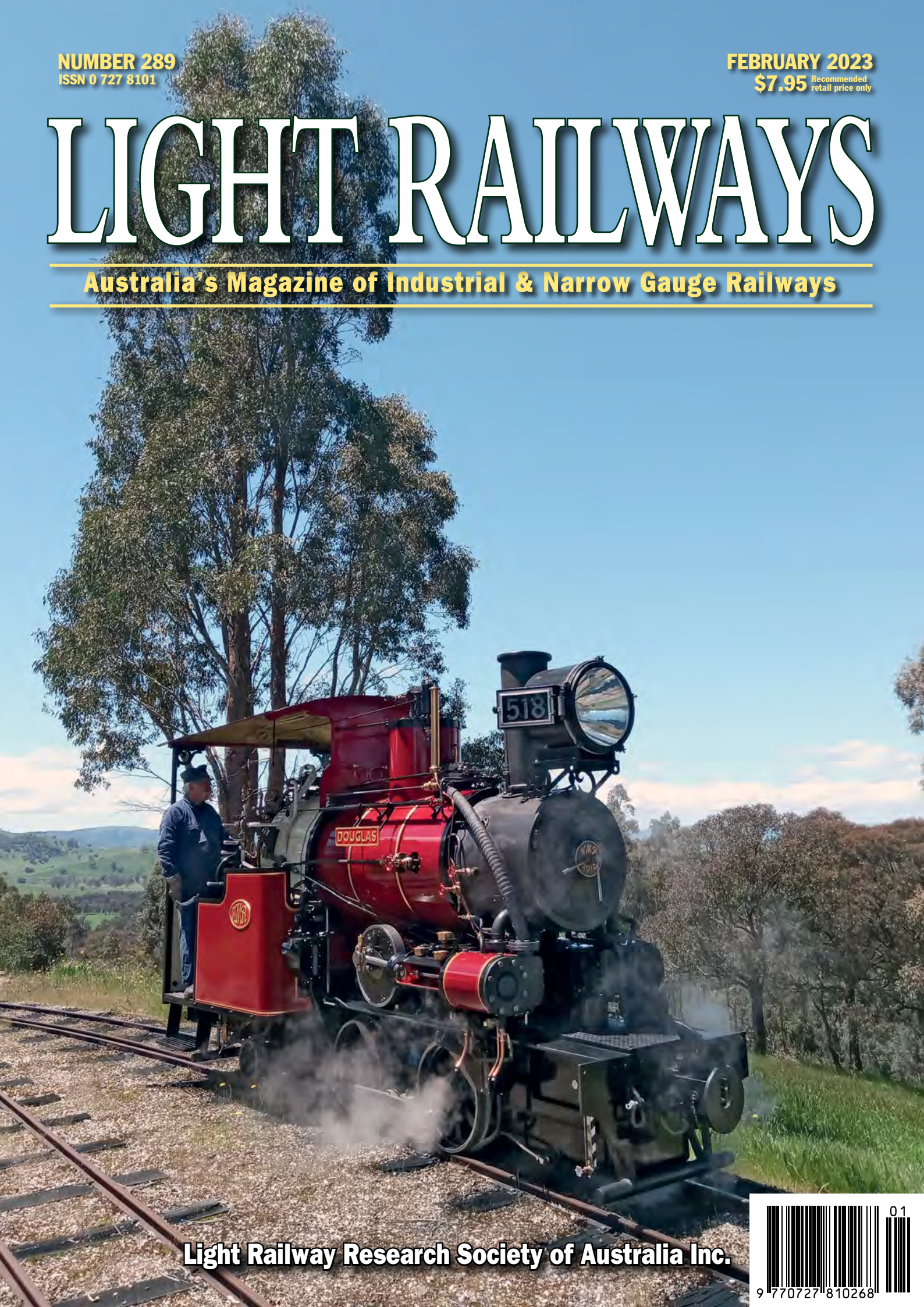


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LIGHT RAILWAYS

Australia's Magazine of Industrial & Narrow Gauge Railways



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Imperial to metric conversions:

1 inch (in)	25.40 millimetres
1 foot (ft)	0.305 metre
1 yard (yd)	0.914 metre
1 chain	20.11 metres
1 mile	1.61 kilometres
1 ton	1.01 tonnes
1 pound (lb)	0.454 kilogram
1 acre	0.4 hectare
1 horsepower (hp)	746 Watts
1 gallon	4.536 litres
1 cubic yard	0.765 cubic metres
1 super foot (sawn timber)	0.00236 cubic metre

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No 289 February 2023

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Editorial

Welcome to 2023 – let's hope that the world continues to release itself from the shackles of the Covid pandemic.

We have another big year planned for the LRRSA and *Light Railways* magazine. I have a large number of articles awaiting publication and, in the pipeline, almost ready to go. The articles cover a wide range of subjects and come from almost all states of Australia.

We also have several books almost ready for publication and we will keep our readers informed of progress on those books.

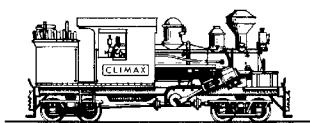
There will be at least another six members entertainment meetings via Zoom covering a wide range of light railway subjects – full details are available from our website.

And of course, our Facebook Group *Light Railways of Australia* continues to thrive. If you have not had a look at it yet, log on and enjoy the discussions and lots of photos not published anywhere else.

This edition of the magazine has a wide range of subjects and I trust that you will enjoy reading them.

Richard Warwick

Front Cover: The magnificent locomotive Douglas on the spectacular Kerrisdale Mountain Railway in central Victoria in September 2022. The locomotive has been built from scratch by Andrew Forbes over many years and its progress has been regularly reported in the Heritage and Tourist section of this magazine. The railway is open on a regular basis and readers are referred to its Facebook page for more details.
Photo: Michael Chapman



**Light Railway Research Society
of Australia Inc. A14384U**
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The Light Railway Research Society of Australia Inc. was formed in 1961 and caters for those interested in all facets of industrial, private, tourist and narrow gauge railways in this country and its offshore territories, past and present.

Members are actively involved in researching light railways in libraries and archives, interviewing knowledgeable first-hand participants and undertaking field work at industrial sites and in forests.

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Articles, letters and photographs of historical and current interest are welcome. Contributions should be double spaced if typed or written. Electronic formats accepted in the common standards.

Material is accepted for publication in *Light Railways* on the proviso that the Society has the right to reprint, with acknowledgement, any material published in *Light Railways*, or include this material in other Society publications.

Good Hope Mine, Crooked River

by Peter S. Evans

Crooked River

The Crooked River is a tributary of the Wongungarra and Wonnangatta Rivers (which in turn feed the Mitchell River), and is situated high in the Great Dividing Range in Victoria north-west of Bairnsdale and beyond Dargo. During the 1860s, like Woods Point and Walhalla, it was the scene of intensive gold mining activity, which included a number of interesting tramway systems.

The Crooked River goldfield was discovered by Alfred William Howitt in December 1860. Howitt had led a party of twelve men on a prospecting expedition, and the party found gold in Good Hope Creek, a tributary of the Crooked River. By late 1861, alluvial miners were doing well in a confined valley where the gold occurred both as large nuggets and fine dust.¹ Most of the creeks feeding the Crooked River were found to be auriferous, and the 'rush' was on to extract the alluvial gold. This easily-won gold was soon worked out and, by 1864, attention had turned to the quartz reefs which had been the primary source of the alluvial riches. The Pioneer Reef was discovered in April 1864 by Angus McMillan (who had been engaged by the Victorian government to cut a track from Woods Point to Omeo via the Crooked River). The Good Hope reef on the creek of the same name was discovered shortly afterwards by prospectors Messrs Watson and Coy. The settlement that would become Talbotville was quickly established close by on one of the larger flats along the Crooked River.² The country rock was Palaeozoic in origin with a north-westerly strike, and the quartz reefs ran generally in the same direction. However, despite the richness of the reefs, the quartz in them was fairly narrow, and the remoteness of the area, the rugged nature of the ranges, and the difficulty of access hindered their development.³

The Good Hope mine

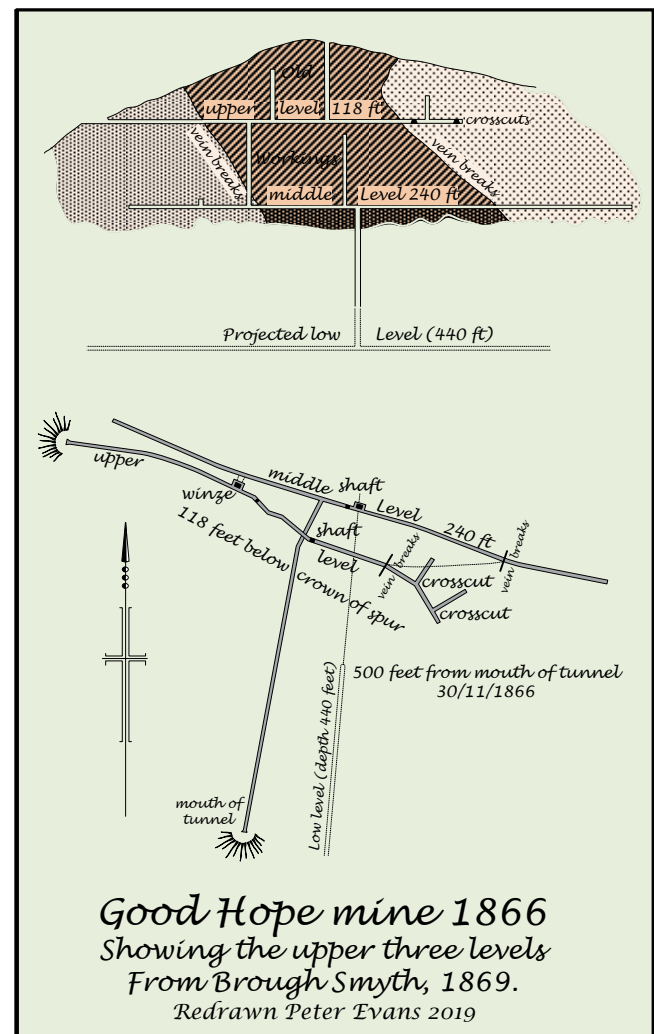
The Good Hope Tunnelling & Quartz Mining Company was registered on 3 February 1865 with a capital of £18,000 in 1800 shares of £10, of which £7,600 was said to be paid-up. Sharebroker Mordaunt Smallpage was appointed founding manager. The shareholders were local men with two exceptions; one of them was a significant man in mining circles. Rivett Henry Bland was, from 1852, the managing director of the Port Phillip Mine at Clunes⁴ (which led Australia in gold-recovery techniques), and his holding of 100 shares in the Good Hope Company could be said to be a huge vote of confidence in the future of the mine. One month later the manager was mining investor Dr Curtis Candler (a Melbourne coroner), the shareholding had diversified, and the registered office had been moved to Melbourne; a sure sign that speculators already had their eyes on the Good Hope mine.⁵

The first crushing mill established on the Crooked River goldfield was that of Messrs Gitchell & Company's Union mine at Grant in February 1865.⁶ By March of that year, the battery plant for the Good Hope mine was at Stratford along with a full complement of workmen from Clunes.⁷ The machinery was at the mine site by June 1865, and crushing was expected to start shortly. The plant, to be steam-powered, was valued at £1500, but cost nearly £2429 delivered due to

the high cost of cartage, which could reach as high as £50 per ton during winter.⁸ It was said that bullock teams were used by John Cowell and Walter Ives to haul the machinery from Stratford, and that a day's journey averaged ten miles. A number of bullocks were killed lowering the machinery down into Good Hope Creek.⁹ Extensive preparations had been made for the commencement of operations; on 9 September 1865, it was reported that:

The tramway, which is now finished, is 642 yards in length. In the lower level, there is a tunnel in 350 ft and, in the upper level a shaft down 120 ft. The quartz from the upper level stoup [sic] are [sic] looking well, in fact quite as rich as any previously quarried. The machine will be at work in fourteen days' time, under the supervision of Mr [Henry A.] Thompson.¹⁰

The Good Hope reef ran north-west with a dip of 7° to 10°, was bluish in colour and banded by slates, and contained large amounts of arsenical pyrites. To develop the mine, a tunnel was driven into the hillside from the Crooked River (north-west) side, south-west along the reef for a distance of 450 ft, and the payable ground stoped out to the surface. A second level was then driven from the Good Hope Creek (south) side of the spur 430 ft south-east and 120 ft below the first tunnel, and a winze was put in to connect the two levels. The payable ground was then stoped out to the upper level. A third level was driven from the Good Hope Creek side (further to the west from the No.2 level) for a distance of 767 ft to meet a winze which had been sunk from the second level to meet with the third. Stone was hand-trucked out from the various levels and transferred along well-graded tramways to connect up with a self-acting incline to deliver the stone to the battery.



The 12-head battery was driven by a 10 nhp portable engine. Normally, only eight heads were in use at any one time, as the engine was not sufficiently powerful to drive more than eight heads and the pump. The battery was self-feeding, and the crushed stone passed over ripple boxes charged with mercury and thence to the blankets. The blankets were changed every two to four hours, and were washed by hand. After leaving the blanket tables the tailings passed to two patented percussion tables designed by works manager Henry A. Thompson.¹¹

Crushing commences

The battery was first started on Friday 8 September 1865.¹² By the end of 1865, 370 tons of stone had been crushed for a yield of 568 ounces of gold, a yield slightly exceeding 1 oz 16 dwt to the ton [20 dwt equals one ounce]. However, it soon became apparent that, during the summer, the supply of water for the plant, which was situated right in the headwaters of the creek, was not sufficient to keep the battery in full operation. By late November, the Good Hope could only work four stamps until an arrangement for 'retaining the water' could be implemented.¹³ Around this time the original

10 nhp portable engine was replaced by a 15 nhp horizontal engine and Cornish boiler, and a pump was placed in the creek bed to augment the supply of water for the boiler and the battery.¹⁴ Despite these difficulties, returns from the battery were consistently good. In February 1866, the Good Hope crushed sixty tons in a week for a yield of 1 oz 16 dwt per ton. Similarly, in March 1866, seventy-two tons were crushed for a yield of 1 oz 12 dwt per ton.¹⁵ The only substantial decline occurred in early 1867 when development work was being carried out and stone from the older workings (that had previously been passed over as unpayable) was being crushed. Even this was producing nearly half an ounce to the ton. The Good Hope mine was fortunate in being in close proximity to a number of other reefs and, while the mine was undertaking its own development work and not producing much stone of its own, the battery could be profitably employed crushing for adjacent reefs including the Collingwood Company, the Uncle Tom Company and Wingate & Coy's Grimross Reef; which were all located on the spur on the south side of Good Hope Creek.¹⁶ In July 1867, an incline tramway was constructed from the latter mines to lower the stone from all three claims down to the Good Hope battery.¹⁷

By the end of 1867 the Good Hope mine was onto some really rich stone. Two hundred and fifty seven tons of stone were put through the battery for the phenomenal yield of 960 ounces; representing 3 oz 17 dwt 17.58 gr – nearly four ounces to the ton! This excellent yield persisted through early 1868 with the quarter's crushing to the end of March being 634 tons for a yield of 2455 oz 15 dwt. This stone was coming from a level 500 ft below the surface, and there was plenty of similar stone in sight both above and below this level. As a consequence, tenders were called for driving a fourth level 200 ft below the current one, and 700 ft below the surface. It was expected that about 900 ft would have to be driven before the reef was met. Especially rich patches of stone were producing an astonishing 30 to 40 ounces to the ton. The second quarter of 1868 was equally rich: 639 tons for 2101 oz 9 dwt. The mine was also operating on the pyrites found in the quartz. There were three grades; the first taken from the blankets, and the second and third from percussion tables patented by mine manager Henry A. Thompson. The pyrites taken from the blankets were the richest in gold, those from the percussion tables less so, but still gave good returns.¹⁸

The Enoch Chambers boiler at the Good Hope mine at Crooked River dates from 1866, and sits in a setting of local stone. These images were taken on 3 January 1992 and show the boiler front, furnace doors and rivet detail. The manner in which the rivets have been closed show them to have been hand-hammered and caulked; the boiler was almost certainly sent up to the mine as separate plates and assembled there. Photos: Peter Evans



The presence of pyrites was always a problem for gold miners. Pyrites, which contained sulphur, 'sickened' or 'floured' the mercury preventing proper amalgamation and leading to the loss of gold. Two Victorian mines excelled in their treatment of pyrites; the first was the Port Phillip Company at Clunes, and the second the Good Hope at Crooked River. There can be little doubt that the influence of Rivett Bland as a major shareholder in both mines is no coincidence, as was the fact that Henry Thompson had previously been works manager at Clunes. (In fact, the experts at Clunes had been involved in assaying stone from the Good Hope almost as soon as the Good Hope Company was formed). At Clunes, the treatment was by using a circular buddle to concentrate the pyrites and then roasting them to drive off the sulphur, followed by grinding in the presence of mercury; at Crooked River the treatment was by percussive table for concentration, followed by roasting and grinding in a Chilean mill.¹⁹

Air-operated Rock Drills

Another technical innovation was the acquisition (in the last quarter of 1868) of a 'Ford's boring machine' to drive the new No.4 tunnel (situated 700 ft below the first level and 500 ft further to the east of No.3 level) and which, by then, had already been driven some 236 ft.²⁰ This machine was an early air-operated rock drill designed by Sandhurst man Robert Gray Ford, who was an employee of the Victorian Railways in the survey and engineering department. Although his design was based on the simplification of an existing English rock drill, Ford was granted Victorian patent 989 on 22 February 1868.



FORD'S ROCK BORING MACHINE.

Robert Gray Ford's rock drill. The operator is probably Michael Ford, Robert's younger brother. Apart from the way in which the drill improved the rate at which holes could be bored, the exhaust from such drills vastly improved the ventilation at the working face of long tunnels. Illustrated Australian News for Home Readers, 1 March 1869, page 45. State Library of Victoria image IAN01/03/69/45.



The Canal Basin Foundry steam engine that operated the battery at the Good Hope mine and the maker's details cast into the steam chest cover. Note the two cast-iron battery boxes underneath the overturned flywheel. In January 1992 there was some lettering painted on the side of one of these boxes, but it was too faint to be fully decipherable. What was readable is '.....nds Foundry Company Ltd Melbourne', suggesting Langlands Foundry. Photos: Peter Evans

Two prototypes were made at Vivian's foundry in Castlemaine and trialled at a local mine. Mining men agreed that the machine was a great success, and a great advancement over the old 'hammer and tap' method of drilling holes manually. A further trial at the Hustler's Reef mine in Sandhurst in November 1868 (where the machine was by then in regular use) was equally convincing. In any event, a machine was purchased by the Good Hope Company from Vivian's Foundry, at a cost of £400 'complete with fittings and carriage', and set to work.²¹ It would seem that this made the Good Hope only the third mine in Victoria to use an air-operated rock drill.²²

Unfortunately, despite this latter innovation, the lower (No.4) tunnel was eventually abandoned after twelve months work and the expenditure of £2500. The rock had become so hard and so 'shot' that further progress was considered impossible. This was a great pity, as the future of the mine hung on opening up new shoots of stone, and many hands had been put off in late 1868 until the No.4 level was completed. With the No.4 level now abandoned, a chamber was cut at the No.3 level in which an engine was to be erected for the purpose of winding and pumping. In future, the mine would have to be worked from this level. Good stone continued to



The entrance to the No.4 adit at the time of survey in January 1992. Photo: Peter Evans



Air receiver at the mouth of the No.4 adit in January 1992. This air receiver may date from the 1868 installation of Ford's rock boring drill or the 1879 acquisition of a 'National' drill. The latter would seem more likely as the rivets appear to have been hydraulically closed, suggesting it was brought in as a complete unit. Either way, it is very early evidence of the use of air-operated rock drills at a Victorian mine. Photo: Peter Evans

come from a depth of 620 ft below the surface. East of the winze driven down from the No.3 level, all the stone had been stoped-out but, due to the hardness of the country rock, by early 1872, very little stone had yet been removed from the west side.²³ Good news was now thin on the ground but, to date, the mine had done well. In six and a half years the mine had realised profits of £18,262 or an average of around £54 per week; the investors had paid £7423 in calls and reaped dividends of £23,470.²⁴

Consolidation

The discovery of a new gold-bearing reef within the Company's lease 700 ft below the surface briefly raised expectations in mid-1872 as the stone appeared to be payable.²⁵ Yields were disappointing,²⁶ and the Good Hope Company now entered a period of financial difficulty; the cost of laying tramways and installing new machinery leading to a hefty call of five shillings per share in September 1872.²⁷ In an attempt to find payable stone, the leases of the Uncle Tom and Collingwood mines were taken up in early 1873. Meanwhile, the tunnel from the No.3 level engine chamber was driven further into the hillside along the Good Hope Reef in search of the associated Mitchell Reef. The cost of this work was about £70 per month. Payable stone was discovered in the Mitchell Reef, and stoping was commenced on stone expected to yield two ounces to the ton. However, the quantity of stone obtained was small, and the yields disappointing. Like the rest of the Crooked River mining division, the Good Hope mine was in the doldrums. The mine struggled on, crushing only small quantities of stone, and even that was not turning out as well as anticipated.²⁸

In July 1877 a meeting was held to authorise the directors to let the mine and its machinery on tribute to a party of working miners (with long experience as employees of the Company) for a period not exceeding two years. At first it seemed these men would do well, but the returns failed to pay expenses. The directors of the Company now considered returning to the No.4 level in an attempt to finish the tunnel and cut the reef an estimated 1000 ft from the adit entrance.²⁹ Further calls on capital followed and, in April 1879 a meeting was held to consider winding-up the Company for reconstruction.³⁰

It seems this was done for, on 4 November 1879, the New Good Hope Tunnelling & Quartz Mining Company was registered with a nominal capital of £6000 in 3000 shares of £2. The value of the mine and its machinery had been written down to a mere £300. The manager was Richard Guthridge and the registered office was in Sale. The majority of the shareholders were locals, most being business people based in Sale with a smattering of shareholders from Dargo, Grant and Talbotville. The tributers went back into the mine immediately and, by the end of 1879, had crushed 100 tons for a yield of 62 oz 6 dwt.³¹

A return was made to the abandoned No.4 level. The hard rock which had stopped the tunnel in late 1869 was broken through, and the ground became easier to work. A new 'National' rock drill was performing well, setting a record of 17 ft driven per week, but at a cost of £2 per foot.³² To fund the work, calls of one shilling per share in the new Company started almost immediately it was formed, and were repeated with regularity. By the middle of 1880 the mine was once again producing some gold through the efforts of the tributers, whose lease expired at the end of 1880. The returns must have been poor, because the tribute was abandoned and not taken up by anyone else.³³ By now some of the investors were



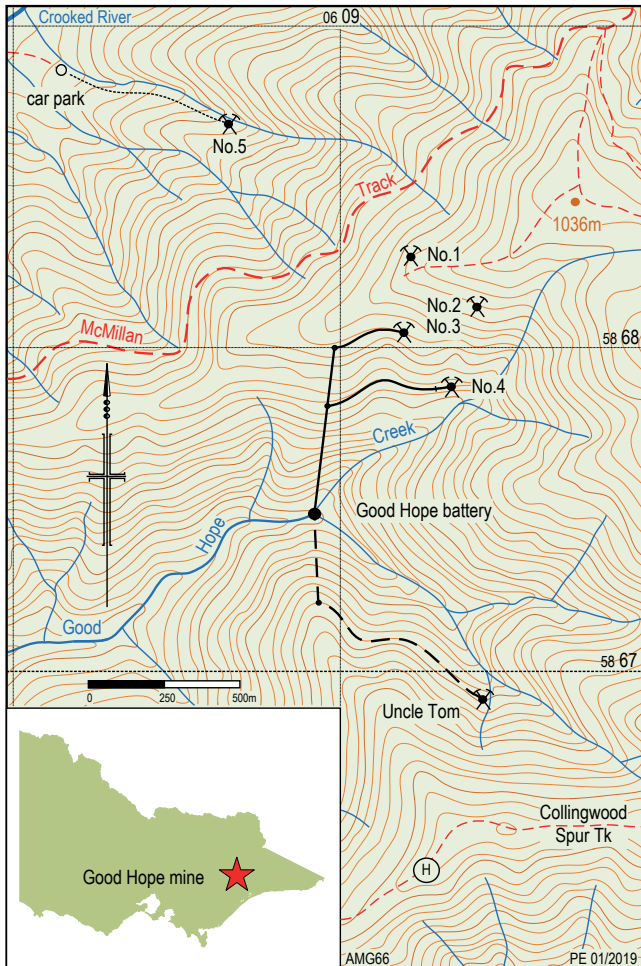
having second thoughts about the mine, and lists of shares to be forfeited for non-payment of calls began to appear along with the call notices. By July 1881, a full £1 had been called up on each share.³⁴ And still the calls continued.

The Company must have returned to working the mine as, by the end of 1881, the No.4 level had been driven 1,130 ft. A reef thought to be the Good Hope had been struck, and was subsequently driven on for 171 feet, but it pinched out without yielding any gold. A re-survey was made of the mine, at which point it was discovered that what had been struck was not the true Good Hope reef, and that another 70 ft would have to be driven to reach the desired objective, which was finally met on 1 November 1881. The extent of the work involved in the previous six months can be gauged by the following statistics: the rock drill had bored 4298 lineal feet, representing 1698 holes of an average length of 2 ft 6½ in, and 2040 trucks of broken rock had been transported out of the

The Good Hope battery derelict in 1903. That work has stopped suddenly is shown by the stacks of boiler wood remaining beside the battery. The short tramway leading to the interior of the building would have been used to transfer wood to the boiler. The exhaust pipe (partially obscured by branches) protruding from the gable roof closest to the camera indicates the probable position of the Canal Basin Foundry engine. In the bottom left corner of the photograph is the staging for the terminus of the incline tramway delivering stone from the Good Hope mine to the battery. On the far side of the valley is the long three-railed incline leading down from the Uncle Tom mine on Collingwood spur. Photograph by John Jackson, State Library of Victoria image H21156.



The New Good Hope mine (adit No.5, also referred to a 'Tunnel A'). This is early in the development of this lowest part of the mine; the mullock heap is not yet substantial. Of note are the two ore trucks and the crib-log extension to the mullock dump tramway. Also of note is the hand pump on the tall timber structure supplying water discharged from the mine tunnel to a tank at the mine blacksmith shop. The generator must be housed here as electrical cables lead from the shed to the mine entrance. The sign on the side of the blacksmith shop reads 'Good Hope Consolidated Gold Mining Company No Liability, E.A Noble, Manager. This dates the photograph to 1905-1909. Unknown photographer, State Library of Victoria image H83.86/14.



tunnel. Despite all this work the reef, where struck, was badly faulted and would have to be driven on for some distance to reach any payable stone.³⁵

In April 1883 a decision had to be made: increase that capital of the company or wind it up. Winding up was staved-off, but the increase in capital was a miserly one – a mere five shillings per share. This was quickly called-up. By the middle of the year stoping was continuing, but expectations were that the stone would, at best, pay only a little more than expenses.³⁶ At the end of 1883 returns were patchy, and it was recommended by the directors that the mine again be let on tribute.³⁷ The result was predictable; in July 1885 the New Good Hope Tunnelling & Quartz Mining Company was wound-up.³⁸ In total, 14,461 tons of quartz had been crushed to produce 23,357 ounces of gold or approximately two-thirds of a tonne of gold.³⁹

In 1892 the Gippsland Mining Board allocated a prospecting grant of £360 for work on the Good Hope Reef,⁴⁰ indicating that there was still some interest in the mine. The North Gippsland Prospecting Association NL was registered on 14 February 1895, and went on to become the founding entity in a series of companies that would create the final era of the Good Hope mine. The new company had a nominal capital of £960 in 32 shares of £30 each, all of which were subscribed. The claim and machinery were valued at £360. William John Gorrie was appointed legal manager by a group of all-Melbourne shareholders (with not a miner amongst them). Progress seemed slow at first, with the first call on shares (of a hefty £5) not being made until early September of that year. At the same time, each share was increased from £30 to £50 to provide for additional capital.⁴¹

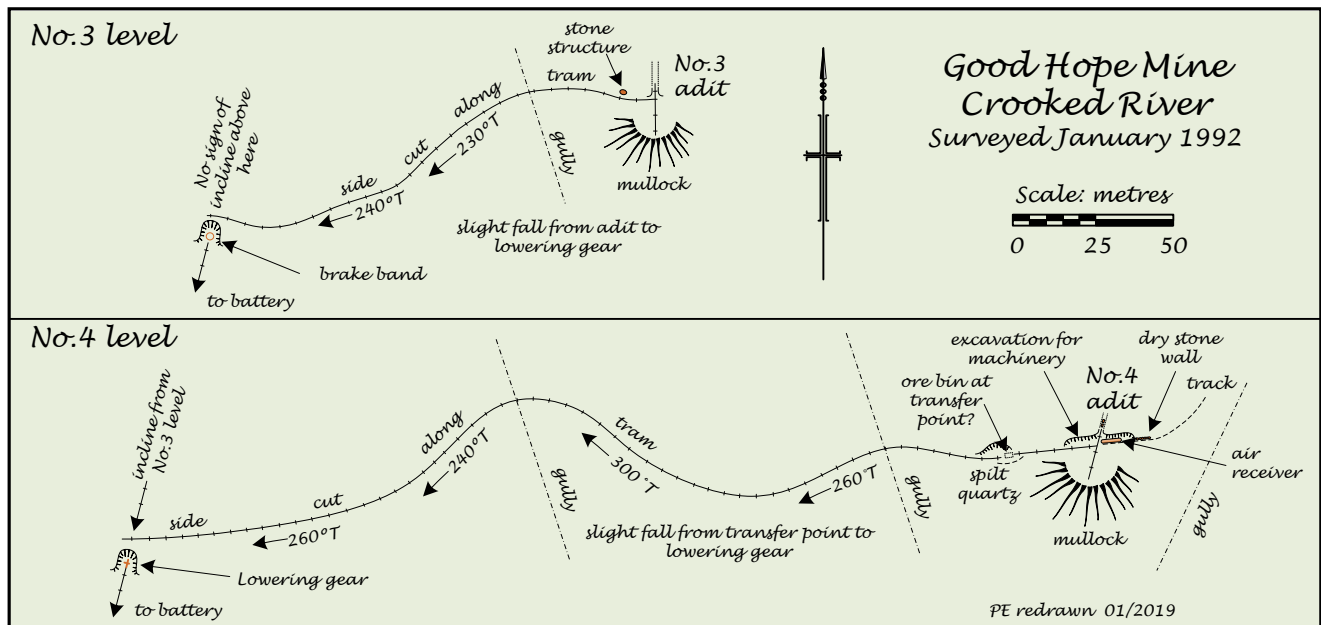
Response to the call may have been poor as, late in September 1895, the Company was liquidated and reorganised

as the North Gippsland Proprietary Company NL. The new company would have a capital of £16,000 in 16,000 shares of £1, issued paid-up to ten shillings each. The company was duly registered on 17 October 1895.⁴² Regular calls of the order of pennies per share commenced immediately. These calls continued until late 1898, when a meeting was held to consider disposing of the Company's mineral leases (No.2470 and No.2702) to James Mitchell Craig.⁴³ Craig was a major shareholder in a new venture, the Good Hope Consolidated Gold Mining Company, which was registered on 24 September of that year. The nominal capital of the new company was £12,000 in 48,000 shares of five shillings each. The mine and machinery were valued at £12,000. Arthur Dendy was appointed manager. There were a handful of Melbourne shareholders, but most of the shares were held in trust for future sale.⁴⁴ It smelt badly of speculation, and the new company vanished quickly.

The North Gippsland Proprietary Company must have retained the leases, as the calls continued with regularity until, 56 calls later, in January 1903, a meeting was held to increase the capital of the Company. A decision was made to increase the existing shares of £1 to £1 10s each, and issue an additional 8000 shares of £1 10s each, each considered paid-up to £1.⁴⁵ And still the calls continued. In May 1905 a meeting was held to decide the future of the company.⁴⁶



Sledging quartz down to the battery at the New Good Hope, before the machinery was shifted from Crooked River and closer to the mine in 1913. Of note are the tramway wheels on the rear of the sled. Photograph by John Jackson in 1911, State Library of Victoria image H21169.



New Good Hope mine

The meeting must have had a positive outcome, as new machinery was transported to the mine in the first quarter of 1905.⁴⁷ A return was made to the Crooked River side of the spur, and a new tunnel was driven 600 ft below the No.4 level and about 2000-ft to the north west of No.1 level. The entrance of the No.5 adit was about 650 ft above the Crooked River. The country rock was sandstone, much crushed and faulted, making the bedding planes difficult to discern. The tunnel took about two years to drive 2800 ft, with a forced turn southwards caused by faulting. By April 1906 a cross-cut had been started along the reef in a north-easterly direction. Electrical power was supplied to the face to provide lighting and operate a rock drill. Electricity was generated at the mouth of the adit by a 4½ hp Otto oil engine driving a dynamo. Air was supplied to the face using a fan and a delivery pipe.⁴⁸

The management of the mine was reorganised with the registration of the New Good Hope Consolidated Gold Mines NL on 21 September 1909, successors to the North Gippsland Proprietary Company NL.⁴⁹ The nominal capital of the Company was £30,000 in 60,000 shares of ten shillings each. The claim and machinery were valued at £10,000. James Prince Cameron was appointed manager. Again, there was a smattering of Melbourne based shareholders and, again, the majority of the shares were held in trust for later sale.⁵⁰ Calls on capital were moderate – in the order of pennies per call rather than shillings. However by 1911, when L.A. Cleveland had assumed the management of the mine, the number of forfeited shares was growing.⁵¹

After dallying for a period with the old No.4 level, the Company had decided to concentrate on the newer lower level No.5 tunnel from the Crooked River side of the spur. (This tunnel is sometimes referred to as ‘Tunnel A’ in the documentation). This was considered risky, as so much barren ground had to be driven through in the expectation of meeting the formation worked in the No.4 level at a point 400 ft below the lowest winze sunk from that level. By July 1910 the battery for the No.5 level was being erected, and had its first trial just two months later. (It is probable that, at this time, the battery was situated close to the Crooked River, and photographic evidence suggests that ore was transported down from the tunnel mouth by sleigh). Some gold was already being produced under the management of Mr

Henry Clarke. By November 1910, 498 tons had been crushed for a yield of 120 ounces.⁵² In April 1911, Robert H. Close of Norseman, WA, took over the management of the mine.⁵³ In mid-1913 the battery was shifted closer to the mouth of the tunnel, and an ore bin and a cyanide plant were erected.⁵⁴ By the end of the year, the reef was being driven along in two directions; to the west it was 3 ft wide and filled with a dark-coloured formation with a few inches of solid stone on the footwall, to the east it was 2 ft wide and filled with quartz, with about eight inches of solid stone on the footwall – this end appeared to be the most promising. About one third of the shareholders were said to be from NSW.⁵⁵

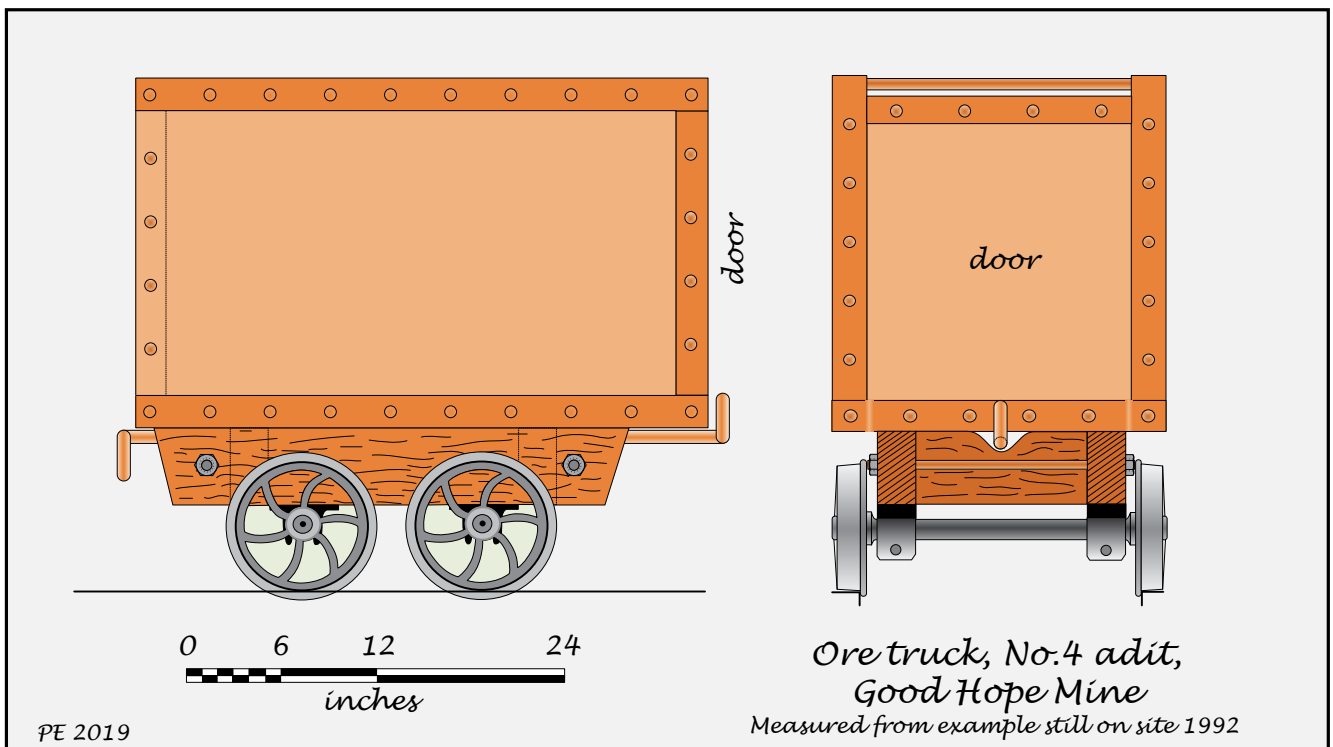
In March 1914 a last desperate attempt was made to raise additional capital by selling the 10,000 unallotted shares (valued at five shillings each) for the discounted price of three shillings each, reflecting primarily the value of past and current calls.⁵⁶ This received substantial interest from existing shareholders.⁵⁷ By this time it had been realised that the reef being driven on was not the main Good Hope reef at all, but an offshoot of Mitchell’s reef. With a further discovery of some one ounce to the ton stone (thought to be the main Good Hope reef), the additional capital from the calls was required to fund the sinking of a winze from the old No.4 tunnel to link up with the No.5 tunnel, necessary to further work the mine to advantage.⁵⁸ It was not to be. The company posted its last notice in December 1914⁵⁹ and went into voluntary liquidation in August 1915. The sum of £112 advanced by the Mines Department as a development loan was repaid. After the liquidation it was estimated that shareholders would receive 3d per share.⁶⁰ The leases were finally declared void in June 1916.⁶¹ Thereafter, despite occasional spasmodic interest from prospectors, the Good Hope mine faded quietly into obscurity.

The archaeology of the Good Hope Mine

There are substantial remains at the Good Hope Mine, and few Victorian mines demonstrate their development over a period of half a century of change as well as this mine does. The following notes were compiled from an investigation of the site on 3 and 4 January 1992 (which included an encounter with a very angry tiger snake!). The investigation centred largely on the No.3, No.4 and No.5 levels and the two battery sites, as these still have significant remains. Bushfires in 2007



*Truck in the No.4 adit of the Good Hope Mine in 1992, and a measured drawing made from that truck.
Photo (by torchlight): Peter Evans*



swept most of the mine site, and an internet search reveals that much of the evidence in Good Hope Creek is now obscured by rock and mudslides, so the investigation was a timely one.

Adits and tramways

The No.3 adit was open at the time of survey and bears roughly north. Tramways here are 610 mm [2 ft] gauge as demonstrated by both a 610 mm gauge wheelset outside the tunnel and remnant sleepers 100 mm x 150 mm in cross-section, notched for wooden rails set to that gauge. Sleepers were spaced roughly 900 mm apart and showed wear between the rails, presumably caused by the miners' boots. The rails were 50 mm by 75 mm sawn timber capped with iron strapping 25 mm by 6 mm, secured with nail-holes spaced roughly every 500 mm. The adit is connected by 135 m of tramway falling slightly with the load to an excavation 5 m square and 3 m deep for a lowering gear. A brake-band

assembly for a lowering gear was noted here. The area above the lowering gear site was checked for signs that the incline continued upwards (which would seem logical), but no evidence to confirm this was seen.

Some distance below the No.3 adit is the No.4 level. Inside the adit were two near-complete mining skips, and wheelsets and axleboxes for a third. These are 450 mm [18 inch] gauge. Outside the adit is a riveted air receiver 5 m long built up with 12 mm plate. The rivets appear to have been hydraulically closed. (If it dates from the days of Ford's rock drill, it is possibly the earliest surviving physical evidence of the use of air-operated rock drills in Victorian mining). Thirty metres west of the adit there is a sharp discontinuity of level on the tramway of some 4m, possibly the site of transfer of stone to skips of 610 mm gauge. It is posited that prior knowledge of the large amount of dead work required for the long No.4 adit dictated a change in gauge to the narrower 450 mm



Above: Lowering gear brake band, No.3 level lowering gear site. From the numerous drilled holes and remnant fastenings it can be assumed that the brake band was lined with segmented material, probably wood. Photo: Peter Evans



Left: Lowering gear wheel and brake band, No.4 level. Photo: Peter Evans

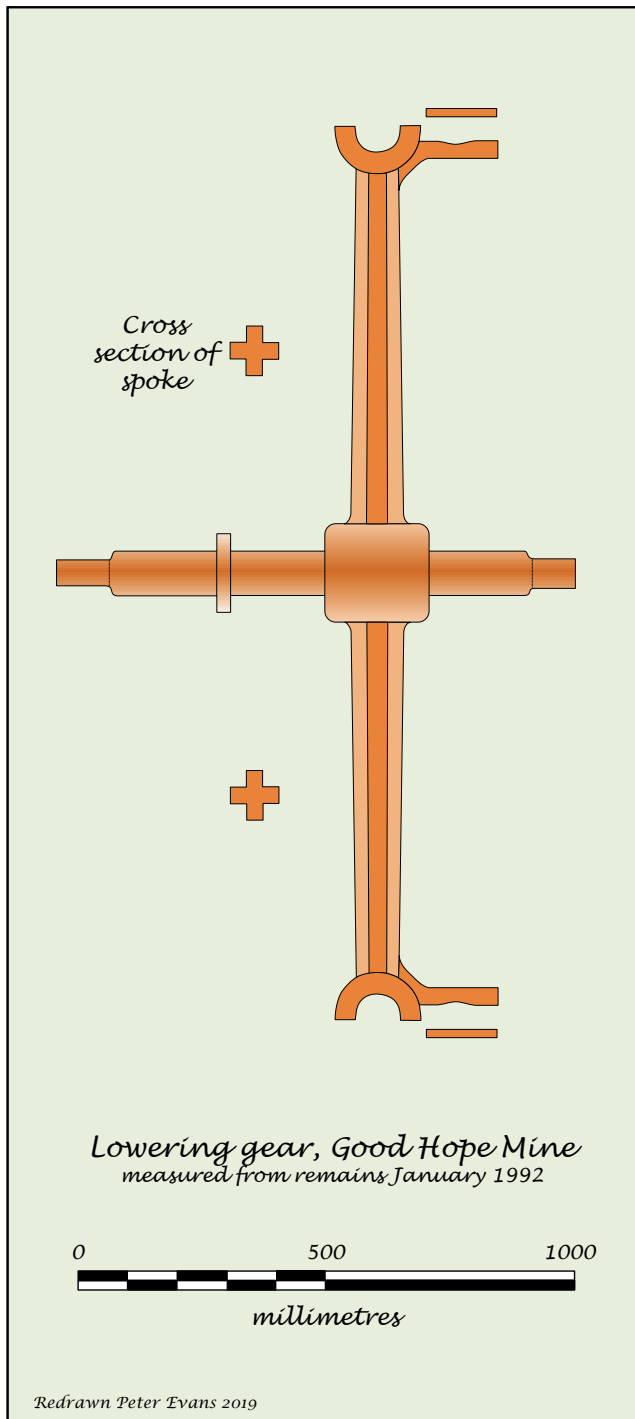
(the width of a miner's shoulders) to reduce the amount of mullock that needed to be removed from this tunnel. From this discontinuity 300 m of tramway formation falling slightly with the load leads to the site of the lowering gear.

Lowering gear and inclines

The lowering gear is still substantially in situ (minus, of course, any wooden components). Nestled in a 5 m square and 3 m deep excavation, it consists of a single cast-iron wheel with both a rope groove and a wide bearing surface for a brake band. The wheel has six cruciform-section spokes and a diameter of 1.8 m. It is mounted on a shaft 100 mm in diameter and 900 mm long, turned down on each end to 75 mm (presumably for bearings). Wear from the brake bands is evident on the face of the wheel. It seems the incline was 'self-acting' with three rails and a passing loop, with the rope taking multiple turns around the wheel. An accident at the lowering gear happened early in the life of the mine. Works manager Mitchell as standing next to the lowering gear

making chalk marks on the rope when his hand became caught between the rope and the wheel, and he was dragged bodily around it until the brake could be applied to stop the trucks. Mitchell would not allow the rope to be cut, knowing the damage the unrestrained trucks could do to the battery below. Instead he instructed that the trucks be first chocked to hold them in place. He then waited over an hour in agony whilst this work was done before the rope could be cut to free him.⁶²

From the lowering gear an incline bearing a little west of south leads down to the battery. This incline seems to have been laid almost flat on the ground with only small side cuts required in some places. Contemporary photographs suggest that the tramway terminated at ore bins slightly elevated above the battery roofline, from which the ore could have been fed directly to the battery by gravity. Those same photographs suggest that the incline trucks were larger than the standard ore trucks and had raked wooden bodies to suit the steepness of the incline. It would therefore seem probable that the incline had only two trucks (captive at each end of



the incline cable), and that ore was tipped from trucks used on the graded tramways via chutes into the incline trucks. Photographs also suggest the presence of a possible firewood tramway near the battery, but definite evidence could not be located on site.

The remains of the battery are substantial, and include a Canal Basin Foundry of Glasgow horizontal engine. The engine has a bore of approximately 300 mm and a stroke of 760 mm with an overhead valve chest and plain-bar slippers for the crosshead. A long-stroke pump worked off the cross-head seems to have been the means of feeding the boiler. The Cornish boiler is in situ, and is the sole known extant boiler built by Enoch Chambers of Melbourne and Prahran.⁶³ The boiler is 5 m long and 1.6 m in diameter, riveted together on site and encased in a local stone setting. Also on site are two boxes of stampers of five head each, and the remains of a Chilean Mill. In the creek bed is what appears to be a pump,

possibly worked by a beam off the main engine shaft, and seemingly forming part of the supply to the boiler and battery. Evidence for the Uncle Tom incline tramway could not be located in the time available at the site, and further survey of the southern fall to Good Hope Creek would be warranted.

New Good Hope Mine

On the Crooked River side of the range the No.5 level also has substantial remains, accessed via a carpark off the Crooked River Track and a walking track. These remains include a 5-head iron-framed battery built by Roberts & Sons in Bendigo, and a twin-cylinder portable engine with bores of 200 mm and a stroke of 305 mm. Remnants of a maker's name appear cast into one of the wheels, but it appears to have been deliberately defaced. Stampings on the backhead record a single Mines Department inspection on 6 February 1914 and the registration number MDJ23. Steeply sloping formations lead out either side of the mullock heap. These would appear to be too steep to be tramways, so it is presumed firewood and mining timbers were sledged to the site.

Taken as a whole, the Good Hope mine is of State significance for historical and technical reasons, and for its association with Rivett Bland, an influential mine manager. The mine had a long working life (1865–1916), was the richest on the Crooked River goldfield, and there is today evidence of almost every facet of its operation. Of particular importance is the evidence remaining of the early operation of air-operated rock-boring drills in Victoria.

Acknowledgment: Thanks to my children Brett and Megan who assisted with the tape and compass survey of the Good Hope mine tramways in 1992 (pre-GPS), and to Trevor Staats who also inspected the mine tramways in 2013 and supplied some GPS coordinates to improve the accuracy of the writer's 1992 field notes. **Please note that entering abandoned mines is dangerous.**

References:

1. *Gippsland Guardian (GG)*, 11 October 1861, page 2.
2. Flett, J. (1979). *The History of Gold Discovery in Victoria*. Poppet Head Press, Melbourne. Pages 149–153; *Ovens & Murray Advertiser*, 16 August 1864, page 2. See also *Quarterly Reports of the Mining Registrars and Surveyors (QRMRS)*, quarter ending 30 June 1864, page 29.
3. Brough Smyth, R. (1869). *The Goldfield and Mineral Districts of Victoria*. Facsimile edition published by the Queensberry Hill Press in 1979. Pages 344–351.
4. Woodland, J. (2001). *Sixteen Tons of Clunes Gold: A History of the Port Phillip and Colonial Gold Mining Company*. Published by the Clunes Museum. Chapter 7 outlines a biography of Bland.
5. *Victorian Government Gazette (VGG)*, Gazette 16, 10 February 1865, page 365; Gazette 28, 14 March 1865, page 650.
6. *Woods Point Leader*, 25 February 1865; *Gippsland Times (GT)*, 15 February 1865, page 3.
7. *GT*, 11 March 1865, page 2.
8. *QRMRS*, quarter ended 30 March 1865, page 31; *Woods Point Times & Mountaineer (WPT&M)*, 3 June 1865; *The Argus*, 14 September 1865, page 5.
9. Christie, R. W. and Gray, G. D. (1981) *Victoria's Forgotten Goldfield: A History of the Dargo, Crooked River Goldfield*. Self-published, printed by Enterprise Press Pty Ltd, Sale, page 80.
10. *WPT&M*, 9 September 1865; 16 September 1865.
11. Brough Smyth (*ibid*), pages 347–349; Dunn, E.J. (1907). *The Good Hope Reef, Grant*. In *Records of the Geological Survey of Victoria*, Volume II, part II, pages 116–117.
12. *GT*, Wednesday 13 September 1865, page 3.
13. *WPT&M*, 22 November 1865; *QRMRS*, quarter ended 31 December 1865, pages 28–29. This seems reasonable given the old rule of '1 nhp per stamp' plus the pump = eight stamps plus 2nhp for the pump. Individual stamps could be removed from operation by the simple expedient of propping them up away from the cams on the finger posts, although this interfered with the 'wash' in the mortar box.
14. Christie, Gray (*ibid*), page 81.



Engine and battery, No.5 level (New Good Hope). Photo: Peter Evans

15. *WPT&M*, 20 February 1866; 11 April 1866.
16. *QRMRS*, quarter ended 31 December 1866, page 26; quarter ended 31 March 1867, page 68; quarter ended 30 September 1867, page 37; *GG*, 7 August 1867, page 3.
17. *GT*, 2 July 1867, page 3.
18. *QRMRS*, quarter ended 31 December 1867, page 35; quarter ended 31 March 1868, page 35; quarter ended 30 June 1868, pages 39–40; *GG*, 11 June 1868, page 2.
19. *GT*, 23 August 1865, page 3; 4 February 1868, page 3; *Woodland (ibid)*, pages 59–60.
20. *GG*, 23 July 1868, page 3; Dunn (*ibid*), page 116.
21. *Bendigo Advertiser*, 25 May 1868, page 3; 6 November 1868, page 2; *VGG*, *Gazette* 7, 29 January 1869, page 204. The type of boring machine is undoubtedly a 'Ford's' boring machine. The *QRMRS* for the quarter ending 30 September 1869 refers to it as a 'Hunt's boring machine'. (In 1850 Robert Hunt, E.R.S., used a rock boring machine in sinking a pit of the Abercarn Colliery, South Wales. The holes were bored in one operation, and fired in volleys. See Weston, E.M. (1910). *Rock Drills: Design, Construction and Use*. McGraw-Hill Book Company, New York and London, page 6). However, the Good Hope Company financial statement in the *VGG* of 29 January 1869 definitely refers to the purchase of a 'Ford's' boring machine' from 'Messrs [G.R.R.] Vivian & Co' of Castlemaine [established in 1857]. It is almost certain that the *QRMRS* is in error.
22. McCarthy, P.L. (1985). *Australia's First Rock Drill – an Historic Note*. In *Bulletin of Proceedings*, Australasian Institute of Mining and Metallurgy, Volume 290, No.2. See also Brough Smyth (*ibid*), pages 230–232.
23. *QRMRS*, quarter ended 30 September 1869, page 43; quarter ended 31 December 1871 page 38; quarter ended 31 March 1872, page 36; *GG*, 28 December 1868, page 3.
24. *GT*, 23 December 1871, page 3
25. *QRMRS*, quarter ended 30 June 1872, page 43; quarter ended 30 September 1872, page 43.
26. *QRMRS*, quarter ended 31 December 1872, page 41.
27. *VGG*, *Gazette* 57, 23 August 1872, page 1597; *GT*, 28 March 1874, page 3.
28. *QRMRS*, quarter ended March 1873, page 41; *QRMRS*, quarter 30 June 1872, page 40; quarter ended 31 December 1873, page 38; quarter ended 31 March 1874, page 37; quarter ended 30 June 1876, page 36; quarter ended 30 September 1876, page 37; *The Argus*, 16 September 1874, page 7.
29. *VGG*, *Gazette* 65, 22 June 1877, page 1224; *QRMRS*, quarter ended 31 March 1877, page 35; quarter ended 31 March 1878, page 33; quarter ended 30 June 1878, page 36.
30. *VGG*, *Gazette* 38, 28 March 1879, page 695.
31. *VGG*, *Gazette* 105, 7 November 1879, page 2652; *QRMRS*, quarter ended 31 December 1879, page 36.
32. *QRMRS*, quarter ended 30 September 1880, page 39.
33. *VGG*, *Gazette* 55, 4 June 1880, pages 1268 and 1273; *QRMRS*, quarter ended 31 March 1881, page 37.
34. *VGG*, *Gazette* 64, 8 July 1881, page 2050.
35. *QRMRS*, quarter ended 31 December 1881, page 42; *GT*, Wednesday 30 November 1881, page 3.
36. *VGG*, *Gazette* 39, 30 March 1883, page 737; *Gazette* 46, 20 April 1883, page 874; *QRMRS*, quarter ended 30 June 1883, page 42.
37. *GT*, 30 November 1883, page 1.
38. *VGG*, *Gazette* 64, 10 July 10th 1885, page 1990.
39. Dunn (*ibid*), page 116.
40. *GT*, 8 April 1892, page 3.
41. *VGG*, *Gazette* 21, 15 February 1895, page 684; *Gazette* 109, 6 September 1895, pages 3208 and 3217.
42. *VGG*, *Gazette* 114, 27 September 1895, page 3370; *Gazette* 120, 18 October 1895, page 3597.
43. *VGG*, *Gazette* 71, 22 July 1898, page 2873.
44. *VGG*, *Gazette* 89, 30 September 1898, page 3530.
45. *VGG*, *Gazette* 4, 9 January 1903, Supplement, page 53; *Gazette* 14, 4 February 1903, page 483.
46. *VGG*, *Gazette* 48, 3 May 1905, page 1521.
47. *The Argus*, 17 March 1905, page 8; 20 September 1909, page 10.
48. Dunn (*ibid*), pages 116–117.
49. *The Argus*, 20 September 1909, page 10.
50. *VGG*, *Gazette* 115, 22 September 1909, pages 4318 and 4319.
51. *VGG*, *Gazette* 36, 10 March 1911, page 1597.
52. *The Argus*, 30 June 1910, page 10; 26 July 1910, page 10; 5 September 1910, page 10; 19 September 1910, page 10; 1 October 1910, page 22; 17 November 1910, page 10.
53. *The Australasian*, 22 April 1911, page 44.
54. *Stratford Sentinel & Briagolong Express*, 2 May 1913, page 3.
55. *The Sydney Morning Herald*, 2 December 1913, page 11.
56. *VGG*, *Gazette* 41, 11 March 1914, page 1329.
57. *The Advertiser* (Adelaide), 1 June 1914, page 18.
58. *Punch*, 4 June 1914, page 15.
59. *VGG*, *Gazette* 177, 2 December 1914, page 5497.
60. *The Argus*, 21 August 1915, page 22.
61. *The Argus*, 3 June 1916, page 39.
62. *Ballarat Star*, 14 March 1866, page 4.
63. For a background to this firm see Evans, P. (2017). *Lives of the Engineers: Enoch Chambers*. In *The Old Machinery Magazine*, issue 192, August 2017.

Light railways at sea: coal hulks in Western Australia

by David Whiteford

Sometimes light railway information comes from a most unusual source. As an archivist with the State Records Office of Western Australia I have been working with an extensive collection of court records. One particular case, in 1899, revealed details of a most unusual use of a light railway – to transport coal on board a coal hulk in Princess Royal Harbour at the port of Albany on Western Australia's south coast. Research has revealed that a trolley tramline seems to have been a feature of coal hulk operations in Western Australia and elsewhere in Australia.

Albany

Prior to the 1890s development of Fremantle's safe Inner (Swan River) Harbour for ocean-going vessels, Albany (almost 400 km south-east of Perth) was Western Australia's main port and it retained importance as a steamer port well into the 20th century. Companies including P&O, Adelaide Steamship Company, and others used their own, or another company's,

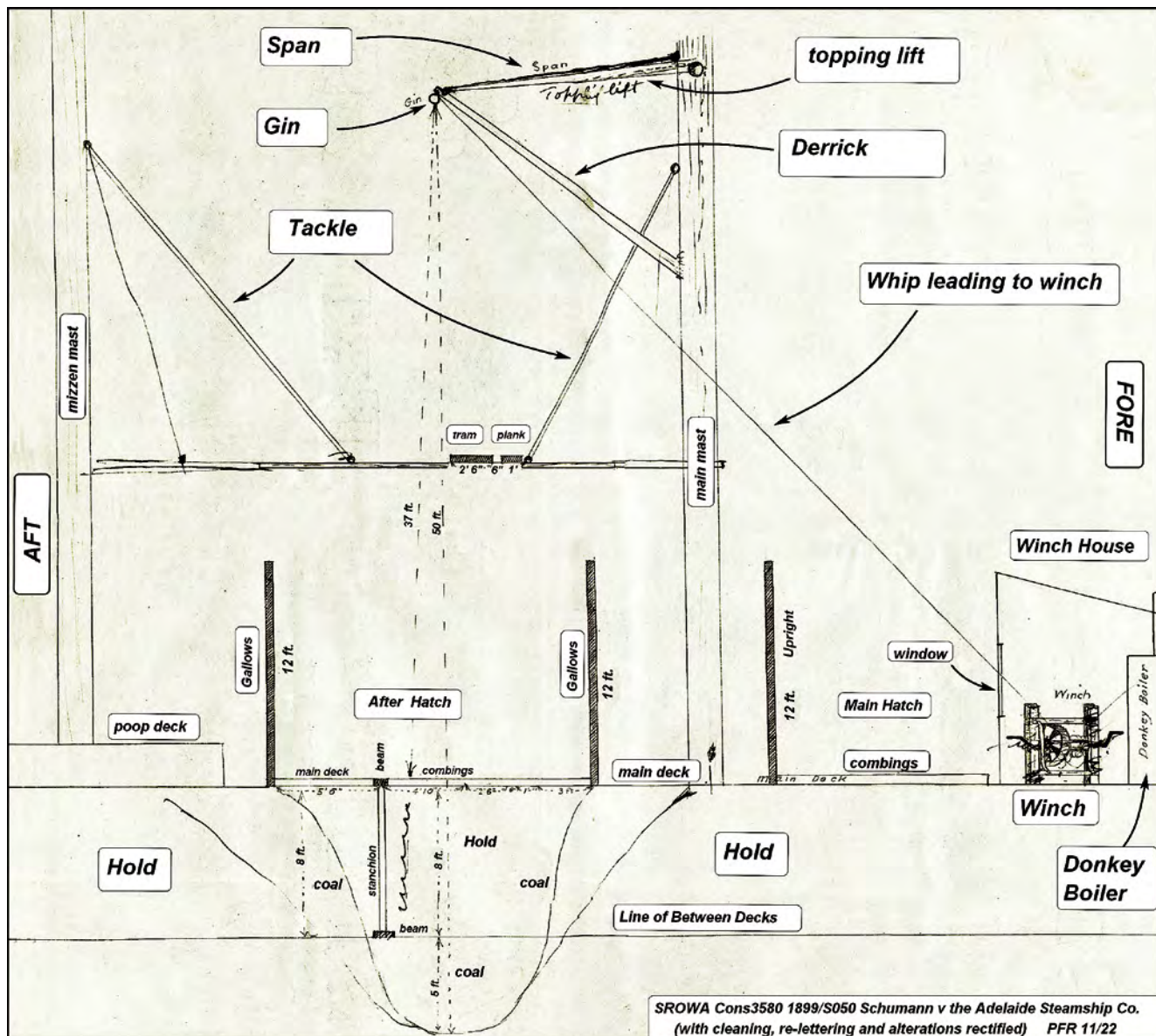
coaling depot and over the years a number of retired ships were used as hulks for the storing of coal and its transfer to steamships. The first was the *Larkins*, arriving in Albany in 1853 with 1000 tons of coal to become the depot ship of the P & O Company. The hulks and coal-fired steamers have long gone but today the Port of Albany is still important, particularly for the export of grain and woodchips.

An interesting court case

The case that fired my research originated on 16 September 1898 when J H C (John) Schumann was employed by the Adelaide Steamship Co Ltd as a whipman on board the company's coal hulk *Herschel*, for the coaling of the steamer *Warrigal*. The hulk had an elevated tramway above the deck that ran from the mouth of the hold to the steamer being coaled. The whipman would signal the winchman to raise the basket out of the hold using a friction winch and, on the basket being raised to the level of the tramline, he would deliver it to the man in charge of the trolley who would then push the trolley and basket to the steamer. Schumann was: "at the head of the gang, was paid 1s 2d per ton for all coal worked into or from a steamer. [He] was more a contractor to, than a servant of, the company, but the company had the first call on his services".¹ He was standing on the tramlines when the winchman started to raise the basket without any signal having been given to him. The basket struck the tramline causing Schumann to be thrown about 24 feet to the deck below, suffering permanent disabling injuries.



Albany and the view south-eastwards from Mount Melville, c1888. The large expanse of Princess Royal Harbour dominates the picture. This fine harbour is virtually land-locked, accessible only via a narrow entrance from King George Sound, seen towards the upper left. The harbour was discovered by Europeans in 1791. Its position on the Australia – Britain shipping route made it an ideal coaling station. Photo: Albany History Colln, Albany Library No.2627



Sketch of the Herschel, as presented at the 1899 court case, showing the method of raising baskets of coal from the hold with the winch and whip. The drawing is effectively a side elevation of the vessel (end-on to the tramway). The tramline is shown in the centre of the image.² For some reason it was originally drawn at deck-level, then crossed out and re-drawn in its correct position, supported by a cross plank suspended by tackle from the masts. Drawing courtesy of the State Records Office of WA, file Cons3580 1899/S050 Schumann v the Adelaide Steamship Co.

A year later John Schumann was in the Supreme Court of Western Australia as plaintiff in a civil sitting on Tuesday 19 September 1899, claiming £1000 damages, and such further or other relief as the nature of the case might require. Evidence was given that coaling was done day and night and Schumann alleged that the company refused to provide sufficient means of light to enable his duties to be safely performed on that night. The company claimed that as whipman, it was his duty to see that sufficient light was provided, and if the light was insufficient, it was solely owing to his negligence. According to the company the whipman was in charge of the men working on the hulk and supervised the work. Schumann countered by saying he had asked the hulk-keeper for more lighting but only one was provided which was shortly afterwards removed. When he said he could not work, the foreman told him to get on. Witness T Hart, trolleyman on the day, said that there were then no lights on the tramline. The winchman was M Martin who had been driving winches for about 10 years and he claimed he had heard the whistle that was the signal to raise

the basket. He hauled slowly for two or three seconds then more quickly after hearing a second whistle. He said that light on the tramline would not have prevented the accident. After the accident he had been told he must have mistaken another noise for the whistles.

Another witness, Francis M Baxter, was acting foreman on the occasion of the accident, but no longer worked for the company. He, and also the winchman and hulk-keeper, were paid by salary, but the men engaged in coaling were paid in gangs at a rate per ton. He said that Schumann had requested more light, but he had none to give. Baxter had previously, on two occasions, applied to the company's agents for more lights but did not get them.

The case was finalised on 21 September and the jury agreed that the company had not had sufficient lights on the hulk, and it was dangerous to work on the elevated tramlines without sufficient lights. However, the jury found that the plaintiff was guilty of contributory negligence as he had continued working after the one additional light that was supplied was removed. They awarded damages of £600.

Other accidents

In November 1899 in Albany the combined total of coal supplied from hulks to steamers was 7106 tons whilst some 6798 tons were received into the hulks from colliers. Being a lumper was a dangerous employment and *Trove* searches give some insights into these dangers and how rail or tram was involved in many accidents.

The above was actually Schumann's second accident of the year. In March 1898 he was leading hand of the coal lumpers who were coaling the livestock carrying steamer *Kolya* and was at the head of the tramway over the steamer's hold:

when the tram resting on the horse stalls gave way when the first truck was filled. Schumann was precipitated into the hold, a distance of 20 ft. Nothing more serious than a shaking is anticipated.³

Dr Frederick Ingoldby, Government Medical Officer at Albany, attended Schumann after that accident and also after his second when he said that a stiffness of the knee-joint was permanent and he doubted whether Schumann would ever be able to work again at his occupation.

Dr Ingoldby also attended the victim of another coaling related accident involving a lumper named Frederick Hulgensen. The steamer *Time* was alongside Albany's deep water jetty discharging coal into railway trucks. Shortly after midnight on Saturday 12 February 1898 Hulgensen was engaged in the trucks emptying coal from the baskets. While doing this, another basket struck him and knocked him over the side of the jetty. He was taken to hospital.⁴ On 1 February 1899 a coal lumper named Alexander Simpson was in the hold of the hulk *Conference* filling baskets. A basket being hauled up struck the tramline and half the contents fell back into the hold. Simpson was struck and rendered unconscious by several lumps. He was taken to hospital and attended by Dr Ingoldby.⁵

At 10pm on the 26 October 1898 (just six weeks after Schumann's second accident) the death occurred of Walter Ilett, one of the men coaling the RMS *Victoria* from the hulk *Herschel*. At the inquest, coal lumper Charles Anderson said he was working at the end of the tramline on the steamer and Ilett was running the trolley to him with the coal. While the trolley was being moved, a basket was raised from the hold and struck the tram line lifting it about two feet. An empty basket being shoved on the tram from the steamer struck Ilett, who was standing on the tram line, on the chest and knocked him into the hold, together with the basket and trolley.

The end of the tram line was lashed to the ship's rail. The coal was about 30 ft or 40 ft from the hatch. The basket must have first struck a beam below the deck and then swung over against the tram... Witness stepped off the tram on the fore-and-aft running plank and the basket then struck the side of the tram which canted on one side. The tram went back into its place again. Someone called out from the steamer's deck that a man had fallen. Witness could not find the trolleyman, Ilett, and called to the men below and asked if he was there... The pitch of the boat caused the basket to come up unsteadily. If the beam had not been across the hatch the basket would have come up clear of the tram. The beam being there really caused the accident. If a guard rope had been along the tram line the man might have saved himself.

The inquest jury said that the beams across the hulk hatch were dangerous and mainly contributed to the accident. Apparently, the beams were usually removed prior to coaling.⁶

Ships were usually coaled while anchored in King George Sound, an example being the liner ss *Kent* on 6 November 1899 which required 600 tons of coal. A hulk was placed alongside but there was a heavy swell and after an accident in which a

basket of coal was upset with the coal falling on lumpers in the hold, *Kent* was taken into Princess Royal Harbour. Anchoring in quieter waters the coaling was successfully continued. The use of the tram system, dangerous at any time, would, in boisterous weather, appear to be extremely precarious.

On 21 August 1901:

coal lumpers were engaged coaling the dredge *Governor* from the hulk *Conference* [and] one of the number, named John Henderson, aged 42, fell from the tram, fracturing one of his ribs.⁷

Another death occurred on 2 August 1902 when a young man named Henry Hay was employed as whipman in discharging coal from the collier ss *Mintara*. He was reaching out to catch a basket but fell 40 feet into the hold, breaking his neck. In the inquest one witness noticed that Hay's left foot slipped off the tram rail and the trolleyman tried to save him from falling. The witness also said that there was no contributing cause such as the trolley hitting the deceased. Hay's body was removed from the hold and placed on a trolley on the jetty before a doctor arrived to declare him deceased. John Regan was the lumper employed on running the trolley at the *Mintara*. Regan's evidence was that the whip caused Hay to fall. The basket was swinging, Hay reached out and caught hold of the whip which pulled him off the tram and at the same time he let go and fell. The whipman's duty was to give signals, guide the basket clear of the tram, and deliver them on to the trolley.⁸

On 1 June 1903 an elderly lumper named Thomas Page was working on the hulk *Samuel Plimsoll*, newly arrived in Albany. He was in a team transferring coal from the collier ss *Duckenfield* to the hulk when he fell from the tramway into the hulk's hold. He broke an arm but it was reported that: "Page is notoriously unlucky, and during the past year or two he has been the victim of several similar accidents".⁹

Albany's last hulk, the former clipper ship *Sierra Colonna*, was cast adrift in the Southern Ocean by the tug *Uco* on 31 October 1952 and then faced a fusillade of rockets, bombs, and machine-gun fire from the RAAF City of Perth Squadron's Mustang fighters! She was sent to Davy Jones in a maelstrom of ocean spray. It had been announced in September 1951 that the hulk would be withdrawn as soon as the small quantity of coal remaining was used so it is likely that she sat in Princess Royal Harbour unused for a year before being used as target practice. This was not an unusual end for hulks with many from Albany and Fremantle being sunk at sea after their usefulness was over.

Fremantle

The Fremantle Harbour was opened in 1897 from which time the hulks were generally placed alongside the vessel at its harbour berth. Prior to this, ships berthed at long jetties or were anchored offshore and required lighters to take their cargo. Some coaling occurred while ships were anchored in Careening Bay, a safe anchorage off the eastern shore of Garden Island. In 1864 there had been serious proposals to entice steamship companies to Fremantle in lieu of Albany but coaling facilities had not yet been established there. A study was made of prospective anchorages for a hulk and favourable reports sent to companies. The Peninsular and Oriental Steam Navigation Company's commander of the ss *Madras* wrote to the Governor's secretary in September that: "I am of the opinion that Fremantle as a port does not afford the facilities of a permanent coaling station equal to King George's Sound, and that it could not be substituted for the Sound but, I am of opinion that it would be a very tolerable auxiliary coaling depot, where 100 to 200 tons could be taken in..."¹⁰ By the 1890s at least one hulk was in use.

On 2 July 1894 the ss *Albany* was being coaled from the hulk *Redemptora* in Careening Bay. Lumper A B Johnston was adjusting the coaling tramway from the hulk to the steamer when he fell down the hold of the hulk and received spinal injuries.¹¹

On 28 December 1900 two lumpers, Henry Rubert and Andy Ellery, with hulk-keeper Peter Josephsen, were rigging up an iron shoot on a coal tramway leading from the steamer *Willyama*, lying at the main jetty, to the hulk *Tamerlane*. They were standing on the tramway over the open hatch of the hulk when it surged against the *Willyama* causing the end of a spar to fly off the rail of *Tamerlane* and knock the workmen into the hold. Of the three men, Rubert was seriously injured.¹²

The ss *Kolya*, noted above in Albany in 1898, was involved in a similar accident while moored at Victoria Quay on 16 September 1902. Robert Limpus was standing over the tramline on the coal hulk *Conference* which was alongside *Kolya*, when a basket of coal being hauled up from the hulk's hold struck the tram rails, tilting them up. Limpus fell about 28 feet and suffered severe bruising and abrasions.¹³

On 19 September 1905 a man named Charles Holme slipped from the tramline on board the ss *Dilkeria* and fell onto the coal hulk below. Fears of major injuries were allayed. Just over a year later, on 27 December 1906, a tramline collapse caused serious injury to Albert Edward Smith. He had been running the trolleys along the tramline from a hulk to the ss *Cockburn*. In May 1907 the Adelaide Steamship Company settled with Smith for £220.¹⁴

In 1914, lumper Charles Fredericksten fell from the tram and into the Swan River between a hulk and the ss *Clan McArthur* on 4 October. He received serious injuries.¹⁵ A fatality occurred on 13 August 1941 when Francis Claude Thornson fell about 25 feet onto the coal hulk *Concordia*. He had been working on the overhead trolley used as a runway for loading coal onto ships, stepped back and appeared to lose his footing.¹⁶

A royal connection?

One wonders if royalty watched coaling tramway operations at Fremantle in July 1901 when the HM Royal Yacht *Ophir* took 1400 tons of coal between 1pm on Tuesday 23 July and 4pm the following day? The Adelaide Steamship Company Limited undertook this and their Western Australian manager wrote to the Premier:

...the coaling work at Fremantle was performed most satisfactorily by all concerned, particularly the labourers, who in spite of other holiday attractions, stuck to the work... This is the largest quantity of coal which has been taken on board by any one steamer with quick despatch, and proves undoubtably that Fremantle is capable of doing such work with quick despatch. The largest quantity which we have supplied to one vessel was 1500 tons to HM Transport Ulstermore some few months ago, but for quick despatch and quantity, the Royal Yacht *Ophir* has certainly the record for Fremantle.¹⁷

It can only be speculation if the Royal Yacht was coaled using the basket and tram method though it seems likely.



This undated (early 1900s?) scene on Wallaroo jetty in South Australia shows some of the dangers of coal-lumping using the “basket and tram” method described in the article. The staging is about ten feet above the jetty and possibly 20 feet or more, above the coal in the ship's hold. There is one trolley on each track and there are three tracks on the nearest staging. Each basket held a bit less than ½ cubic yard (approx 8 cwt) of coal. In 1905/6, some 73,200 tons of coal and 6400 tons of coke were imported to Wallaroo, all being unloaded as shown and most destined for the Wallaroo Copper Smelters. At left SAR 0-4-4T V145 (Martin 69/1893) is shunting a long line of trucks with grain for export, the whole scene being watched over by the inevitable young lad. At many ports a coal-lumpers' union was formed. In Sydney, by 1905, they had an Award that detailed pay per basket, basket size, meal times, smoke-oh's etc – but little about safety! Photo: courtesy History Trust of South Australia ref GN05330



On Thursday 11 January 1923, our intrepid photographer, Mr J J Jones, perched himself and camera atop a truck-load of grain sacks on Wallaroo jetty. This must be export season as vessels both sides of the jetty are engaged in loading vast amounts of, predominantly, wheat. Lying along the middle of the jetty are the dis-assembled accoutrements for coal lumping – a pair of, purportedly, hydraulic lifts, piles of timber stage supports, lengths of pre-assembled tramway and a couple of trolleys. Were the lifts used to raise the various tramlines onto the staging supports? (Your editors would be glad to receive advices as to how they operated – see SL&A image B26195 for a clear image of one.) The gauge of the tramlines scales to 18 inches. See left for enlarged view. The photo appeared in the Adelaide Observer on 20 Jan 1923. Photo courtesy: State Library of South Australia, B1185

The Duke and Duchess of Cornwall and York were returning to England after the opening of the first Commonwealth of Australia parliament in Melbourne in May.

Geraldton

The Port of Geraldton, about 420 km north of Perth, also had coaling tram equipment though it was rarely used, as shown by the following story. On Thursday 18 April 1901, the ss *Richmond* began discharging coal for the W.A. Government Railways. However, the Railways could not supply sufficient wagons to convey the coal away, and the men unloading the wagons at the locomotive depot went on strike for overtime payments equal to the men on the ship (2 shilling per hour). This combination caused the captain of the *Richmond* to: “unship the gear for the trams (which were used here for the first time in many years to facilitate discharge) and [it] proceeded to Fremantle”.¹⁸

The end of trammimg in WA

The use of tramways on hulks in W.A. came to a head in April 1946 when the Fremantle Waterside Employment Committee (FWEC) of the Stevedoring Industry Commission received complaints from Fremantle lumpers. There had been complaint about the slowness of coal bunkering at the port. Lumpers had refused to work the basket and tram method since 5 April and coaling was reported to be taking longer resulting in the delayed departure of a number of ships. Mr W D Ivey, Chairman of the FWEC, said that

the normal method of bunkering was by the discharge of coal from hulks by the basket and tram method. This had operated at Fremantle for many years. Under this system coal was hoisted in quarter-ton baskets from the hulks, placed on tramways, and pushed across to the bunker hatch of the ship. The system had been objected to by the lumpers, who had worked it under protest for about 12 months. Last December (1945), he said, the lumpers

gave notice that they expected a changed method of bunkering, and stated that after three months they would not make themselves available for work by the basket and tram method.¹⁹

The FWEC inspected a bunkering job in February and opined that the tram method was worthy of alteration and improvement. A meeting of bodies concerned had been held but no alternative had been decided on. Employers claimed that the tram method was in use at many Australian ports “and that the few accidents at Fremantle supported their contention that the system was not dangerous”. Lumpers claimed that the job of the whipman was dangerous. He stood on a plank on the tramline and guided the basket to its position on the line with the friction winchman unduly responsible for the safety of the whipman. Since 5 April they had refused to operate the positions of whipman and winchman.

The Adelaide Steamship Co. Ltd. and McIlwraith, McEacharn Ltd. issued a joint statement.

The chairman of the Waterside Employment Committee at Fremantle was evidently under a misapprehension as to the tram and trolley method having been objected to by the lumpers about 12 months ago and since worked by them under protest. What happened was that the union asked that the rates of pay of the friction-winch drivers, whipmen and trolley men employed in connection with the method in question should be increased by 9d an hour... These increases were eventually conceded as from October 15 last, and an agreement was signed accordingly. Apparently the union was quite content with what was then done. Needless to say [employers] were somewhat surprised to receive from the union on December 20 a letter to the effect that at a meeting of its members on October 27 it had been decided that a claim should be made on the employers for some “improvement” to be instituted in the method of handling bunker coal at this port, the union seemingly being under the impression that action had already been taken in this respect at



A busy scene in Fremantle harbour, c.1905. The nearest vessel is the ss Moira, with a coal hulk alongside. The accompanying enlargement of the centre portion (left) shows that the photographer captured the moment coal was being trammed across from the hulk to the steamship. The elevated nature of the tram line and the obvious risks involved is well illustrated – imagine doing this if the waters were unsettled and it was night time, during a sudden squall. Note the donkey engine on the left side of the hulk for powering the winches. The 2184-ton Moira was built by W Denny & Bros., Dumbarton, Scotland in 1901. She was 301ft long, and 42ft wide. Sold by AUSN Co Ltd in 1926 to Toyo Kaiun KK, Japan; she was sunk by a US submarine in August 1944 off the Ryukyu Islands. Photo: State Library of WA ref 009674PD





Albany coal hulk Copeland at Deepwater jetty. c.1940. Photo: Robert Stephens Colln. Albany History Colln., Albany Library No.9999

other ports in the Commonwealth. In reply...the union was advised that the method in operation was the counterpart of that in Adelaide and Melbourne (although it is true that some years ago an elaborate and costly mechanical plant was installed at Sydney, where, however, steamers were bunkering every day and taking their main supplies whereas at Fremantle, under normal conditions, such work was very intermittent, and comparatively small quantities were taken), but that if the union should be able to suggest anything which in reason might be done to improve the system the employers would be glad to give it consideration... The tram and trolley method is the most efficient one that could be devised for a port like Fremantle, where steamers have to be bunkered from the waterside in their discharging and / or loading berth. Any mechanical system that might be installed would be quite uneconomic, not by any means calculated to expedite the dispatch of shipping, especially as only one vessel could be dealt with at a time, and incidentally would deprive the lumpers of a considerable volume of work...²⁰

I have been unable to trace any other official or secondary references to this dispute and any conclusion, although the Perth *Workers Star* newspaper of 25 October 1946, in an article headed *Safety measures urgent at port*, said that: "In recent years there have been quite a number of improvements in working conditions (no trams and trolleys for bunkering, short shifts for obnoxious shift jobs, etc.), but there is still room for much to be done". It seems that the April 1946 ban was either still in force or the tram and trolley system had been replaced.

The use of coal hulks at Fremantle ended in 1950 and the last one, the former windjammer *Bankfields* was attacked by the RAAF 27 miles from Fremantle on 7 June. "As the *Bankfields* was subsiding into the water over the continental shelf, the Mustangs turned from their rocket attack and raced in with machine guns blazing in a strafing attack".²¹ *Bankfields* had been sold to a metal dealer who had stripped her of anything of value and this may have included the tramway. She had been the only hulk at Fremantle since April 1948 when the *Concordia* was towed off Rottneest Island and sunk.

Victoria and elsewhere

Similar operations occurred in other colonies/states and the following cases are a sample of coaling tram references found for Geelong and Melbourne (Melbourne unless noted). Invariably coaling trams were only mentioned when an accident occurred. In the case of fatalities, the resulting coronial enquiry gave the cause of death as "Accidental" and it was many decades before more stringent safety measures were introduced. By then, coal-powered steam ships were on the way out anyway.

Geelong 5 May 1881.

An accident... happened on board the steamer *You Yangs*, at the Railway Wharf... The vessel was discharging her cargo of coals, and it appears that a full basket, raised by the donkey engine, struck the elevated tramway along which the coals are trollied to the wharf, and overturned it. James Walsh, working a night shift on the tramway, was on it at the time it was upset and, perceiving his danger, jumped, to avoid being thrown down the hold. (*Geelong Advertiser* 7 May 1881)

24 May 1902. 54-year-old Antonio Alla received fatal injuries whilst assisting discharge of coal from the steamer *Norkooowa*. He was knocked over by a truck of coal and thrown from the landing stage to the wharf. He died a few hours after admission to Melbourne Hospital. (*Argus* 26 May 1902)

6 April 1905. Charles Keene (48) had aided unloading of coal from the *ss Barrier* at West Melbourne Docks and was sweeping up some small coal from the wharf. Other workmen were removing the portable tramway, along which the trollies had run from the vessel to the trucks. The iron tramway was lifted by a winch, and was being swung to the wharf, when one of its hooks gave way, the iron rails swung downwards, and one of them struck Keene on the head. He was killed instantly. (*Sydney Morning Herald* 6 April 1905)

19 June 1914. David Mann was unloading the collier *Jeseric* and was pushing a trolley bearing a basket load of coal along a piece of staging from the ship's side to a shoot when the lateral support between two uprights on the pier broke. Mann

was thrown headlong to the pier; his skull struck one of the trolley lines on the permanent track and was shattered. (*Argus* 20 June 1914)

25 June 1923. Men assisting unloading coal from the ss *Goulburn*, at the Coal Berth, North Wharf, narrowly escaped fatal injuries when the coal staging collapsed... In order that the coal might be conveyed to the gasworks in drays, two sets of staging were erected across the wharf from the steamer's hold. On this staging were tram lines over which the loaded buckets were wheeled to the schute. The staging was of a temporary character and the whole structure weighed between 10 and 12 tons. Shortly after half past ten o'clock, after two buckets of coal had been wheeled over the tram line, a crash was heard, and the staging at the end nearest the drays collapsed. Eight men, four in charge of the trams and four topmen were working on the staging at the time, and most of them were caught between pieces of falling timber and debris. Four men were admitted to Melbourne Hospital. (*The Mercury* [Hobart] 26 June 1923)

11 December 1928. Eight men were injured in the hold of the steamer *Dumosa* in the Yarra today, when gear which was used for the discharge of coal collapsed and fell through an open hatchway, where the men were working. Several trollies and rails were precipitated onto the coal. The *Dumosa* had come from Newcastle, and the usual practice of running rails and trollies on the deck from the wharf was followed today. The coal lumpers were at work in the hold at a depth of about 8 feet, when without warning the timber carrying the rails snapped, and the rails, trollies and loading slings crashed into the hold. (*Examiner* [Launceston] 11 December 1928)

The use of the "basket and tram" method to shift coal from colliers to hulks, hulks to ships, or colliers to shore, though widespread was not used as much at some ports as it was at others and dates of introduction vary. The Sydney Coal-lumpers' Union (the first and largest lumpers' union in the country), formed in 1882, appears to have been against increasing the use of mechanisation – even as helpful as the use of a tram would seem. Thus, there continued to be many hundreds of men employed in carrying baskets of coal, on their shoulders, along elevated narrow planks, day and night. Fatalities and injuries were possibly the highest per capita of any industry in Australia. In July 1899, George Herbert, the secretary of the union told a reporter from the *Evening News*, Sydney, that since 1882 seven men had been killed and 45 incurred serious injuries.²² Before the year was out, another two lumpers had been killed. Periodically, the stevedoring companies tried to increase the load size of the baskets – from 12 or 13 per ton, to 10 per ton, a move opposed by the union. From a fairly exhaustive newspaper search of Sydney accidents after 1880, the first mention of coaling trams was found in 1905 when both Jones Bros. and B Byrnes Ltd were using them.²³

An 1889 attempt to introduce coaling trams at Port Adelaide came, initially at least, to nought (though such a system had been in use at Wallaroo for several years). In May a dispute arose between the coal lumpers and W Howard Smith & Sons regarding discharging coal from a recently-arrived collier, the ss *Buminyong*. The Howard Smith company wished to introduce the system they used in Melbourne and Geelong, namely the use of larger baskets, on trollies, run along on tramlines. Initially, there were no objections and the necessary equipment was brought from Victoria. When rigged and in position and, despite being easier, physically, for the lumpers, they objected and refused to start work. Possibly they reasoned that if they discharged the vessel faster, they would receive less pay (despite being told they wouldn't). At Port Adelaide the

wage was per day unlike Victoria where it was per ton.²⁴ Next day the tramway equipment was de-rigged and the men went back to work with their old small baskets, manually lumping. The date of re-introduction to Port Adelaide is unknown though an accident in February 1900 confirms its use by then. A stevedore, James Murphy, was discharging coal from the ss *Moonta*, and fell from the overhead tram into the hold, breaking some ribs.²⁵

Some of the ships used in WA

Herschel

The *Herschel* was an iron sailing ship built at Thomas Brassey's Canada Works, Birkenhead, England, in 1857 and launched as *Edith Byrne*. Sold to Robert Miles Sloman & Co. in March 1865 it was renamed *Herschel* and was used to carry immigrants to Queensland. Sold again in 1891, to Halvigsen of Norway, it was then purchased by the Adelaide Steamship Company in February 1893, converted to a coal hulk in Adelaide and towed to Albany. In July 1908 it was scuttled off Inner Island, King George Sound, and in 2019 the wreck is thought to have been found.

Warrigal

The *Warrigal* was a steel screw steamship built in 1893 by the Sunderland Ship Building Company, England. Owned by Wilhelm Lund & Sons (Blue Anchor Line), it was sold in 1906 to W Thomson & Sons of Dundee, then in 1907 to the Cairn Line of Steamships Ltd. In May 1908 it sank sailing from Montreal to London, off Wolf Lighthouse after a collision with the ss *Japanic*.

Kolya

The *Kolya* was built by Workman, Clark & Co., Belfast in 1888 for Kirklands Steamship Co., Glasgow, and named *Kirkland*. The Adelaide Steamship Co. chartered the ship in 1895, purchased it in June 1897 and renamed it. It could carry 483 cattle and 1,140 sheep. The Adelaide Steamship Co. sold it in 1912 and it was broken up in 1924.

Sierra Colonna

Sierra Colonna was built in Stockton-upon-Tees, UK in 1878 for the Sierra Line (Thompson, Anderson & Co.). Hulked in Adelaide in 1914 it was bought by the Adelaide Steamship Company and brought to Albany in 1917.

Samuel Plimsoll

Samuel Plimsoll was one of the fastest emigrant and wool clippers on the London - Sydney - London route from 1880 to 1895 and could do the eastbound voyage in 70 days. Named for the English politician and social reformer Samuel Plimsoll (best remembered for having devised the Plimsoll line, the line on a ship's hull indicating the maximum safe draft, and therefore the minimum freeboard for the vessel in various operating conditions) she was built in 1873 at Aberdeen, Scotland, by W. Hood & Co. for the Aberdeen Line. Severely damaged off New Zealand in 1902, she was sold as a hulk and in use in Fremantle by 1903. On 17 June 1945 the *Dalgoma* collided with and sunk the *Samuel Plimsoll* in the middle of the harbour adjacent to H shed, Victoria Quay with the latter's masts showing above the water. In October work began to remove the 1300 tons of coal on board but it was not until July 1947 that work began to remove the wreck. This was completed in September; twelve sections of the cut-up ship having been dumped at sea. The figure head went to the Perth Museum long before the removal of the hulk.

Bankfields

An iron lighter, formerly a 3-mast barque, built in 1876 by Osbourne, Graham & Co, Sunderland as *James Beazley*. Renamed in 1878. Acquired by the Adelaide SS Co in 1911 and hulked. Taken to Fremantle in 1918 and, as noted above, was the last hulk in use at Fremantle, being taken to what is known as the Rottne Island ships' graveyard in 1950.

Conclusion

Coal hulk tramways in Western Australia operated for at least 50 years and likely longer. By nature, the tramways were very temporary and must have been made up of panels ready to lay and remove as required. Simple end-to-end operations, with perhaps only one trolley being used in some cases whereas in other instances multiple planks and trollies were used. The 1928 Melbourne incident noted above mentioned several trollies and the Wallaroo images show a number in use at once. The practice was obviously widespread throughout Australian ports and likely also at other coaling stations on international routes. While incidents tend to be rather repetitive in nature, there may be scope for further research to locate greater detail of these interesting tramways and their operation.

Acknowledgements

Thanks to Phil Rickard for an initial review of my text, providing a list of *Trove* sources for other colonies and states, penning the "and Elsewhere" notes and locating the Wallaroo images. To Sue Lefroy of the Albany Public Library for assistance with photographs and information, and to Fiona Caratuzzolo of the State Library of WA for assistance with photographs.

Bibliography

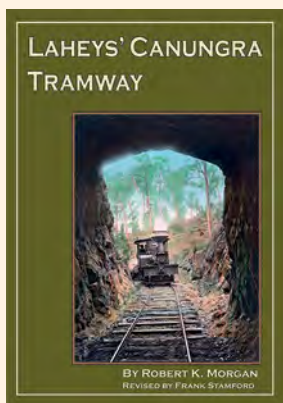
Western Australian Museum, Maritime Archaeology database <http://www.museum.wa.gov.au/maritime-archaeology-db/wrecks/>

1. "The West Australian 21 Sept 1899 p7
2. SROWA Cons3580 1899/S050 Schumann v the Adelaide Steamship Co.
3. Daily News 12 March 1898 p1
4. Albany Advertiser 15 February 1898 p3
5. *ibid* 2/2/1899 p3
6. The West Australian 31 Oct p5; Albany Advertiser 1 Nov 1898 p3
7. Albany Advertiser 23 August 1901 p3
8. *Ibid* 5 August 1902 p4
9. The West Australian 3 June 1903 p4
10. SROWA Cons 5000 40/2/04 Report as to capability of Port of Fremantle as a coaling station.
11. Daily News 3 July 1894 p2
12. The West Australian 29 December 1900 p5
13. The West Australian 17 September 1902 p6
14. Daily News 19 September 1905 p3
15. The West Australian 5 October 1914 p6
16. Daily News 14 August 1941 p1
17. SROWA CONS1496 1901/1222 The Adelaide Steamship Co. Coaling work at Fremantle.
18. Geraldton Express 26 April 1901 p3
19. The West Australian 13 April 1946 p12
20. *ibid* 12 April 1946 p12
21. Daily News 7 June 1950 p1
22. Evening News, Sydney 25 July 1899 p5
23. The Australian Star, Sydney 17 April 1905; Evening News, Sydney 10 July 1905
24. South Australian Register, Adelaide 7 May 1889
25. The Advertiser, Adelaide 8 Feb 1900 p5

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Laheys Canungra Tramway was a 3 ft 6 in gauge timber tramway in south-east Queensland which operated from about 1903 to the early 1930s. It used one B class Climax locomotive, and two A class and one B class Shay locomotives. The tramway ran through superb scenery, and included one tunnel through rock, and a 1 in 12½ grade for over half a mile. To add more interest, it had a very basic T Ford railcar, an even more basic Commer railcar, and a home-made passenger car.

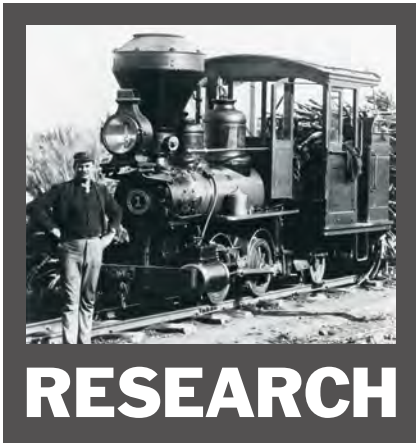
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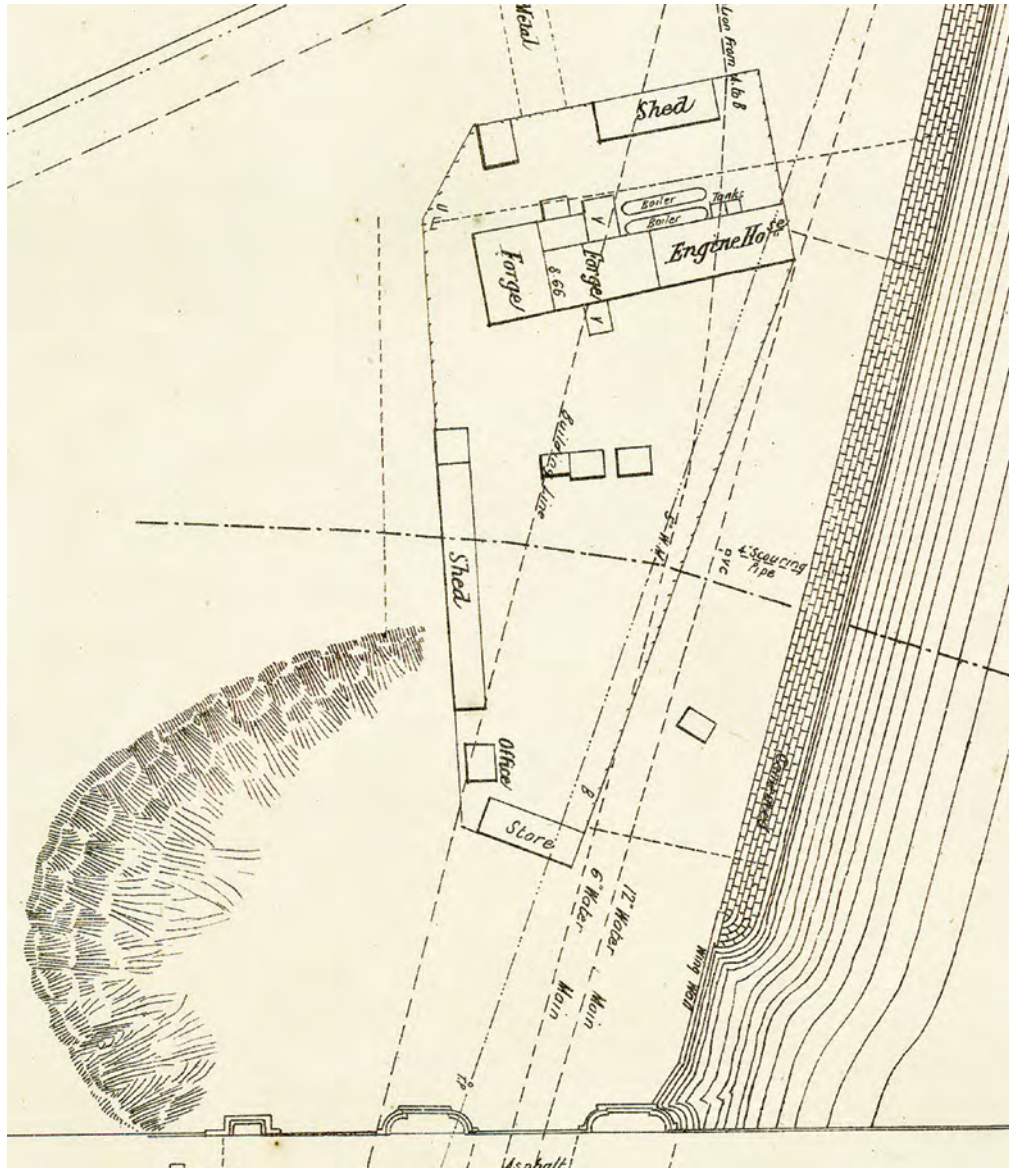
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Yarra Bank Tramway

by Peter Evans

A happy coincidence led to the discovery of a map and a complementary photograph whilst researching an entirely different topic. The map shows part of the south bank of the Yarra just west of Princes Bridge in Melbourne (the site of today's Hamer Hall of the Melbourne Arts Centre). The map was produced in 1896, which helps to date the photograph clearly showing the same group of buildings.

The foreground of the photograph (overleaf) shows a ramshackle collection of buildings with the Victorian Confectionary Works and the Australian Paper Mills in the background. The map shows those ramshackle buildings to be a small engineering works, with a



Photographed by J. A. Gribbin, from an Original Painting by A. Flood.
MELBOURNE.



forge, boiler house and engine house attached. Of interest is the tramway on the right. A small group of men struggle to haul a crab winch into the enclosed

yard, while the horse which has clearly brought it along the tramway on a small flat truck looks on, perhaps relieved to have the heavy work done by humans

for a change. At first glance it would appear that the tramway was installed to serve the engineering works, but two items suggest a different use.



In the extreme right foreground is a side-tipping skip full of earth or rock, whilst the map shows an excavation or quarry in approximately the same location. The far end of the tramway appears to lead to a landing with barges moored alongside. Could this mark a subsequent re-use of the quarry opened

up by contractor David Munro for the construction of the earthen embankment on the south side of the new Princes Bridge (opened in October 1888) and from which 40,000 cubic yards of material had already been excavated?¹ The buildings were not there in 1888², and the fact that the buildings were there

to be mapped in 1896 appears to rule out any connection with the construction of Princes Bridge.

Can anyone shed further light on the subject?

1. *Weekly Times*, Saturday 7 May 1887, page 15; *The Argus*, Wednesday 3 October 1888, page 12.
2. VPRS 5357/P0, unit 3655, file 1009/91.



Top: Princes Bridge circa 1890 from a John Shirlow etching courtesy State Library of Victoria. **Above:** Princes Bridge circa 1890 courtesy Museums Victoria

Stannary Hills and Irvinebank tramways

by John Dennis

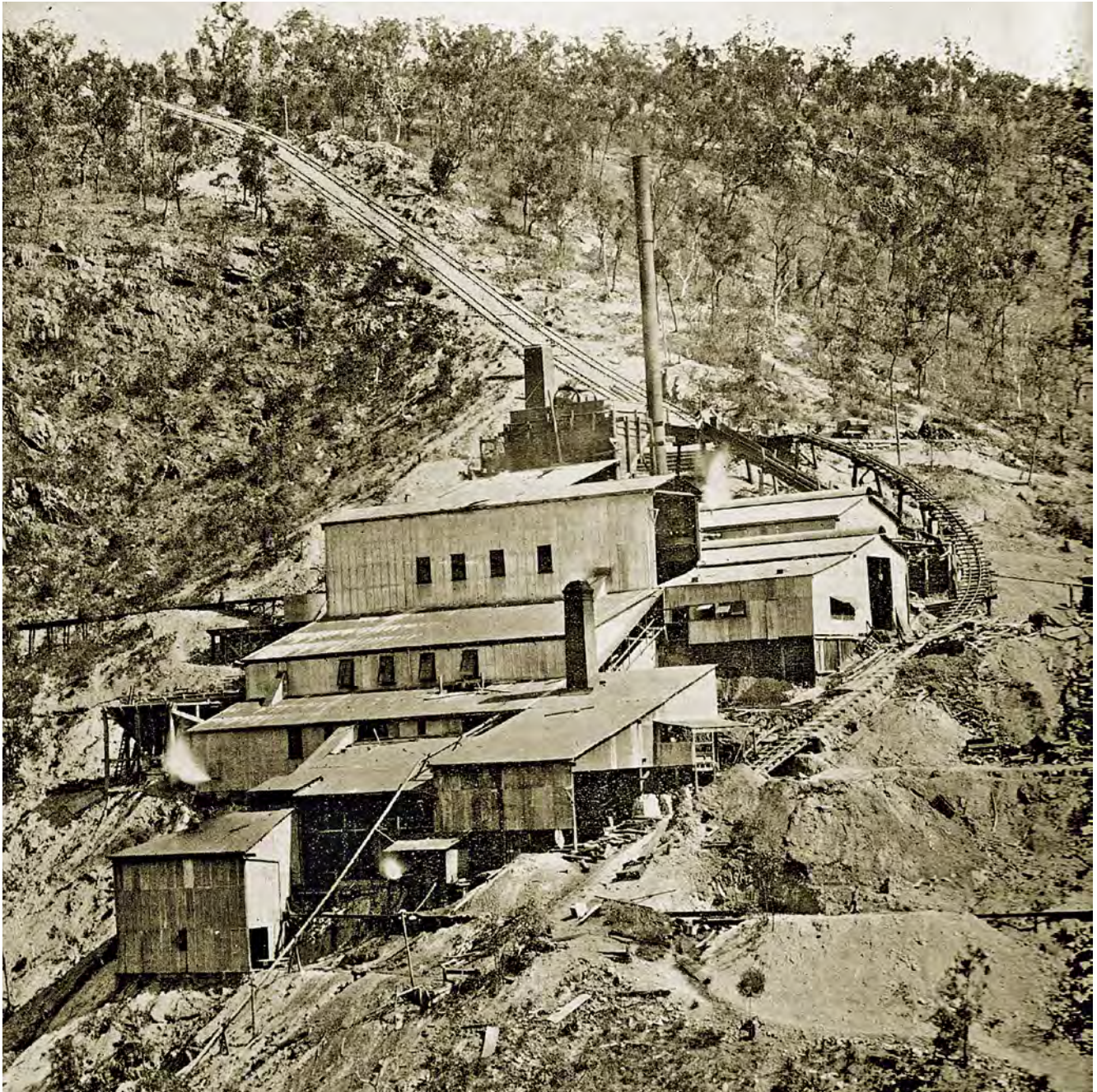
When the late Gerry Verhoeven penned his wonderful articles on the Stannary Hills and Irvinebank tramways in *Light Railways* 30 and 32, back in 1969, there were no photographs on the line to Rocky Bluff. In 1986 the Society published *Rocky Bluff to Denmark* to celebrate our 25th anniversary, and included the earlier articles on Stannary Hills. Although the published photographs were of a higher quality than those in the magazine articles, the line to Rocky Bluff remained unillustrated.

The Stannary Hills Mines and Tramway Company planned for a 2ft gauge tramway to access their mines, connecting to the outside world at Boonmoo, on the Chillagoe Railway & Mining Company line. The survey followed Eureka Creek including a spectacular gorge section, to the mines in the vicinity of Stannary Hills, and on to Watsonville to service the Company's Caledonia Mine. A branch off the Watsonville line was also surveyed to the Walsh River, where a mill was to be erected at a location which became Rocky Bluff.

Construction began in 1901 from Boonmoo, through Eureka Gorge, 13m 55c to Stannary Hills, and on a further tortuous 6m 59c to the Mill, the latter segment winding up and over a watershed, and requiring 31 bridges. Building the Mill branch first was sensible as the battery was required



This photograph shows the 650 ft length of the aerial tramway (or flying fox) linking the horse-drawn tramway from the Arbouin Mine with the ore hoppers on the Stannary Hills tramway at the "18 Mile". In his book "Back O' Cairns" Ion Idriess describes the operation as a "loaded truck, minus its undercarriage, was simply hooked to a trolley head fitted over the cable, a lever was pulled, and the next second that truck was shrieking down and away over the gorge, Flying hell for leather out over space and down, while up screeched empty trucks hauled by the weight of the loaded one whizzing down". However exciting this description is, it must be taken with a grain of salt, the book being published about 28 years after his short visit. Photographs show no means of swinging the scoop to align with the underframe, and the ore-trucks in use were designed to fit the tumbler; having smaller scoops would not permit the tumbler to be used. Photo: Queensland Government Mining Journal April 1909



A magnificent view of the mill at Rocky Bluff, which extended up along the steep bluffs from close to the level of the Walsh River. Ore was delivered via the tumbler (tippler) visible on top of the ore bin and the top level, about 200 ft above the Walsh River. The platform at the foot of the incline, about the level of the tumbler, was the location of a weighbridge and the lower turntable. Out of shot to the right is the "town" of Rocky Bluff, where a cluster of houses were located along Ruffasell Street, while the rails running down, alongside the mill, would, if extended, reach the river almost at the location of the first weir. Another weir was constructed some distance upstream, with water reaching the mill via a flume, although that did not stop the mill running out of water. Photo: Queensland Government Mining Journal May 1911

before the Company could begin to make a return on the money spent. Ultimately the Watsonville line was never built.

The tramway's Rocky Bluff terminus was located high above the Walsh River, with access to the mill below by a double-track 3ft gauge incline tramway about 800ft in length. Carrier wagons were provided, fitted with 2ft gauge track, and turntables were utilized at each end to transfer the 2ft gauge wagons to the waiting carrier vehicle.

Later, the Irvinebank Company built their own tramway from their smelter and mill, connecting with the Stannary Hills tramway at "The Junction", 1m 10c on the Rocky Bluff side of Stannary Hills.

Like many mining companies of this era, optimism outweighed reality, and as early as 1907 the company was forced to reorganise,

and again in 1912 when John Darling and Company took over the assets. An additional difficulty was the mill at Rocky Bluff being forced to shut down for periods due to a lack of water. The 1920s saw Arbouin Mine providing the bulk of the ore, somewhat ironic as this mine was located adjacent to the proposed line to Watsonville. Arbouin ore was dispatched along a horse-drawn tram for one mile, then a flying fox across a deep gully. In 1925 the Mill was closed, and the tramway was lifted back as far as a siding servicing a mine, almost at The Junction.

In 1927 the tramway's assets were purchased by the State Government, and operation came under control of the State Treatment Works at Irvinebank. The last services on the joint tramway ran in 1939, with rolling stock retrieval and dismantling completed by late 1941.



Above: The Arbouin or "18 Mile" siding and ore loading bins were located on a shelf above the Basin Gully ravine. Ore was taken from the mine along a horse-drawn tramway a distance of about 1 mile, then via a flying-fox 650 ft in length, with the tub containing a little over 1 ton of ore. This siding was installed in 1905 allowing the ore trucks to be loaded without blocking the main line, and facilitating the operation of a shuttle service to Rocky Bluff. The ore wagon hoppers are from Arthur Koppel, Berlin (along with some, perhaps all of the metal work) and the trucks constructed at the Stannary Hills workshop. The hoppers may look like "side tippers" but they would carry about 3 tons of ore, and other photographs show they are bolted securely to the wagon frame, the contents being emptied by the whole truck being hand propelled onto a tumbler, and upended over the ore bin at Rocky Bluff. The locomotive shunting the loaded ore-trucks is either Falcon (Brush) 291 or 292 of 1901. Photo: John Oxley Library, State Library of Queensland. Image No 27921-0001-0144





Above: A lovely photograph of the ore bin at Arbouin Siding, and clearly showing the depth of the Basin Gully ravine. The Falcon (Brush) locomotive 291 or 292 has arrived from Rocky Bluff with an empty train, and is trailing a 4-wheel tender (in reality a water wagon) and the Stannary Hills tramway first passenger coach, both built on ore wagon underframes. This particular tender is a mystery, and does not appear (at least in this condition) in any other photographs. The wire rope required replacing quite often, and coils can be seen alongside the track. Note the size of the tub used on the flying fox when compared to those on the ore trucks. Photo: University of Newcastle ARHS Box 153_3565

Left: Looking down from the summit of the gravitation incline we can see the town of Rocky Bluff below, with the mill hidden by the very full load of firewood descending. All Stannary Hills trucks are loaded transversely onto the incline wagons. The incline ends (100 ft lower in altitude) at a platform upon which a weighbridge was found. One turntable is located at the nearest end of the platform (almost impossible to see, but the 2 ft gauge rails leading to/from the carrier wagons are clear, and a second turntable beyond is obvious, with the trestle heading to the ore bin heading off at an angle. At other times there were different arrangements, with the second turntable having multiple exits. The trucks carrying firewood were dumped into a chute leading down from the platform to the boilers. John Oxley Library, State Library of Queensland. Neg No 109714

Right: There were no roads into Rocky Bluff, with everybody needing to either ride the incline, or clamber up or down alongside. This photograph shows what would appear to be a family group posing on an empty ore-truck on a short stub track off the lower incline. With no passenger services to Rocky Bluff, any intending passengers or residents (including school children enrolled at Stannary Hills) needed to hitch a ride, both on the incline, and the 2ft gauge tramway. John Oxley Library State Library of Queensland Image No 31280-0001-0014





Industrial Railway NEWS

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Special thanks to contributors to the *Sugar Cane Trains/Navy Pics 2ft* Facebook page.

QUEENSLAND

RIO TINTO ALCAN, Weipa

(see LR 288 p.28)

1435 mm gauge

Collision damaged Downer EDI Co-Co DE R1006 (08-1764 of 2009) was observed on road transport at Port Augusta, South Australia, on 9 December.

Damien Butler 12/22

FAR NORTHERN MILLING PTY LTD, Mossman Mill

(see LR 288 p.28)

610 mm gauge

Com-Eng 0-6-0DH *Mossman* (B1719 of 1957) was seen on a ballast train at Shannonvale Road on 18 October. Since 2021, Com-Eng 0-6-0DH multi-unit locos *Cook* (AL3372 of 1964) and *Ivy* (AL4181 of 1965) have been repainted in the mill's yellow and green livery. This just leaves the *Mossman* in the former



yellow and blue livery. Clyde 0-6-0DH *Habana* (60-215 of 1960) was seen in the loco shed on 24 or 25 November. RMP Baguley 0-6-0DM *Mowbray* (3378 of 1954) from the defunct Port Douglas Steam Train Company was still at Port Douglas late in November and on 3 December. This loco was supposed to go to Mossman Mill following closure of the tourist railway. The trackage from this railway has been lifted for mill use. Late in November, Chinamans Creek bridge on the Bamboo Creek branch was seen to be closed and barricaded off and with the inclusion of flood debris on its deck, the

implication is that this branch is no longer in use for its full length.

Anthony Winstone 10/22; Mike McCarthy 11/22; Shane Yore 12/22

CAIRNS KURANDA RAIL SERVICES, Cairns

(see LR 287 p.32)

1067 mm gauge

The frame and cab of ex Emu Bay Railway Walkers B-B DH 1102 (639 of 1970) remained here unsold in October.

Joseph Dietz 10/22

MSF SUGAR LTD, Mulgrave Mill

(see LR 288 p.28)

610 mm gauge

Clyde 0-6-0DH 13 *Hambledon* (64-316 of 1964) was seen working the northern beaches lines in October.

Adam Brown 10/22

Top: *Mulgrave Mill's Com-Eng 0-6-0DH 12 Riverstone (AD1452 of 1961) in the Thomson Road area near Edmonton on 15 October. Photo: Doug Witteveen*

Above: *Mulgrave Mill's Com-Eng 0-6-0DH 26 Meringa (AK3675 of 1964) in the Thomson Road area near Edmonton on 25 October. Photo: Doug Witteveen*

Left: *Com-Eng 0-6-0DH multi-unit locos Ivy (AL4181 of 1965) and Cook (AL3372 of 1964) trundling down Mill Street, Mossman in their new livery on 24 November. Photo: Mike McCarthy*



MSF SUGAR LTD, South Johnstone Mill

(see LR 288 p.28)

610 mm gauge

The old bridge over the North Johnstone River on the main line north had been completely removed by 28 October. The hi-rail herbicide spraying truck from here was seen on road transport in Townsville on 8 November.

Daniel Follett 10/22; Luke Horniblow 11/22

TULLY SUGAR LTD

(see LR 288 p.29)

610 mm gauge

Com-Eng 0-6-ODH multi-unit locos 11 (AD1347 of 1960) and 16 (AH4484 of 1964) were seen at work early in December. Com-Eng 0-6-ODH 18 (AO60113 of 1977) was seen with the ballast train early in December.

James Chuang 12/22

WILMAR SUGAR (HERBERT) PTY LTD,

Herbert River Mills

(see LR 288 p.29)

610 mm gauge

Firstly, a correction to the previous issue. Wilmar bogie brake wagon VRA 19 was built at the Pioneer Mill workshop and not at Proserpine Mill. Victoria Mill's Clyde 0-6-ODH *Ingham* (64-382 of 1964) was on loan to Macknade Mill from overnight of 21/22 to 24 November. Clyde 0-6-ODH *Perth* (69-682 of 1969) which was also on loan from Victoria Mill returned on 9 December. Clyde 0-6-ODH *Lucinda* (65-436 of 1965) replaced EM Baldwin B-B DH *Darwin* (6171.1 9.75 of 1975) and Com-Eng 4 wheeled brake wagon VRA 1 (PA101 of 1967) on the Victoria Mill sugar train from 8 December. After a brief stint hauling cane for Victoria Mill, the *Darwin* and VRA 1 returned to Macknade Mill on

the evening of 9 December. New build Wilmar B-B DH loco *Brisbane* (assembled at Macknade Mill in 2022) made its first commissioning run on 21 November and further light loco runs and adjustments continued in the days following. It and brake wagon VRA 19 went to Victoria Mill on 8 December for further commissioning and that is where they will be based. A haul out tractor collided with a loaded cane train hauled by Walkers B-B DH *Clem H McComiskie* (605 of 1969) at Gonanos siding on the Bambaroo line on 16 November. Minor damage resulted and nothing was derailed.

Kieran Koppen 6/22; Editor 11/22, 12/22; *Townsville Bulletin* 16/11/2022

WILMAR SUGAR (INVICTA) PTY LTD,

Invicta Mill, Giru

(see LR 288 p.29)

610 mm gauge

This mill has been crushing cane from Inkerman, Pioneer and Kalamia Mills this crushing season using a variety of methods for transfer. Inkerman cane is road hauled to sidings on the north side of the Burdekin River using semi tippers and piggyback haul out trucks then rail hauled to the mill. Kalamia cane is transferred directly by rail and Pioneer cane is delivered to Invicta Mill sidings by the harvesting groups. Invicta has to finish crushing by 23 December when several spans of the Houghton River bridge will be removed in preparation for wet season flooding. Walkers B-B DH *Clare* (655 of 1970) was seen running with Invicta Mill 6 wheeled brake wagon *Clare* (built in 1985 using Com-Eng C1015 of 1957) on 9 October. This is the only non bogie brake wagon in use here. Plasser tamping machines KMX-12T (255 of 1982) and KMX-08 (415 of 1995) were stabled at the Mitchell Road triangle on 26 November. The former was at Kalamia Mill on 6 November and the latter is on loan from Plane Creek Mill. On the same day, a pair of tractors with spray rigs used for grass and weed control on this mill's rail system were sighted parked beside the line. Clyde 0-6-ODH *Kalamia* (67-569 of 1967) is expected to go to Wulguru Rail Maintenance in Townsville for work on its running gear during the 2023 slack season. Rebuild of Invicta Mill bogie brake wagon *Giru* (built in 1994) had commenced by 26 November. One thousand tonnes of 63 pound rail from a relay of the line from the Lake McDonnell gypsum mine to the Port of Thevenard in South Australia has been obtained by Invicta Mill and was expected to be delivered over a period of five weeks.

Luke Horniblow 10/22, 11/22; Shane Yore 11/22; Australian Sugar Council LinkedIn website via James Chuang 12/22; *canenews* 11/11/2022, 9/12/2022

WILMAR SUGAR PTY LTD, Pioneer Mill,

Brandon

(see LR 286 p.33)

1067 mm gauge

Walkers 0-6-ODH *Aramac* (583 of 1968) derailed at Labatt Road in Airville with injury to the crew on 13 November. Cane from here has been transferred



Above: Mulgrave Mill's Com-Eng 0-6-ODH 26 Meringa (AK3675 of 1964) on the Cemetery line, Gordonvale on 23 October. Photo: William Thomson

Below: Clyde 0-6-ODH Lucinda (65-436 of 1965) at Kirkwoods Junction in the Backrock area on its way to Victoria Mill on 29 July. Photo: John Kirk



to Invicta Mill this season by several groups delivering directly to Invicta Mill sidings.
Townsville Bulletin 13/11/2022; *canenews* 11/11/2022, 9/12/2022

WILMAR SUGAR (KALAMIA) PTY LTD,

Kalamia Mill

(see LR 287 p.33)

610 mm gauge

The Plasser KMX-12T tamping machine (255 of 1982) from Invicta Mill and the Plasser PBR-201 ballast regulator (243 of 1984) from Proserpine Mill were here on 6 November. Cane from here was being transferred to Invicta Mill by rail on 26 November.

Luke Horniblow 11/22; *canenews* 11/11/2022, 9/12/2022

WILMAR SUGAR PTY LTD, Inkerman Mill,

Home Hill

(see LR 288 p.29)

610 mm gauge

Cane from this mill was being road hauled to sidings including Airdale Loop on the Pioneer Mill network for crushing at Invicta Mill on 9 October and 26 November. Semi tippers and haul out trucks piggybacking bins were in use. An ex Inkerman Mill 4 wheeled ballast hopper has been purchased by Peter Neve for use on Pete's Hobby Railway at Junee and arrived there on 13 September. It is numbered BW5 and was one of six obtained by the Kerosene Creek Tramway from the mill early in 2022.

Luke Horniblow 10/22, 11/22; Peter Neve 12/22; *canenews* 11/11/2022, 9/12/2022

WILMAR SUGAR (PROSERPINE) PTY LTD,

Proserpine Mill

(see LR 287 p.34)

610 mm gauge

Clyde 0-6-0DH 7 (65-442 of 1965) was seen on a load of fulls from the Strathdickie branch at Myrtle Creek Junction on 14 November. Walker's bogie brake wagon 1 (built in 1998, possibly using an ex QR wagon) has been renumbered 12 following a rebuild here this year. Its appearance has changed considerably with the concrete block ballast weights replaced by steel deck plates and the midships hut being removed. It is paired up with Walkers B-B DH 12 (680 of 1972). The Plasser PBR-201 ballast regulator (243 of 1984) was seen at Kalamia Mill on 6 November.

Anton Summer 11/22; Luke Horniblow 11/22; Tom Badger 10/22, 11/22

MACKAY SUGAR LTD, Mackay mills

(see LR 288 p.29)

610 mm gauge

EM Baldwin B-B DH *Hampden* (6706.1 5.76 of 1976) and Walkers B-B DH *Walkerston* (672 of 1971) teamed up to double head a load on 6 November and were seen coming down Sivyers Hill on their way to Farleigh Mill. EM Baldwin 4wDH *Little Baldwin* (5/774.1 2.64 of 1964) was stabled at Costello's 7 on the Farleigh network on 25 November.

Anthony Morris 11/22; Steven Jesser 11/22



Above: Proserpine Mill's Clyde 0-6-0DH 7 (65-442 of 1965) comes off the Strathdickie line at Myrtle Creek Junction on 14 November. Photo: Tony Summer

Below: Pioneer Mill's Clyde 0-6-0DH Colevale (65-438 of 1965) passes by Payards 2 with a load of fulls from Sexton Road on 31 July. Photo: John Kirk



WILMAR SUGAR (PLANE CREEK) PTY LTD, Plane Creek Mill, Sarina

(see LR 288 p.31)

610 mm gauge

Anderson Rea bogie brake wagon 2 (20/7/95 of 1995) returned to service around 10 November following refurbishment here this year. It is paired up with Walkers B-B DH 2 *Karlool* (632 of 1969). The Plasser KMX-08 tamping machine (415 of 1995) was still on loan to Invicta Mill on 26 November.

Luke Axiak 11/22; Jonathon Tait 11/22; Luke Horniblow 11/22

BUNDABERG SUGAR LTD, Millaquin Mill

(see LR 287 p.34)

610 mm gauge

Spare loco Com-Eng 0-6-0DH *Invicta* (A1513 of 1956) was in use in the Fairymead area on 30 November.

Mitch Zunker 11/22

ISIS CENTRAL SUGAR MILL CO LTD

(see LR 288 p.31)

610 mm gauge

Walkers B-B DH 6 (610 of 1969) derailed and rolled onto its side at Duingal on the Wallaville



Top: EM Baldwin 4wDH "Little Baldwin" (5/774.1 2.64 of 1964) at Farleigh Mill's Costellos 7 on 25 November. Photo: Steven Jesser

Centre: EM Baldwin B-B DH Hampden (6706.1 5.76 of 1976) and Walkers B-B DH Walkerston (672 of 1971) have teamed up to double head a load of fulls to Farleigh Mill and are seen heading down grade at Sivyers Hill on 6 November. Photo: Anthony Morris

Above: Martinus Rail GM Canada A1A-A1A DE locos MR-0102/4571 (A2221 of 1967 rebuilt Clyde 80-944R of 1980) and MR-0104/4041 (A2118 of 1966 rebuilt Clyde 78-870R of 1978) in storage at Rocklea, Brisbane on 2 May. Photo: John Browning

line on 17 November. On 25 November, EM Baldwin B-B DH 10 (7267.1 6.77 of 1977) was seen on road transport returning from somewhere on the Wallaville line. This line has been experiencing sinkage problems and by 10 December, had been closed beyond Marule with cane being road hauled to the mill.

The Courier Mail 17/11/2022; Quinn Olsen 11/22; Gary Kemp 11/22; Sandra Webb 12/22

MARTINUS RAIL PTY LTD, Queensland

(see LR 288 p.31)

1067 mm gauge

There has been a mix up with the identities of three of the four Martinus Rail locos in LR 287 and LR 288. The correct version for all of these locos is as follows.

4041 MR-0104 GM Canada A2118 1966 reb.Clyde 78-870R 1978 ex DA 1507, DC 1555, DC 4041

4444 MR-0101 GM Canada A2225 1967 reb.Clyde 79-933R 1979 ex DA 1526, DC 4444

4571 MR-0102 GM Canada A2221 1967 reb.Clyde 80-944R 1980 ex DA 1522, DC 4571

4692 MR-0103 GM Canada A2056 1964 reb.Clyde 80-961R 1980 ex DA 1480, DA 817, DC 4692

On 2 May, MR-0104/4041 and MR-0102/4571 were in storage at Rocklea in Brisbane. A report on Groups.io group New Zealand Locomotives indicated that they arrived in New Zealand on 11 October. Around early November, MR-0104/4041 was spotted on road transport in Auckland.

Geoff Blackmore 11/22; John Browning 11/22; NewZealandLocomotives@groups.io 11/22

NEW SOUTH WALES

SOUTH MAITLAND RAILWAYS PTY LTD, East Greta Junction

(see LR 288 p.31)

1435 mm gauge

Orenstein & Koppel 4wDH 32 (26263 of 1963) was seen in the sidings at East Greta Junction on 1 December.

John Browning 12/22

OVERSEAS

FIJI SUGAR CORPORATION

(see LR 288 p.31)

610 mm gauge

Lautoka Mill EM Baldwin 0-6-0DH 195 (3406.1 7.70 of 1970) has a Com-Eng sandbox mounted on the front buffer. Lautoka Mill finished crushing by 12 November for a total of 514,892 tonnes of cane. Some cane from here still to be harvested will be crushed at Rarawai Mill. Labasa Mill was expected to finish crushing on 28 November.

John Browning 9/22; Richard Chapman 10/22; FBC News 12/11/2022; *The Fiji Times* 16/11/2022



Field Reports

Please send any contributions, large or small, to fieldreports@lrssa.org.au or to PO Box 21, Surrey Hills, Vic 3127.

Thomson Portal Tramway, Thomson River, Victoria

Gauge 762 mm

David Malady reports

The catchment of the Thomson River today forms part of Melbourne's water supply. Work commenced on Stage 1 of the Thomson development in 1967/68, comprising:

- Some 20 km of tunnel of 3.6 m nominal diameter;
- A works portal on the Upper Thomson River;
- A diversion weir and portal on the Thomson River at Easton;
- A diversion weir on Whitelaws Creek and a pipeline to Easton Weir;
- Outlet works at Fehrings Creek.

These flows diverted some 163 km² of Upper Thomson catchment west into the Yarra River (via Fehrings Creek) and thence into the Upper Yarra Reservoir. This stage was completed in 1974.

- Thomson Stage 2 development comprised:
- East and west extensions to the main tunnel;
- A diversion weir and portal at Swinger, downstream of the confluence of the Thomson and Jordan Rivers;
- Outlet works to the Yarra River.

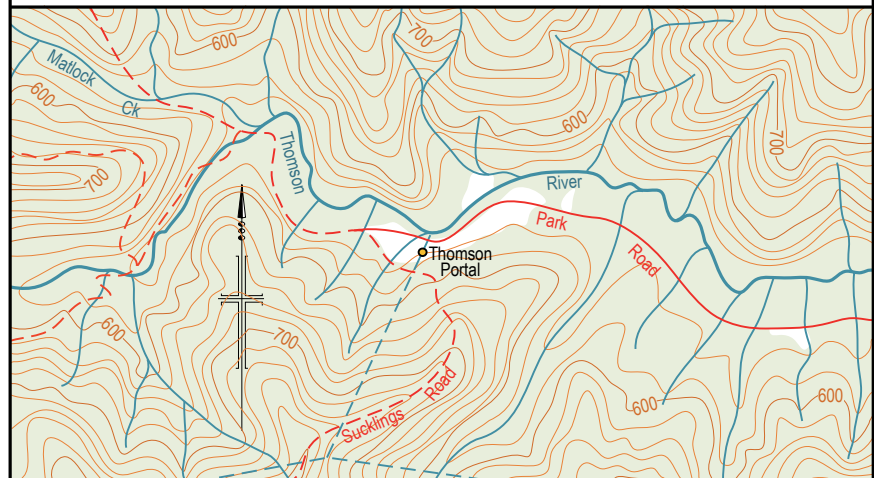
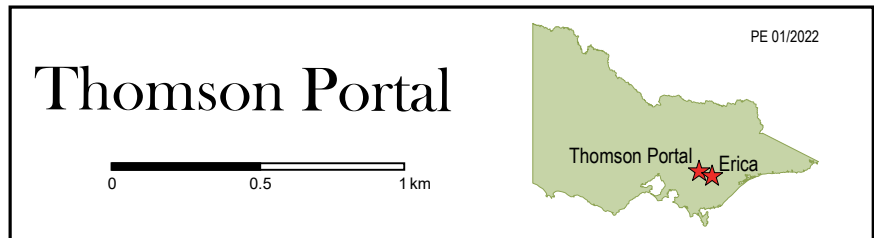
Completed in 1977, these flows added some 166 km² to the catchment area in service.

Thomson stage 3 construction began in 1976, comprising

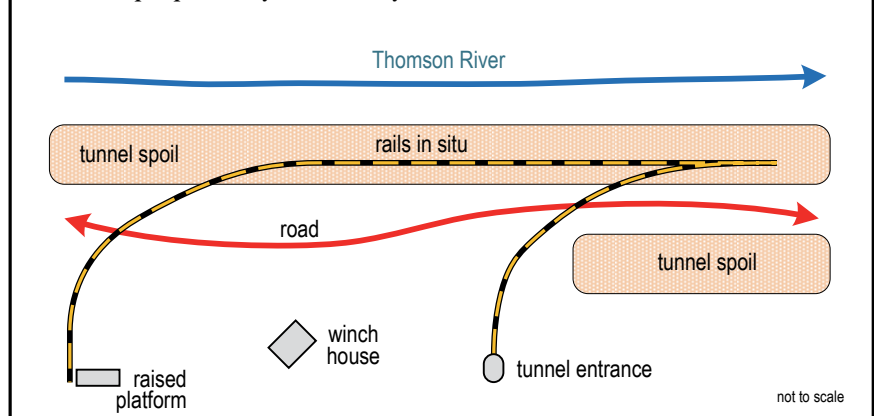
- A large earth and rock fill dam on the Thomson River near Talbot Creek;
- Multi-level outlet facilities at the dam for downstream releases;
- Southerly extension of the Stage 2 tunnel to Bells Portal;
- Draw-off facilities at Bells Portal.

When this stage became operative, a further 158 km² was added to the catchment area.

Tramways (both locomotive and winch-powered) were used widely during tunnel construction and were reported in *Light Railway News* #6 (October 1978), #17 (August 1980), #18 (October 1980), and #33 (April 1983). The Thomson Portal on Park Road above the Thomson Dam was visited on 31 December 2021. I had been to this portal many years ago (before becoming interested in tramway sites) so, when inspected in December, I was



Sketch prepared by D. Malady of remains on site 31 December 2021



Thomson portal tunnel entrance. Photograph: David Malady.



Above left: Converging track at the eastern end of the in-situ rails. **Above right:** Rails crossing Park Road at Thomson Portal. Photos: David Malady

surprised to see the tramway still in situ and the winch house still standing. I was unable to undertake a thorough inspection of the site due to my 'snake-ometer' giving me very high readings (in 36 degree heat), but would

be interested in another visit in the near future. The tramway appears to come out of the inclined tunnel and curves around to a set of points where the track changes direction and heads along adjacent to the road before

heading up to a raised platform. There was a compressed air fitting protruding out from the ground close to the tunnel incline. I was able to make a quick sketch map of the remains.

Clive Plater awarded an OAM

LRRSA member Clive Plater of Eudlo, Queensland was awarded an Order of Australia Medal [OAM] in the 2022 Queen's Birthday Honours for Services to Community History.

Clive has been involved with the Nambour and District Historical Museum since its incorporation 30 years ago and is in his 16th year as president. Born and bred in Nambour, he is a proud 4th generation local whose great-grandfather, G L Bury was the first Chairman of the Moreton Central Sugar Mill.

Having two great-grandfathers, two grandfathers, a father and three uncles involved with the local sugar industry it is no wonder Clive has a great interest in preserving local history, especially the locomotives used in the cane fields. He authored the book *Locomotives of the Moreton Central Sugar Mill* in 2013, which was launched by Governor Penelope Wensley AC to commemorate the 10th anniversary of the mill's closure.

One of Clive's uncles was killed in World War II and the family's military history goes back to the 1850s Crimean War in which one of his great-great-grandfathers died, hence a prominent military section has been established at the Nambour Museum to honour local heroes.

Clive and his father, Edgar Plater, started collecting historical items being discarded



Clive Plater with his award at Government House, Brisbane on 14 September 2022 Photo: Stuart Riley, SRPhotography

by the Moreton Sugar Mill back in the 1970s long before the establishment of a local museum. The family retains a substantial private collection that at times supplements special displays at the Nambour Museum.

Clive also served as an Honorary Warden with the archaeology branch of the Department of Aboriginal Affairs from 1979 to 1988 and five years as a member of the Sunshine Coast Council's Heritage Reference Group. He also provided transport for 30 years in his military Jeeps for Veterans taking part in ANZAC Day parades.

Clive and wife Lorelle were on Norfolk Island for their annual visit when the Queen's Birthday Honours were announced. Clive said it was rather special to be on Norfolk Island for the Queen's Birthday public holiday where the Queen was held in such high regard and 'God save the Queen' was still the national anthem. This year the community organised a special "Morning Tea and Garden Party" which was held in Queen Victoria Gardens situated on Queen Elizabeth Avenue to commemorate the Platinum Jubilee of Her Majesty, Queen Elizabeth II.

Clive's Investiture Ceremony was originally scheduled for 14 September 2022 but had to be postponed due to the mourning period following the Queen's death. The Investiture eventually took place on 18 November 2022 and Clive considers his OAM now even more special being the last awards approved by the Queen and the first such awards to be presented by the King's representative.



LETTERS

Rail motors of the Emu Bay Railway (LR 286)

Following Les Morley's article in LR 286 and letters from Geoff Thorpe and James Shugg in LR 287 I thought you might be interested in a few of my own photos of the West Coast railcars. You will see that in its later years the Mt Lyell Daimler had acquired a radiator from what looks like an OB Bedford truck! The West Coast railways were good at economical renumbering: DP19 became DP1 merely by painting out the 9 and in 1956 ex-TGR and SAR YX-type loco F1 became Emu Bay Railway 19 by adding the numeral 9 to the TGR number.

The TGR and Emu Bay had a reciprocal arrangement whereby the TGR used the EBR station at Burnie and the EBR used the TGR station at Zeehan, although as James mentioned the EBR had its own wye just north of Zeehan yard, with a small loco shed at its apex. When the TGR Strahan - Zeehan line closed in June 1960, the EBR took over what was left of Zeehan station. An EBR Australian Standard Garratt coming into Zeehan with the daily goods from Burnie, was stabled in the TGR shed, although continuing to turn on the EBR wye.

The EBR loco shed had gone by the time of my first visit to Zeehan in February 1961 and it is possible that the stabling of the ASG in the TGR shed predated the EBR takeover of Zeehan station.

I also attach a photo I took of NSWGR saddle tank 2604 while on hire to the Portland cement works in December 1966 and a photo of EBR G16 at Zeehan in February 1961 on what had once been the interchange sidings with the Zeehan Tramway Co.

Jim Stokes
Via email

Stories from the Otways (LR 287)

I note in LR 287 that Phil Rickard points out an incorrect caption in 'Stories from the Otways', LR287. He is correct. The date of the Ray Bruce image showing G41 without headlight should be 5 October 1955. Sorry about that – it looks like I somehow got the dates mixed up on the caption I provided you.

Nick Anchen
Via email



Farina had a 2ft gauge line (LR287 & LR 188)

The Farina restoration reported in LR 287 on page 46 mentions 1067 and 1435mm lines, but there was also a 610mm line, as recorded in a letter and photo from Arnold Lockyer in *Light Railways* No.188, April 2006 on page 24 describing a 2ft gauge skip found at a Farina railway dam sometime between 1969 and 1974. However, there is

an error in the letter from Arnold. The last sentence as printed begins

When it was transferred from Leigh Creek to Dubbo, in early 1974....

The word "it" in this sentence refers back to the "it" at the end of the previous sentence, where "it" refers to the truck. So, the last sentence transfers "it" from Leigh Creek to Dubbo and then contradicts that by loading "it" (the dump truck) at Telford



for despatch to the Mile End Railway Museum (now the NRM. Port Adelaide).

It is obvious that Mr Oakes was transferred from Leigh Creek to Dubbo, not the truck. So the last sentence should begin:

When I was transferred...

and in the caption of the photo, the truck was from *Farina*, not Leigh Creek, which was the source of a smaller 2 ft gauge trolley, as Mt Oakes says.

Corrections might be published accordingly, but would you consider correcting the online downloadable version so that future readers are given the right story without having to find the later publication where the correction might be shown? Of course, the latter should happen, and perhaps could be mentioned as a note in the online version at the point where the correction is done.

The same could be applied to the error on page 2 of LR 287 where "Tailm Bank" should read "Tailm Bend" - and thank you for that article - both the Kilsby work and the photos from the late John Morphett. Chris Andrews says of the latter that John would have been glad to see them published.

Les Howard
via email

The Tasmania Gold Mine OHW Electric Tramway (LR 281)

The Siemens electric locomotive used on this tramway was a design originally developed by Siemens for use during the construction of the Waterloo & City tube railway in London. Three locomotives were supplied, one each in February, May and October 1895, each being an improvement on the previous one. Their development is described and illustrated in *The Electrical Engineer* of 1st November 1895 (pg.497-504), with another description and drawing of the No.2 locomotive in *The Engineer* of 2nd August 1895 (pg.114-115). The twin wire and 'trolley' overhead system was used here to avoid the need to reverse a trolley pole or bow collector in the confines of the tube tunnel; this system was later replaced in London by a single wire with a vertical collector.

Similar locomotives built by Thomas Parker Ltd. of Wolverhampton were also used in the construction of the Baker Street & Waterloo tube railway (today's Bakerloo line) a few years later.

A description and additional photograph of the Tasmania Gold Mine line can be found in *The Australian Mining Standard* of 19th January 1899, where it states "the electric locomotive is of Siemens' well-known 'Contractors' type, of which a great many have been used in England and elsewhere, principally for underground use", so presumably there are more examples out there to be found. This article also describes the use of the twin wire and 'trolley' overhead system at Beaconsfield as being necessary to cope with trolley wires being set as low as 5ft in the mine workings and also at 18ft at the street crossings, which would be extremely difficult to accommodate with a normal collector.

There is also a similar article in *The Australian Mining Standard* of 30th January 1907 which describes the electric line at the Cornwall Coal Mine, Tasmania, which used the General Electric locomotive now preserved at Zeehan.

Stuart Jenkins
Bristol, UK
Via email

Industrial Wagons at Collie, WA.

I believe there is a possibility that the rail vehicle shown on page 38 of LR288 may indeed be related to brick-making. The photograph below (State Library of South Australia image B 15081) shows a brick-hardening cylinder constructed by H.B. Hawke & Coy of Kapunda, South Australia, 75 ft in length, 6 ft 2 inches in diameter and weighing 19 tons. The image (below) depicts its movement in the main street of Kapunda on 7 November 1910. Rails on brackets ran the entire internal length of the cylinder for trollies carrying the bricks. The cylinder was destined for the South Australian Silicate Brick Coy's works at Osborne, Outer Harbour, Adelaide. (See *Kapunda Herald*, Friday 11 November 1910, page 5).

Peter Evans
Mount Waverley, VIC

Watch out for snipers (or the lack of)!

If you're familiar with the internet-based auction site; eBay, you will be aware of snipers. They can be really irritating; you find the item you want, place your bid, and excitedly watch as the clock counts down. Seconds before the auction ends, and you're on the brink of acquiring the item, someone suddenly jumps in at the last second 'snipes' and out-bids you...

I am very fortunate to have been to Melbourne several times and visited the 2 ft 6 in gauge Puffing Billy Railway which is twinned with the Talyllyn Railway and associated with the Welshpool & Llanfair in Wales. On my last visit to Melbourne,

I was 'enjoying' (ahem!) the wine whilst browsing the narrow-gauge items on the Australian version of eBay. Then I came across something that made me sit up and take notice; a brass plate from the side-tank of an NA class 2-6-2T 'Puffing Billy'. The description said the plate was 46cm in length, by 27cm wide and 1.2cm thick; made from brass and weighed 8.6kg – so quite heavy.

The plate is a replica of one carried by the NA class locomotive '3A' and is mounted on a piece of hardboard 45 cm x 62 cm. There are two shades of green on the hardboard. The dominant lighter green is thought to be near to the original Baldwin colour, the darker green is presumed to be for trim. They are delineated by a thin white line. The seller said he could not guarantee these were the actual colours; however, the above information was told to him by the original owner of the plate; an elderly Victorian Railways' fitter called Mort Clark.

So, slightly lubricated by the wine I thought "I'm having that" and a bid was duly placed. Later whilst in a more sober state I logged back into eBay. I assumed an Australian railfan would spot the plate and outbid me, or snipe at the last minute. The clock clicked down as the auction drew to a close. Come on, somebody outbid me... where are the snipers?

I won and the invoice arrived. Oh!

Communication with the seller commenced about postage and shipping to the UK. The parcel weighed nearly 10 kg so would be expensive to send back home. Options were considered including a trip on the local Metro train to see the seller in person and collect the item. In the end, and in a scene reminiscent from *Brief Encounter*, we met at the clock at Southern Cross Station in Melbourne and the deal was done. It turned out the seller was the former Vice-President of the Puffing Billy Preservation Society. We could have chatted for ages but we both had our respective trains to catch.

Safely back at the digs in Melbourne the enormity and the weight of the purchase became apparent; it filled the suitcase! Items had to be moved to the hand-luggage and bags weighed several times. The case was perilously close to the 30 kg allowed by the airline.

Safely back in the UK – what to do with the 3A plate? It's a bit big for the wall and I'm not sure my wall would take the weight.

The plate has now been placed on loan to Puffing Billy's twin; the Talyllyn Railway and should be on display at the Narrow Gauge Railway Museum at Tywyn very soon.

Let this tale be a warning; 1. don't go on eBay whilst under the influence and 2. you cannot always rely on snipers to out-bid you!

Michael Chapman
Talyllyn, Wales, UK
Via email

Preserved locomotive in Queenstown

I took this photo (below right) in Queenstown of the "sort of" preserved locomotive in October 2022. I think it might be Mt Lyell Mining and Railway Co., Electric loco #1, 10 ton English Electric.

I would be interested to know what other readers may know about the locomotive.

Lindsay Bamford
Via email

Tramways on Raine Island and at Burrinjuck (letter in LR 287)

Thank you for publishing "my interesting letter" in the October issue of *Light Railways* and for telling me and your other readers about sources which answer my questions about the Raine Island guano tramway and the sand haulage railway upstream of Burrinjuck dam. Here are some responses and new information which may be of interest to *Light Railways* readers!

I visited Raine Island twice in 1984. These visits and subsequent research undertaken in the following years were funded by the Raine Island Corporation





and facilitated by Dr Hugh Lavery, who also assisted John Browning in preparing his LRRSA article. During this period I was involved in research on the coastal processes forming and maintaining the coral cays of the Great Barrier Reef. My research assistant Jennifer Hacker and I sought any and every publication we could find about the history, geology, geomorphology, fauna, flora, photos, maps, plans, etc of this most interesting, biologically prolific and remote island. However, while we were aware of the tramway's existence, we did not find John Browning's article on Queensland Guano Tramways! At that time, I did not know about LRRSA. PCs were only beginning to be available, and neither Google nor Trove had yet arrived to assist us.

When I first started researching my grandfather Charles Simons' life and professional career in late 1991, I thought that the tramways he worked on at Burrinjuck might have been the Goondah to Burrinjuck narrow gauge railway. Enquiries to the NSW Water Resources Department led to a visit to their Parramatta office in April 1992 where I met John Newland who told me that Charles Rawdon Cuninghame was the engineer for that line. This was disappointing at the time but ultimately this contact was very helpful in providing access to old, not in use, Public Works Department files stored at the Government Record

Office (State Archives) at Kingswood. After the publication of Newland's book in 1994 I revisited the Water Resources Department in July 1995 and made a few comments to him about the book, particularly about the absence of a track diagram for the Burrinjuck terminus. My research concerning Simons subsequently was diverted away from railways and I completely overlooked the chapter about the Sand Haulage Railway.

After the Goondah to Burrinjuck railway was completed in June 1908, Cuninghame was sent to Berembé, the construction site of the diversion weir for the Murrumbidgee Irrigation Area, downstream of Burrinjuck Dam. He died there suddenly from a heart attack a year later in June 1909. Charles Simons was sent to Berembé to replace him. (The information about Cuninghame on page 14 of Newland's book is incorrect, as is the spelling of his name.) Among the professional papers of Charles Simons was a copy of the 18th edition of *The Civil Engineer's Pocket Book* by John C Trautwine, published in 1907. It includes significant material about Railroads and their construction based upon American practice of the time. No doubt Cuninghame found it useful as he worked on the Goondah to Burrinjuck railway and Simons would have appreciated receiving it from Cuninghame's wife before she and her children vacated the resident engineer's house at Berembé on

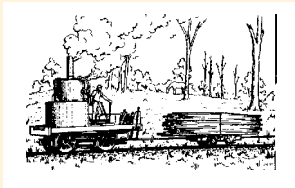
18 June 1909. Ten days later Simons handed "B. J. Ry papers left by Mr Cuninghame also Sections B. J. Ry" to one of the supervising engineers. This material no doubt ended up in the files which were source material for Newland's book.

So much about the Raine Island guano tramway and the sand haulage line at Burrinjuck but what about the Catamaran colliery line? – surely an updated description of it needs to be published! It was the southernmost railway in Australia. Moreover, the Raine Island tramway, short lived as it was, appears to have been the northernmost railway in Australia.

Michael Gourlay
Via email

Editor's note:

Thank you, Michael. Absolutely agree with you about the Catamaran colliery tramways. The Editor would love to see an update of the excellent work done by the late Lindsay Whitham in 2002 and more recently by Scott Clennett (2016). Trove beckons! Re Catamaran being the most southerly, and Raine Island being the most northerly – the editorial team think they would temper that claim with 'the most southerly line operated by a *steam locomotive*' and 'the most northerly line operated by a *steam locomotive*'.



LRRSA NEWS MEETINGS

LRRSA members on line meetings

The LRRSA will be holding regular members meetings on line via Zoom conferencing on the dates below. Members wishing to "virtually" attend will need to pre-register by responding to an email inviting you to attend or via our website lrrsa.org.au. After registration, details of how to join the meeting will be provided to those that have registered.

February 2023 members Zoom meeting – Queensland cane railways

Date: Thursday 9 February 2023 at 8.00pm AEDT

John Browning will give a presentation of a tour of Queensland's cane railways during a time of Covid. In 2020, with planned overseas travel cancelled, and State borders closed, what better solution than to hop in the car to view 18 cane railway operations on the 3600 kilometre drive from Brisbane to Mossman and return.

This presentation will show some of the main highlights of the road trip and provide

insight into the planet's most advanced and extensive above ground industrial narrow-gauge operations.

April 2023 members Zoom meeting – Mortlake Gasworks tramways

Date: Thursday 13 April 2023 at 8.00pm AEDT
The Mortlake gas works was erected in the late 1880s on a site on the Parramatta River in Sydney and the site had been selected to enable coal to be shipped directly from Newcastle to the gasworks. Initially, a single retort house was erected and, to transport the coal from the wharf to the Retort House, a locomotive was purchased from Hudswell Clarke in the UK. Eventually, the Mortlake Gasworks would grow to become the largest gasworks in the Southern Hemisphere and seven locomotives were acquired to operate the internal railway system. In 1914, a Telpher system commenced operation at Mortlake to transport the coal, but the internal railway system did not close until 1948. This presentation by Mark Langdon will describe both the narrow-gauge railway and the Telpher system used at Mortlake.

Brisbane: "No meeting"

At this stage it has been decided to postpone the Brisbane meetings, but this decision is under constant review – members will be notified if the situation changes.

SYDNEY: "Balls Head Coal Loader tramway"

Situated near Waverton on the North Shore, the coal loader was used from the 1920s to

the 1970s to load Newcastle coal into smaller ships plying Sydney Harbour. From the 1970s export coal for Japan was loaded at the wharf and the facilities were modernised. The coal loader finally closed in 1992. Two speakers from North Sydney Council will outline the history and preservation of the loader, in particular the rail transport system used in earlier years.

Location: Club Burwood RSL, 96 Shaftesbury Road, Burwood, in the 'Private Room', Brasserie Restaurant. Free parking is available in the RSL car park. Only 10 minutes easy walk from Burwood railway station. Please contact Ross (0415995304) or David (0400347127) if you need to be signed in upon arrival. It is highly recommended to arrive early and enjoy a meal with other LRRSA members.

Date: Wednesday 22 February 2023 at 7:30pm

MELBOURNE: "No meeting"

On line meetings via Zoom will be hosted from Melbourne and will feature presenters from far and wide.

ADELAIDE: "Bi monthly meeting"

The SA group meets every second month on the first Thursday of every even month to discuss matters of light railway interest. As accommodation is limited, interested persons should contact Les Howard at sa_group@lrrsa.org.au for details if you have not been to a meeting before.

Location: 1 Kindergarten Drive, Hawthorndene
Date: Thursday 2 February 2023 at 7.30 pm

Timboon Tour - 19 and 20 November 2022



Members pose for a group photo at the Brucknell station site on the Timboon rail trail. Photo: Mirjana Rasic

The Timboon tour was a great success despite the damp and wet conditions over the entire weekend. This was the first LRRSA tour in Victoria since the State reported its first Covid case in January 2020.

The tour began on Saturday afternoon at 2.00 pm at the Camperdown and District Historical Society Heritage Centre. Miraculously the rain stopped just before the venue opened and we had 14 members in attendance. Our hosts were Maree Belyea and Rob Wuchatsch the president. The centre contains various interpretative displays of First Nations people, inspiring local women, the dairy industry and many historical photographs and artefacts. The members were given a talk by Maree and Rob about the local history and the key identities who lived in the area, white settlement and development of the township.

Next stop was the Camperdown clock tower and our enthusiastic host John Hulm. This unique gothic clock tower reminded your humble narrator of a miniature Big Ben. It was built in 1897 after £1000 was bequeathed to the council for a clock tower by local identity John Manifold. The members climbed the steep oregon stairs past several landings to get to the clock mechanism which sits in the middle of the tower opposite the clock faces. The clock mechanism was built by German-born Fritz Ziegler, and there are several Ziegler mechanisms still operating throughout Victoria. The members could also climb up to the landing above the clock faces and were offered unprecedented views in all directions of Camperdown.

John maintains the clock on behalf of the local council and adjusts the mechanism for daylight saving. It was obvious to members that John loves the clock and understands

the intricacies of this impressive mechanism. He also helps coordinate upgrades to the tower to maintain its longevity, such as re-pointing the brick work and replacing the clock faces. The tour of the clock tower ended around 4.30 pm, and members dispersed for the day with very threatening skies overhead.

Most members stayed in Camperdown for the night, but eight brave souls camped out at Lake Elingamite campground, and were lucky to get their camp established before substantial rain fell. However, the rain eventually subsided and we managed to cook dinner under awnings and enjoy a drink or three around the camp fire.

On Sunday morning, 18 members met at the Curdies river trestle bridge at 10:00 am. Peter Evans was our tour host and we took a commercial bus to the start of the downhill section of the Timboon rail trail. Again, miraculously the rain had stopped and we were greeted to a sunny morning and reasonable temperatures. The members headed off and the first artefact we came across was a lovely brick arch culvert with bluestone edging. Peter showed us a number of photographs of the old tramlines and quarry workings along the line.

Not long after the culvert, we discovered our first trestle bridge across a flooded creek and plenty of broad-gauge rails in-situ. We passed several more trestle bridges on the way to our lunch stop at the Brucknell station site. There is also a small hand winch loading crane just north of the station site. We had a sprinkling of rain during lunch, but the skies cleared again and we were



able to take the group photo of members included with this report.

Following lunch, we wandered past several more trestle bridges and limestone quarries until we finally reached the Curdies River trestle bridge and our cars. Peter also showed us the site of the limestone kiln just south of the Curdies station embankment which is still in position.

The tour ended at around 1:00 pm when we all thanked Peter for a great tour and the members dispersed to their various homes in Victoria and beyond. We had a sensational tour and the unique opportunity to investigate some of the historic places in the Camperdown and Timboon areas. It should be noted that the rain held off for most of the tour and we achieved all our objectives substantially dry. This could not be said for the drive home when the heavens opened at around 2:00 pm and it poured for hours. Perhaps our maker is a rail fan?

Thanks again to Peter Evans for recommending and hosting the tour of the Timboon rail trail. Also, thanks to Maree Belyea and Rob Wuchatsch at the Camperdown and District Historical Society Heritage Centre and to John Hulm at the Camperdown clock tower. And thanks to David Pope at Popes Consolidated Bus Lines of Timboon
Simon Moorhead

OBITUARY

Kenneth John Milbourne OAM KStJ

1928-2022

It is with great sadness that we report the passing of Ken Milbourne on 9 December at the age of 94. Ken joined the LRRSA over 40 years ago and from that time he became a regular contributor of news items and letters to *Light Railway News* and *Light Railways* magazines. Ken's assistance was also acknowledged by the authors of many books on Tasmanian railway history.

steam locomotives, which he generously shared with other interested enthusiasts, both in Australia and overseas.

Ken's passion for steam locomotives developed almost from birth. When Ken was born his father was a porter for the Tasmanian Railways at Latrobe station. Ken later attended Devonport High School where he was dux in his final year.

This gave him the opportunity to travel all over the state – where interesting steam locomotives worked! He was later Head Teacher at various schools, and his final position before retiring was Regional Director of Education – North West Tasmania.

Ken had many other interests. He was an active volunteer in St. John Ambulance Australia – Tasmania Inc. rising to the position of Brigade Commissioner. For this service he was awarded the honour Knight of Grace of the Most Venerable Order of the Hospital of St John of Jerusalem (KStJ). He was heavily involved in the management and sailing of the Tasmanian Sail Training Association's replica of the sailing vessel *Lady Nelson*, and a keen collector of Australian pre-decimal coins and stamps. He was a Spike Milligan fan, and his well-developed sense of humour was no doubt aided by his love of *The Goon Show*.

In 2021, with the assistance of his son John and others, he self-published his 254 page book *Steam Locomotives of Tasmania* and had the satisfaction of seeing it sell well and cover its costs. The book gives the history of all steam locomotives known to have worked in Tasmania, and explores some mystery locomotives.

In the Australia Day Honours list for 2004 Ken was awarded the Medal of the Order of Australia (OAM) for service to the community, particularly through St John Ambulance Australia, and as a contributor to the preservation of maritime and railway history in Tasmania.

We extend our sincere condolences to Ken's family.



Ken Milbourne and Christine Horne at the historic bridge at Richmond in Tasmania taken on 31 March 2009. Photo: Richard Horne

One of Ken's many passions was the steam locomotives of Tasmania, both those on the Government Railways, and those of the many private railways and tramways. Over his long lifetime Ken amassed a vast amount of information on Tasmanian

At this time his father was Station Master at Leith station, and Ken travelled by train to school at Devonport.

He then attended the Hobart Teachers College, and on completion of his course was appointed a permanent relief teacher.



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Heritage & Tourist NEWS

News items should be sent to heritagetourist@lrrsa.org.au Digital photographs for possible inclusion should be sent direct to Richard Warwick at editor@lrrsa.org.au including the name of the location, the name of the photographer and the date of the photograph.

QUEENSLAND

AUSTRALIAN SUGAR CANE RAILWAY, Bundaberg

610 mm gauge

On 20 November 1988 the Australian Sugar Cane Railway officially commenced running trains through Bundaberg Botanic Gardens. Since then, the railway has passed many milestones and faced many challenges, and another milestone is rapidly approaching. It is currently anticipated that the 750,000th passenger should be carried between 20 and 26 December 2022.

Australian Sugar Cane Railway Facebook page, 12 December 2022

ATHERTON-HERBERTON HISTORIC RAILWAY, Atherton

1067 mm gauge

Workers are starting the restoration on Peckett 0-4-OST 1174 including cleaning the smokebox to see what work needs to be completed to have it ready for a boiler inspection. 1174 was built in Bristol UK and decommissioned in the early 1950s at Mount Isa. It was built by Peckett & Sons, a Type R1, No.1174 of 1908 for the Mount Morgan Gold Mining Co. Ltd of Rockhampton for its Mount Morgan Mine. It later moved to work at Mount Isa before being preserved at Barkly Highway State School.

On 27 October, the Mulgrave Mill 'Piecart' was trialled in the Atherton yard. It has been under reconstruction for many months, including regauging it to 1067 mm from 610 mm. It is the first time it has run in many years. The 'Piecart' is a 4W DM built in 1962 at Mulgrave Mill.

The first training session of several was held on 29 October in readiness for when the railway is given the green light from the Rail Safety Regulator to start running the Peckett with passengers. Attendees learnt about the roles of carriage attendant, guard, fireman and driver. Meanwhile, the *Tinlander* continues to be run from Herberton to the Historic Village.

Workers are starting the huge job of regauging

Mulgrave Mill No. 2, a sugar cane locomotive which hauled cane to Gordonvale Mill.

Atherton Herberton Historic Railway Facebook page – various entries.

FRIENDS OF ARCHER PARK STATION AND STEAM TRAM MUSEUM, Inc.

Rockhampton

1067 mm gauge

Celebrations for the thirtieth anniversary went very well with around 80 people in attendance including the local MP, the Mayor and other past and present Councillors, and representatives from some of the businesses that support the museum. ABC Capricornia broadcast live from the platform.

The museum has been hiring its location to a training group doing a Certificate III in Track Work. This group finished on 18 October 2022 and had its graduation on 21 October 2022. The next course is planned to commence on 14 November 2022. Apart from being good to link in with the community, this hire helps with income and brings people into the museum who may not have come before.

The museum is also involved in the Work for The Dole Program whereby volunteers are regularly sent to the museum to help with yard work and cleaning.

Tram Tracks: Volume 16 Number 4, 2 November 2022

At Rockhampton some railway history has been unearthed in some Council works going on in William Street, viz. the remains of the old tramway line that existed in Rockhampton, beginning in 1908 when the Rockhampton Council purchased four steam trams from Bordeaux in France to build a city tramway.

Central Queensland 4 x 4 Explorers Facebook page 27 October

DALBY PIONEER PARK MUSEUM, Dalby

610 mm gauge

Henschel and Sohn 0-6-0WT number 104 built at Kassel Germany in 1956 spent many years on display in a partly dismantled state at the Pioneer Park Museum. It was loaded this morning to be reunited with one of her sisters, number 103 and to be restored to steaming order. Number 103 is moving north from the WGR in Victoria where it has been stored for a decade (see report from the WGR). There was no indication of by whom or where this restoration would take place.

Light Railways of Australia Facebook Group, 28 October 2022

THE SAVANNAHLANDER, Cairns

1067 mm gauge

Your regular correspondent took a trip on this railway in October along with his long-suffering partner. The trip begins at 6.30 am at Cairns Central Railway station and then travels mainly west through Kuranda, Mareeba, Dimbulah, Boonmoo, Lappa, Almaden, Mount Surprise, (Chillagoe), Einasleigh, finally finishing up at Forsyth which is the end of the line.

The rail component of the trip was great for the rail fans (there were a few and you could

tell them from the rest of the travellers as they had copies of the yellow book, *Exploring the Railways of Far North Queensland* by Brian Webber, which was invaluable during the trip. The railmotor consisted of two of the Queensland 2000 (numbers 2053 and 2026) class that ran on various lines in Queensland before most of them were scrapped. A few were saved and some of them are run by the Savannahlander company. Seating on the train was fine although some seats were better than others. For cooling purposes, the windows were opened; no airconditioned luxury here. The front seats with the best views were kept free and passengers were able to sit in these for five minute spells whenever they chose. Most people did not avail themselves of this opportunity but the railfans spent as long as they could in these prized seats. There is nothing as good as bowling along a railway looking at the scenery from the driver's seats.

I was particularly interested in the safeworking system employed by this railway as I am a safeworker at Puffing Billy and Walhalla Goldfields Railway in Victoria. All safeworking until a certain point (I have forgotten where but it is a fair way along the railway) is controlled from Townsville and is done by mobile phone and computer-generated messages. After a certain point staff and ticket operations take over, using the oddly shaped (to a Victorian) staffs used in Queensland. No tickets ever need to be written these days as the Savannahlander is the only train using the line past Kuranda.

Speeds vary on the track with the maximum being about 40 km/h (although there is one section of 70 km/h in Cairns which the drivers love as it shows that capabilities of the railmotor). Speeds are governed by the quality of the track and the weight of the rail. Most of the track is maintained only to a minimum standard that will allow about 30 km/h running. In some sections heavier rail allows higher speeds. Queensland Rail oversees track maintenance, and they reckon that any more work than just the minimum would be a waste of time and money.

One of the most interesting parts of the line was the bridges. In the first section the bridges were high level but for large sections of the line the bridges were low level, just above the ground as they went across the many rivers. Most of the year the rivers are not flowing or just flowing, and the bridges are well above the level of the water. During the wet season when the train does not run, the rivers cover the bridges and sometimes damage them as the flows are very strong. This was done for reasons of cost; low level bridges were cheaper to build and repair.

The driver with the railway knowledge pointed out all the interesting railway artifacts along the way including where the branch lines had veered off the mainline and where the line had been continued towards Georgetown (and Croydon to join up with the Gulflander) for 400 metres and then abandoned way back when the line was originally built. One of the branch lines was to Ravenshoe where there was a

short lived steam railway (the locomotive and all the rollingstock and infrastructure are still there) and before that to Atherton where the Atherton Herberton Historic Railway is soon to commence running with a steam locomotive and two carriages. At present at this site, rides are given on the *Tinlander*, a collection of trolleys, but advances are being made quite quickly. I refer to this railway elsewhere in the news.

For rail fans this is one of the great railway journeys of the world. For non-railway fans, there was plenty to see and do but the heat was a bit of a downer.

Andrew Webster

NEW SOUTH WALES

ZIG ZAG RAILWAY, Clarence

1067 mm gauge

The following message recently appeared on Facebook. After almost a decade of closure, the iconic Zig Zag Railway is set to reopen to the public soon! Originally built in the 1860s, the narrow-gauge tourist railway will host a few charming steam and diesel locomotives.

As usual, non-railway writers do not always get it perfectly correct and the pedants let them know.

Visit *Blue Mountains* Facebook page, November 24

TIMBERTOWN HERITAGE PARK,

Wauchope

610 mm gauge

The locomotive *Green Hornet* which was built in 1910 and was sold off many years ago has now returned to Timbertown in March this year. It has now undergone a complete restoration and was returned to service in December 2022.

David Waite, *Light Railways of Australia* Facebook Group, 17 December 2022

PETE'S HOBBY RAILWAY, Junee

610 mm gauge

The railway had recently been offered an operating four-wheel ballast wagon previously in use at a North Queensland sugar mill. The vehicle can discharge into the track centre as well as to the sides and was thought to potentially be of considerable advantage to the railway's volunteers.

Pete has now purchased the wagon and it arrived on Tuesday 13 September, 2022. It is in good general condition, with the discharge controls fully operational. During a trial over the whole of PHR's existing line, it was confirmed that the vehicle passed through Loftus platform without any structural clearance problems. There are some stress fractures which the railway's welding experts advise would not be difficult to repair. Consensus to date is that the "hungry boards" extensions at the top of the wagon should be removed, thus making the vehicle easier to load with ballast.

The acquisition has ended up costing somewhat less than originally anticipated, however, contributions would still be greatly appreciated. Progress Report, December 2022

VICTORIA

PUFFING BILLY RAILWAY, Belgrave

762 mm gauge

The replica station building on the heritage platform at Gembrook is reported to be progressing well. Andrew Rayment reports that the buildings at either end of the existing portable will look like typical portables, with an open waiting shelter between the existing portable and the new "portable" at the Up (Belgrave) end. The building at the far Up end is a building in lieu of, but not a replica of the original "Men's" which was down the ramp just beyond this, but it will not look like a typical portable. Extending in the Up direction from the second of the new buildings will be a corrugated iron replica of the original "Ladies". As all these buildings will house women's and men's toilets, parents' room, and accessible toilets, they will

all be fully lined inside due to having to meet modern building codes, etc. A replica lamp room is also being built in its original location at the Down end of all the buildings at the top of the ramp.

Puffing Billy Railway Volunteers and Staff Group Facebook page, November 4, 2022

DAYLESFORD SPA COUNTY RAILWAY, Dalesford

1600 mm gauge

Trains returned to Bullarto 17 months after the disastrous storms which closed the line in 2021. 32RM and 91RM double headed the train for the first time in many years. Readers of the page were assured that a return to Trentham will happen as enough rail for the restoration is already on the railway.

Railways in Victoria Past and Present Facebook page, 29 October 2022



New building works at the Gembrook station on the Puffing Billy Railway in November 2022. Both photos: Andrew Rayment



Front end view of locomotive 3620 on the Bellarine Railway in November 2022. The ex South African 24 class 2-8-4 locomotive has been operating at Queenscliff since 2021. Photo: Michael Chapman

WALHALLA GOLDFIELDS RAILWAY,

Walhalla

762 mm gauge

The Henschel and Sohn steam locomotive (0-6-0WT WGR number 103, *Spirit of Baw Baw*, number 25427 of 1956) that operated for a few years at Walhalla has been returned to Queensland to its owner. The locomotive was brought to Victoria as there are no railways in Queensland on which it could operate. It came south as a 750 mm gauge loco and was converted to 762 mm to run on the Walhalla line. While it was fine to have a steam locomotive on the railway, there was strong opposition to running it as it was severely underpowered and had to operate under push-pull conditions which meant two crews, one for the steam loco and one for the diesel loco at the other end of the train. Often it is difficult to get one crew at Walhalla, and almost impossible to get two. After its boiler ticket expired the loco was put on blocks on a member's property with a shelter built around it to protect it from the weather, but eventually the owner wanted it back. During Victoria's raging bushfires in the early part of the century it was briefly taken to the Latrobe Valley for protection, but once that danger had passed it was returned to the Walhalla region.

The conversion of the X1 tram to a railmotor has been paused at present and attention has been turned to converting ex Queensland Railways DH 37 from 1067 mm to the Walhalla gauge of 762 mm. The railway has not been formally advised by Regional Development Victoria (The State Government Department providing funding) that the scope of the grant project has been changed to the DH restoration, therefore the DH is being done from the railway's accumulated funds.

This work has begun with the bogies already removed for conversion. The loco is presently on blocks in the Walhalla yard and once the bogies are converted the loco will be moved to the Thomson workshops for fitting out.



The QTrain at Drysdale station on the Bellarine Railway in November 2022. Photo: Michael Chapman



Henschel and Sohn locomotive 58 on a loader ready for transport. Photo: Alan Robert



NGG16 locomotive 129 at Menzies Creek station on the Puffing Billy Railway in November 2022. Photo: Michael Chapman



Locomotive Douglas at the Kerrisdale Mountain Railway on 4 November 2022. Photo: Michael Chapman

The railmotor project was quite well advanced when the decision was made to temporarily halt the work. The ends of the tram had been removed and the rest of the body fitted to the new frame. The bogies were complete and fitted as was the Subaru engine. However, design problems with the floor and incomplete designs for the two ends of the vehicle plus the departure of the project manager meant that the project was mothballed for the time being.

Andrew Webster

TASMANIA

IDA BAY RAILWAY, Lune River

610 mm gauge

Workers have already started the old railmotor number 7 and it runs well, but after four years in the draughty shed it needs a thorough clean and service. The exciting news is that the railway has been invited to take the railmotor to Steamfest 2023 in March. If this proceeds it means that all three Tasmanian 2 ft gauge railways, Redwater Creek, Wee Georgie Wood and Ida Bay, will be represented.

Ida Bay Railway Facebook page, 1 December 2022

REDWATER CREEK RAILWAY, Sheffield

610mm gauge

Preparations are well underway for Steamfest 2023, to be held on the long weekend of 11-13 March. As many as 8000 visitors are expected at this annual event which started 30 years ago and celebrates not just steam but vintage machinery, beasts of burden and much more. All three Tasmanian 2 ft gauge railways will be represented. *Wee Georgie Wood* and his two carriages will be transported from Tullah to join Sheffield's resident Krauss meaning that two steam hauled trains will operate throughout the three days, crossing at Dulverton station. A new safe working system has been developed to allow two trains to operate, with drivers required to be in possession of the unique staff for either the Sheffield-Dulverton or Dulverton-East Victoria St section, before being allowed to proceed. In further exciting news, the Ida Bay Railway's railmotor No. 7 will also be making the trek to Sheffield.

James Shugg

BUSHMILL RAILWAY, Port Arthur

381 mm (15 inches) gauge

Tasmanian K1 half size replica, 'K3' was a new build operating on the Bush Mill Railway at Port Arthur from around 1993-4. The locomotive has since been sold to the Perrygrove Railway in the UK. It was built by Lester Jones for the Bush Mill Railway and was owned and operated by Alistair Matheson who is now a station master at the Puffing Billy Railway. Its move to the UK was greatly lamented on Facebook and it is reported that it is long gone from the Perrygrove Railway and is now undergoing an extensive overhaul in the Manchester region.

Light Railways of Australia Facebook Group, 23 October



Ida Bay railmotor No. 7 photographed shortly before railway operations were suspended in 2018. Photo: James Shugg



On Feb 22, 2022 Wee Georgie Wood was hauling both carriages at Tullah. Patronage levels on regular running weekends usually only require one carriage, so the second carriage only sees occasional use on special charter trips. However both carriages will be making the journey to Sheffield for Steamfest. Photo: James Shugg



Redwater Creek Krauss and train crossing East Victoria St near the far end of the line at Sheffield on 4 December 2022. Photo: James Shugg

TASMANIAN TRANSPORT MUSEUM SOCIETY, Glenorchy

1067 and 610 mm gauges
Former Tasmanian Main Line Railway carriage B+21 was acquired by TTMS in the early 1970s but languished for many years awaiting restoration. This has now been mainly completed, although minor problems prevented its use at the September 2022 open day. The special running day held at the museum on 4 September to celebrate the 60th anniversary of the museum was a great success, with over 900 visitors coming through the gates. The train rides were busy as usual, although carriage B+21 was not able to be used. Spring Newsletter 2022

SOUTH AUSTRALIA

COBDOGLA IRRIGATION AND STEAM MUSEUM, Cobdogla

610 mm gauge
At the time of writing (December 2022) the Museum was under threat from the floodwaters that were slowly moving downstream from NSW and Victoria. Further information will be provided when it is available. Light Railways of Australia Facebook Group 15 December 2022

OVERSEAS

STATFOLD BARN, Tamworth, England

610 mm gauge
The locomotive *Seaforth* Hunslet 0-4-2T B/N 1026/1910 was awaiting restoration at the Statfold Barn Railway on 22 March 2022. This locomotive was purchased from Australia as part of the long-standing practice of the current owner of Hunslet to obtain examples of its products for restoration. *Seaforth* worked at the Pleystowe Mill in Queensland situated alongside the Pioneer River west of Mackay. Upon withdrawal from cane haulage duties, it was placed on display at Pleystowe Mill. It was then sold in November 2003 to a private owner and stored at a private property in nearby Mackay, where it could be seen from the Bucasia Road. Apparently, the private owner in Mackay has since passed away and by 2020 the locomotive had been sold and exported to the United Kingdom for restoration at Statfold. Narrow Gauge Enthusiasts Group Facebook Group, 10 December 2022



**LRRSA
Facebook
Group**

Join the LRRSA Facebook page titled *Light Railways of Australia* for lots of online discussions and photos of light railway interest.

ASG power at the Pieman River

Continuing to showcase some of the late Weston Langford's photographs taken on the West Coast of Tasmania in early 1963. The Emu Bay Railway's 4-8-2+2-8-4 Garratts have only a few months of service left before being replaced by diesel-hydraulic locomotives. The EBR's 1930 Beyer-Garratts have just about reached the end of their life and more and more of the 'hard yards' is being done by the ex-wartime Australian Standard Garratts. The ASGs were originally built to an 8½-ton axle load to enable their use on Queensland's railway system. Between 1944 and 1954, seventeen of these locos found their way to the Apple Isle where the heavier rail of the TGR and EBR allowed many modifications and re-balancing of the weight which saw axle loadings increase to around 10½ tons. Tasmanian railwaymen were used to Garratts and the ASG had finally found a home. It was still 'hard yakka' for the fireman, but if well cared for the ASG could return the favour. Friday, the 1st of February finds our intrepid photographer near the EBR's famous Pieman River bridge, built in 1899 during construction of the line from Guildford Junction to Zeehan.

Top and middle: EBR No.18 on a south-bound Goods, blasting upgrade on the south side of the Pieman River gorge. The receding shot clearly shows the large sand boxes, added fore and aft, and the 'hungry boards' to increase the coal capacity.

Below: A classic photo and the embodiment of ASG power, taken from the northern end of the Pieman bridge with the north-bound West Coaster. The EBR's short-lived named-train, the West Coaster cashed in on the post-war rise of tourism on the West Coast. At the time there was no through road from north to south on the West Coast and all cars and buses needed to be transported by rail. Car and bus passengers are comfortable ensconced in the two-tone blue carriages, out of sight at the rear of the train.

Photos: Weston Langford images: 102573, 102574, 102579, courtesy www.westonlangford.com Images converted from colour to B&W. Captions: Phil Rickard

