine, a 40b.h.p. motor geared to 4 puddling machines, and a number of small motors driving ventilating fans, pumps and machine tools. This was the first attept to electrically drive puddling machines here, and the advantage over the old single-cylinder puddler engine was very noticeable in the fuel consumption. The engine is kept as a standby, and when it is running the fuel consumption for all the power plant is 4 cords of wood per shift, which drops to 3 cords per shift when the electric motor is in use. Mr T.E. Thomas, the mine manager, is enthusiastic on the subject of electric haulage, and says that the plant works well, and that they could not drive the long distances or work the mine at a profit without the electrical plant.



Ganz locomotive for underground haulage.

The Prentice and Southern Deep Leads (1907) Ltd has an electric plant consisting of a General Electric 60kw 230-volt generator direct coupled to a compound high speed engine and three Weymouth 10h.p. electric locomotives. This plant has been in use 1½ years.

At the Pioneer Mine, Moolort, the company has 2 Ganz locomotives in use, the power being obtained from the company's large power plant, the three phase current being converted to direct current by a motor generator.

Two other mines, which have recently closed down, had electric haulage plants, viz:- The Duke United, Maryborough, which had a General Electric plant, and the Berry Consols Extended, Creswick, which had a Ganz generator and three Ganz locomotives.

The most recent electric haulage plant installed is that of the Duke and Main Leads Consols, Maryborough. This company installed a 75kw Australian General Electric generator and Bellis-Morcom compound engine, together with a 2-stage motor-driven turbine pump of 90h.p. to assist in unwatering the mine, about 3 years ago. The generator is now used for supplying current for driving a 50h.p. Weymouth motor that drives 4 puddlers and surface pump by means of rope gearing and also two 10h.p. Weymouth electric locomotives.

In all the existing haulage plants the trolly wire is placed on insulators attached to the side timbers of the drives as near the cap as possible, and is protected by a 6in x ¾in hardwood board that is bracketted in front of the wire to prevent accidental contact with the trolly wire. The collector is a sliding shoe of sheet steel, which slides along the top of the wire, and which is connected to the locomotive by means of a flexible insulated conductor. This arrangement has many advantages over the usual trolly pole in the drives of these mines. The track is usually of 20lb per yard rails with fishplates and bonded.

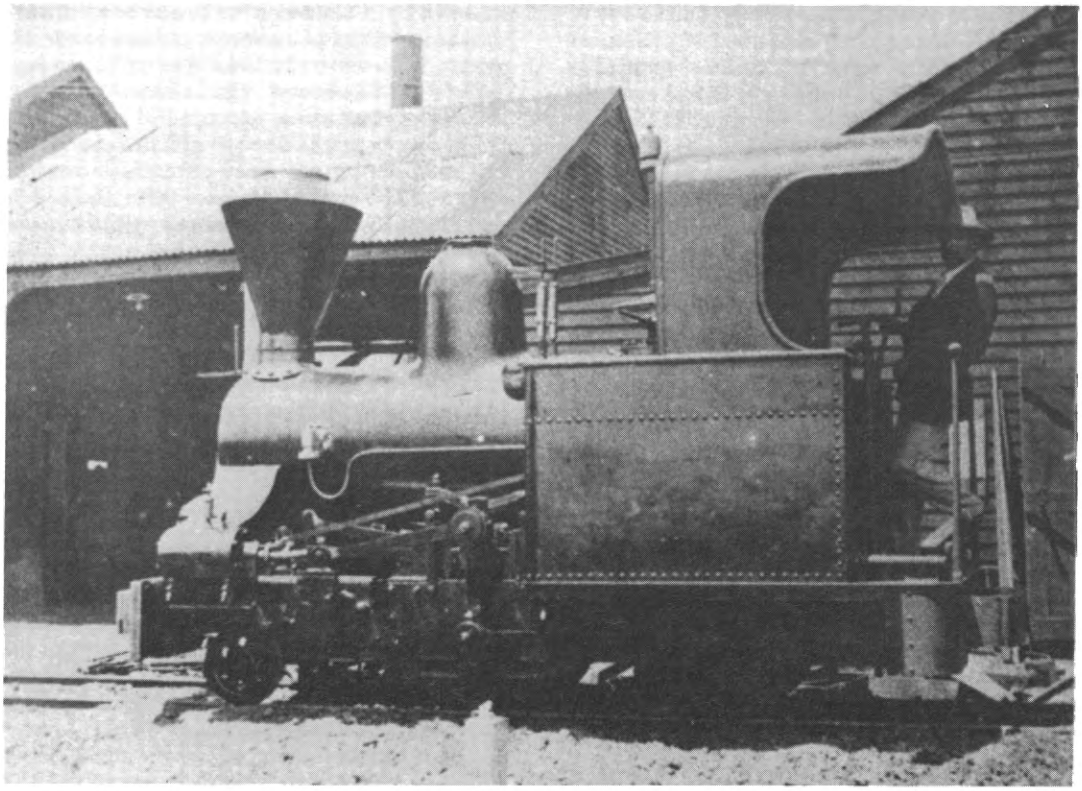
An important matter in the laying out of an electric haulage plant for alluvial mines, where from 700 to 1000 trucks of washdirt are handled per shift is the laying out of the approach of the plat. The Chiltern Valley Co's arrangements are ideal in this respect. The drive approaching the plat has for about the first 400ft a grade sufficient to keep the full trucks in motion when once started towards the plat. It is equipped with 2 sets of rails, one for the empty and one for the full rake of trucks, with points about 300ft from the plat. The following is the uusal operation. The locomotive driver coming down with a full rake of 60 trucks slows down on approaching the points, draws his coupling pin, and then runs on ahead of his rake of trucks, crosses the points on to the track for his empties, couples up, and as soon as the points are clear of the full rake of trucks which are running towards the plat (due to the grade), he starts off up the drive with the empty rake. The wheels of the full trucks are chocked as they approach the plat sheets by the platman, and in this way there is no loss of time.

NOTES ON THE GREAT COBAR LOCOMOTIVES

The definitive history on the railways of "The Great Cobar" by John Shoebridge was published in the *ARHS Bulletin* No. 383 of September 1969.[1] At that time, details of the locomotives used on the 2ft 6in gauge firewood tramway (opened in 1883) were difficult to obtain, particularly as clear photographs of their operation at Cobar had not been located. Shoebridge reports that six John Fowler jack-shaft drive 2-4-0 locomotives were imported for use on the line. By 1888 firewood trains were operating over 20 miles of track, but operations ceased in 1889 when the mine was laid idle. Only three of the locomotives were in use by 1888. The mine reopened in 1893, but coke was used as a fuel and the firewood tramway was used to a limited extent for the collection of underground timber and green wood for the roast heaps until 1897.

We now know that the locomotives were John Fowler 4370-4373 of 1882 and 4631-4632 of 1883 with 5½ x 9 in cylinders[2]. Publication of the book, *Cobar Founding Fathers* by William Cleland in 1984[3] provided a sharp photograph of one of the locomotives at Cobar c.1888. Mr W.P. Snelson, President of the Cobar Historical Society, has kindly provided a copy of this photograph which is reproduced here.

From John Shoebridge's research we know that four of the locomotives were returned to service in 1903 and 1904 for use on slag disposal operations, but were apparently retired in 1909. The mine



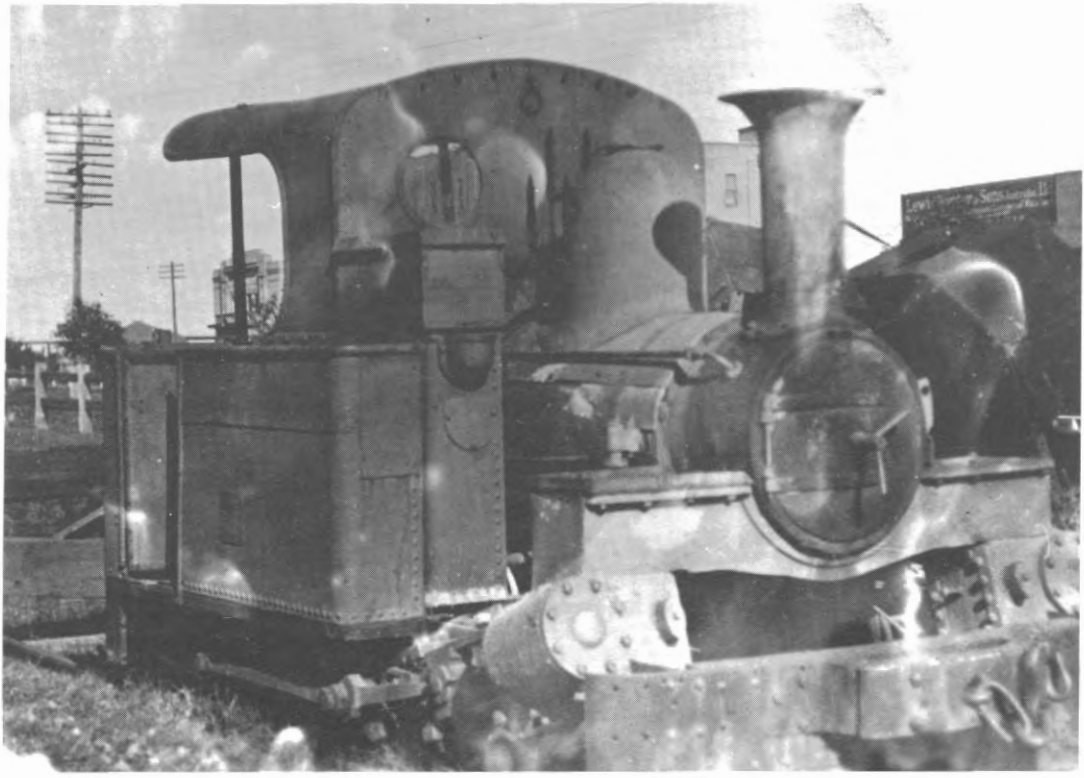
Great Cobar jackshaft drive Fowler locomotive on the firewood tramway, circa 1888.
Photo: Cobar Historical Society

closed in 1920 and the works were dismantled. One of the locomotives was sold to Goninans of Newcastle and later worked at the Commonwealth Rolling Mills at Waratah (p.215). Three were sent to Tullochs at Rhodes where they were combined to build a standard gauge locomotive for the Mount George logging tramway[4]. This leaves two further locomotives, which were possibly sold by the Company about 1888. Shoebridge speculates that they may have gone to Sanderson's Tramway, Barwon Downs in Victoria (p.196) and the idea that these locomotives came from Cobar has been widely repeated in railway historical circles. However, we now know that Sanderson's locomotive *Westward Ho* was built by Bagnall's, while a detailed comparison of the Cobar locomotive photo with *Parrot* by Richard Horne has identified a number of significant differences between the two locomotives. Can any reader provide further comment on the history of the Cobar locos?

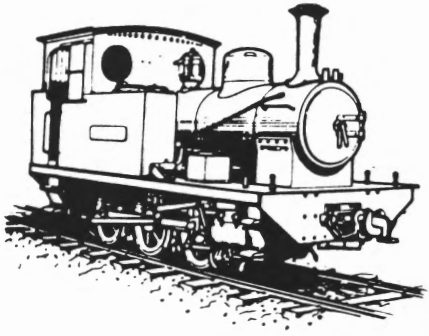
References

1. 'The Railways of "The Great Cobar" ' by J.W. Shoebridge, *ARHS Bulletin* No. 383, September 1969.
2. R. Horne, 'Early John Fowler Locomotives in Australia', *Light Railways* No. 81, July 1983.
3. W. Clelland, *Cobar Founding Fathers*. Dubbo, Macquarie Publications, 1984.
4. G.H. Eardley "The Rhodes Timber Company's Mount George logging tramway". *ARHS Bulletin* No. 282, April 1961.

Editor



Ex-Cobar Fowler locomotives rebuilt by Tulloch Ltd. for the Rhodes Timber Company, Mt George, NSW.
Photo: CC Singleton collection



BOOK REVIEW

COBAR FOUNDING FATHERS by William Clelland. Vol. 7 Western Heritage Series. Macquarie Publications Pty. Ltd. 51 Wheelers Lane, Dubbo NSW. $16.95 + postage. Hard bound, 160 pp 290mm x 210mm.

The development of the heritage movement over the last 20 years has, amongst other achievements, resulted in the publication of works dealing with the history of many isolated communities.

Cobar Founding Fathers is a very professional publication which records the pre-European, exploration, pastoral, industrial and social history of the isolated Cobar district in north western NSW up to c. 1910.

The author has unearthed a treasure house of photographs to accompany the text. The high and

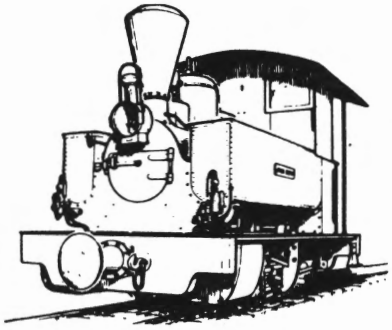
low points of the life of this community are sympathetically revealed . . . it was a community at the mercy of harsh seasons, poor transport modes, unpredictable diets, pastoral and mineral industries dependent on the whims of overseas demands and prices, and indifferent health conditions.

For those of us interested in rail tranport developments of the Cobar area the real "find" is an extremely clear side view of a jackshaft drive 2-4-0 John Fowler locomotive which served the 2ft 6in gauge firewood railways (see p.26). According to *Light Railways* No. 81 (p.22) this locomotive belongs to the batches 4370-4373 of 1882 or 4631-4632 of 1883 from the John Fowler factory. These light railways hauled fuel to the smelters from July 1883, but reliance was reduced after July 1982 when the standard gauge NSWGR branch from Nyngan reached Cobar.

Other railway photos in *Cobar Founding Fathers* show narrow gauge slag cars as well as the electric locomotives and standard gauge smelters rolling stock used by Great Cobar Ltd. after the 1908 modernisation programme.

This book is highly recommended for both the quality of the research and the quality of the presentation. It is a logical progression of the initial research presented in the *Cobar Copper Centenary 1869-1969* book produced by the Cobar Copper Centenary Celebration Committee and is a companion for the account "The Railways of The Great Cobar" presented by John Shoebridge in the Australian Railway Historical Society *Bulletin* of September 1969.

K.McC.



LETTERS

WEST MELBOURNE GASWORKS, LR.90

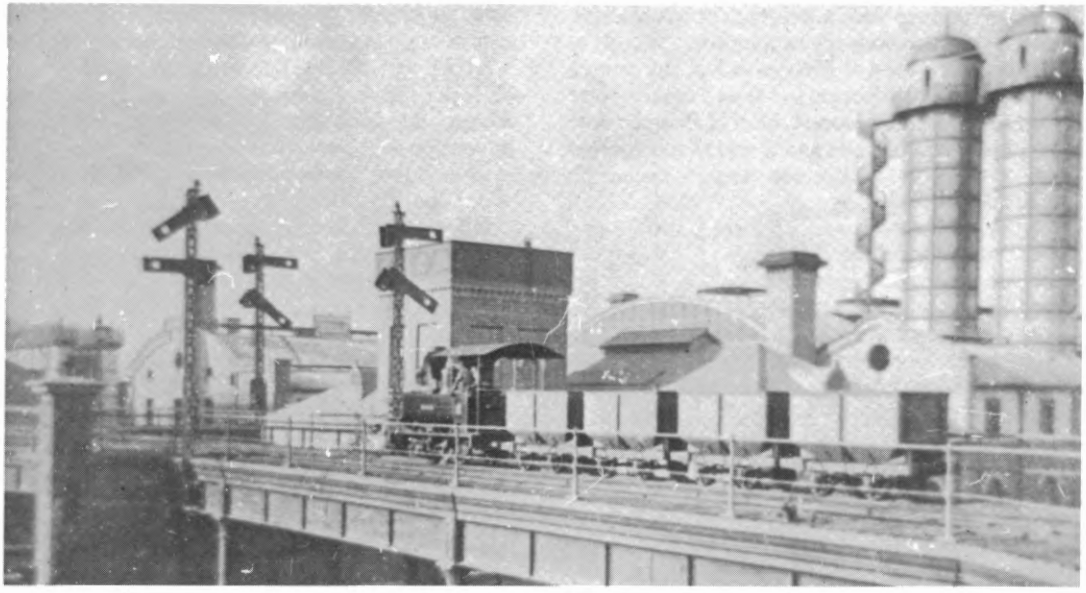
Some additional interesting West Melbourne photographs have turned up recently — as always after the event. I enclose two which add to the article published in *LR.90*. Both feature the elevated point indication signals, circa 1910.

John Buckland
East Brighton, Vic.

MACKAY HARBOUR BOARD BALDWIN LOCOMOTIVES I enclose copies of original correspondence from the records of the Mackay Harbour Board which I obtained years ago for Mr Bill Henderson of the ARHS, Queensland Division. They provide some details of the 0-4-0 Baldwin locomotive used by the Board on their construction tramway from 1920.

A report by the Asst. Workshop Manager of the Victorian Railways, dated 17 February 1920, states that it was "of the usual bar frame type, four wheel coupled. This engine has originally been 4ft 8½in gauge, but has been altered and is now 5ft 3in gauge. This has been done by fitting new axles to wheels, lengthening the frame stays and fitting distance pieces between cylinders and frame. Cylinders 9in x 12in, pistons and rods in good order . . . When the engine was examined, the water tank, coal bunker, cab, and certain boiler fittings were missing. Without these, and considering repairs to the boiler are estimated to cost 25 pounds, it is thought that the price asked for the engine, viz — 625 pounds f.o.b. Melbourne is somewhat high, but with these missing parts, the engine may be regarded as reasonable value." The locomotive was shipped on the SS *Suva* from Melbourne to the Mackay Harbour Board on 25 August 1920.

The engine was used to haul stone from the Mt Basset quarry to North Mackay for the building of



Above: A Metropolitan Gas Company Couillet locomotive supplied by Decauville photographed on the elevated trestleway leading from the wharf to the West Melbourne gasworks, showing elevated point indication signals, circa 1910. **Below:** A close up view of the above showing scissors crossover within the works compound, circa 1910. Photos: ARHS (Vic.) Archives

the long retaining wall in the Pioneer River in the 1920s. When this project was completed, two of the Board's locos — 0-4-0 Merryweather saddle tank and a new German Koppel 0-4-0 well tank — were stored at the Board's workshops, Mt Basset, while the Baldwin was dumped at the end of a section of track with some of the old wagons, where it remained till 1942.

I knew the Baldwin well, as it was good to "play trains" with when we were kids. I know your members will curse me, as one day I put my Brownie box camera up on the side of it, but it never occurred to me to take a photo. Oh well, I was only 11. I can recall the actual day — HMSs *Ajax, Essex* and *Achilles* were belting the daylights out of the *Admiral Graf Spree.*

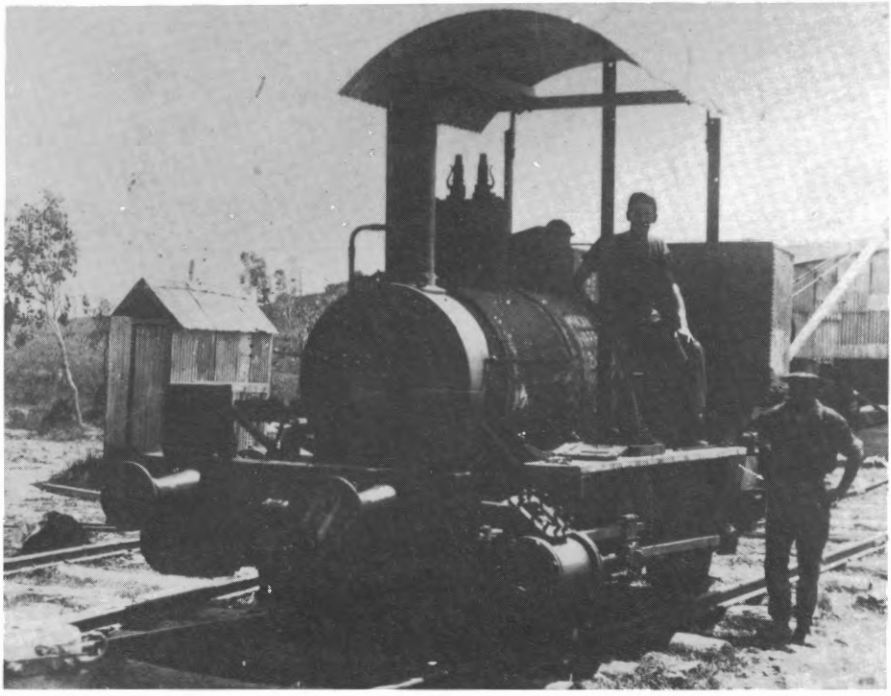
The US Navy set up a fleet repair depot at the Outer Harbour and built barracks at the quarry. The Baldwin and wagons were bulldozed into the quarry.

The last time I saw the Baldwin was in 1948. One Saturday afternoon I rode over to Mt Basset with the late Tom Harvison, who was an engine driver in the Mackay Power House. Tom had been a loco driver during the construction of the outer harbour.

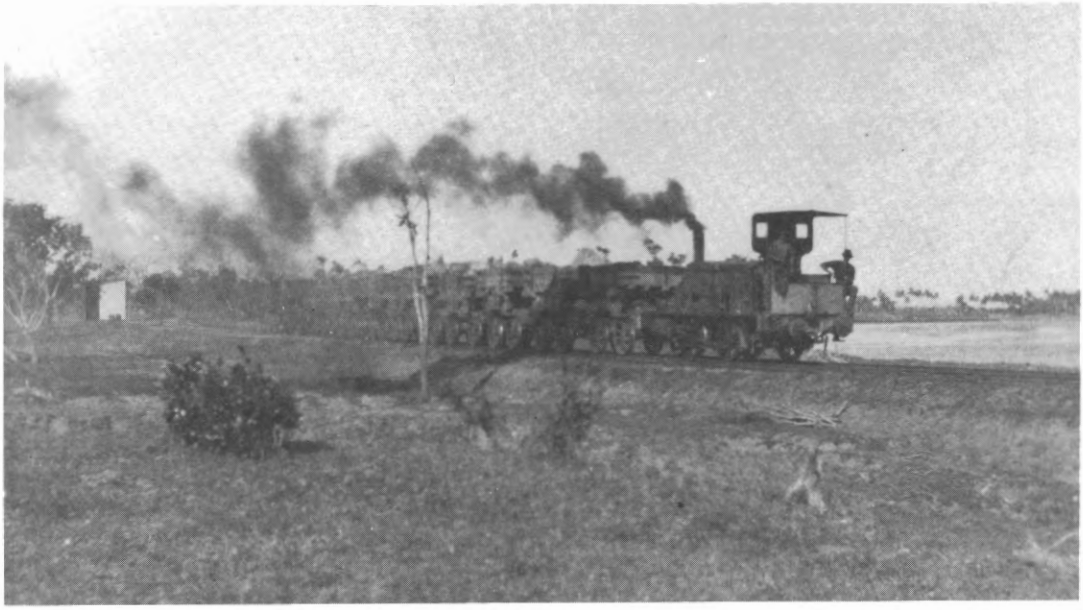
The five locomotives used on the construction were still rusting away — 0-8-0ST Avonside, Vulcan 0-6-0ST (ex-NSWGR), Manning Wardle 0-4-0ST (ex-NSW Public Works), the Koppel and *Fanny,* the Merryweather, believed by some to have been a Parramatta tram engine. Around the original quarry we found the bullet riddled Baldwin where the Yanks had left it.

Efforts to obtain further information about the Baldwin from the Board initially came to naught. Later I realised that the late Jack Casey had the lease on the old quarry and his son Edmond, member for Mackay, knew of the engine. He was able to obtain the documents I have forwarded. George Bond was able to provide additional information and the two ends of the Baldwin story came together.

It was originally a Bendigo tramways engine and was later used to build stone walls for the Warrambool Harbour. It was last seen at Port Melbourne, from where it was thought to have dissappeared into oblivion, until the VR engineers report surfaced. In 1975 I put a letter in Mackay's *Daily Mercury* asking for any photos. I received a response from Mrs Helen Lankin, whose father,



The Baldwin being assembled at Mt Basset in 1920. The driver, Hugh Barbour stands beside the loco. Photo: Barbour Family colln., courtesy Mrs Helen Lankin



Mackay Harbour Board's Merryweather 0-4-0T *Fanny* arriving at Devils Elbo with Hugh Barbour driving.
Photo: Barbour Family colln., courtesy Mrs Helen Lankin

Hugh Barbour, was the Baldwin's driver, and she provided a photo of the locomotive.

Alan R Rae
Brighton, Qld.

(Ed. The documents provided by Mr Rae have been placed in the LRRSA archives.)

JOHN FOWLER NO. 5154 OF 1885 The enclosed drawing shows John Fowler loco 5154 of 1885 as running at South Bulli Colliery, NSW circa 1905.

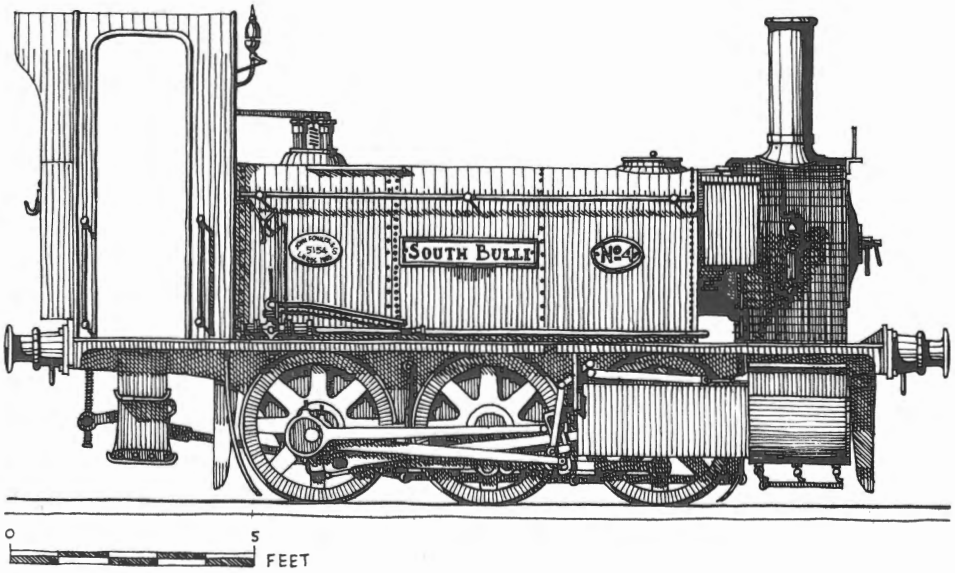
It was built new for Thos. Saywell's Rockdale Tramway, south of Sydney and transferred to South Bulli Colliery (at that time also owned by Saywell) in 1888 where it became No. 1. In his book *Transporting the Black Diamond - Book 1* on pages 42-44 and 53, the late Giff Eardley claimed that this locomotive was built new "with neither a running plate nor splashers over the wheels" and was rebuilt (and renumbered 4) about 1904 at South Bulli with side tanks in place of "the leaky saddle tank formerly in use".

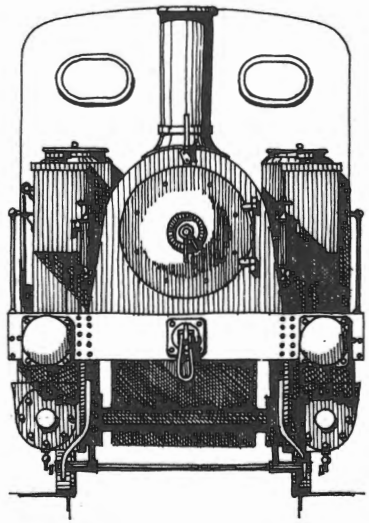
I personally doubt if this was so. Only one JF drawing of this loco survives (curiously entitled "N.B. Tramway" — New or North Brighton I wonder?) and it only shows a random selection of details including the cab, boiler backplate, safety valve, couplings and handrails. My drawing is based on these, the dimensional details given by Giff and the photo of the loco "as rebuilt" on page 51 of his book. This photo shows sidetanks which not only carry the original handrails shown on the JF drawing, but evidence of the JF builder's plate having been originally mounted centrally on the tank, but moved to the rear to accommodate new plates, reading "South Bulli" and "No. 4", of which the same pattern as applied to the colliery's new Avonside locos. My conclusion is that the locomotive was built in this condition and there never was a saddletank.

I would further suggest that the major alterations were the crude backward extension of the cab by some 8 or 9 inches, replacement of original fare-and-aft regulator by the more normal quadrant type and possible repositioning of the front sandboxes. The JF drawing notes the boiler pressure as 150 psi, while Giff shows that, in its later years, 5154 was operating at 120 psi.

Richard Horne
South Croydon, UK

Back Cover: Richard Horne's drawing of John Fowler No. 5154 as running at South Bulli Colliery, circa 1905.





R.T. HORNE NOV. 1985

SOUTH BULLI COLLIERY, N.S.W.

No 4 BUILT BY JOHN FOWLER, 5154 OF 1885