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LIGHT RAILWAYS

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Light Railway Research Society of Australia Inc.

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1 inch (in)	25.40 millimetres
1 foot (ft)	0.30 metre
1 yard (yd)	0.91 metre
1 chain	20.11 metres
1 mile	1.60 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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Contents

Editorial

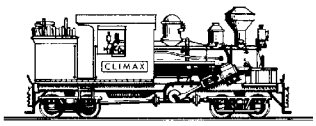
This edition contains the second parts of two recently published articles. The first part of the Caldwell Vale and Purcell Engineering locomotives article received quite a lot of very positive feedback as evidenced by the number of letters to the Editor. The second one covers the operations of the Luggage Point tramway that used electric locomotives on the construction of sewerage treatment works in Brisbane. The Looking Back feature looks at some tramways used on several jetties in Victoria.

I can hear all those steam aficionados saying "but where are the steam locomotives?". Rest assured that we have you covered in many ways. Both the front and back covers feature steam locomotives as well as a couple in the Heritage and Tourist section. Also, I have many future articles that include some fascinating steam locomotives from across Australia.

Finally, the LRRSA has just published its next book, the magnificent *Australia's Colourful American Locomotives* that includes diagrams and photos showing the livery of American locomotives at the time of their import to Australia. With the exception of Shay and Climax geared locomotives, it includes all known American steam locomotives delivered to Australia from the first in 1876, up to 1920. The locomotives worked in every Australian state, and in every type of service from tiny 2 ft gauge sugar tramway locomotives, to mainline broad-gauge goods and passenger locomotives. If you are interested, go the Society website - lrrsa.org.au - for more details.

Please enjoy this edition of *Light Railways*. *Richard Warwick*

Front Cover: *A sunny day on the 3ft 6in-gauge Marrawah Tramway in north-western Tasmania finds* Big Ben *(BLW 52512/1919) and crew pausing for their photo. Prior to the new Baldwin's arrival at Smithton, the tramway's motive power consisted of a small 0-4-0ST ex-Bendigo Tramways' Baldwin steam tram called* Spider *and an equally ancient fourth-hand Hudswell Clarke 0-6-0ST known as* Six-wheeler. *The new 0-6-0ST, officially No.3, was equipped with an Improved Rushton smoke stack, water-lifting apparatus and problematical rear overhang. In 1929 the tramway's ownership changed from the Public Works Dept to the Tasmanian Govt Railways and in 1948* Big Ben *left the North-west for use elsewhere. Sadly, he was scrapped in 1951. More details of* Big Ben *may be found in* Light Railways *No. 257 and the society's new book* Australia's Colourful American Locomotives. *Photo courtesy: University of Newcastle, ARHS Box 113_2817*



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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.

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Caldwell-Vale and Purcell Engineering industrial locomotives – an overview – Part 2

by Jim Longworth

Introduction

In Part 1 published in LR 278 in April 2021 we outlined the 1910 formation of the Caldwell-Vale Motor & Tractor Construction Co Ltd – a partnership of Felix and Norman Caldwell with the two sons of Henry Vale – Frederick and Henry jnr. Felix (in particular) brought to the new company his ideas regarding internal-combustion and its application to agricultural tractors and road trucks. Henry Vale & Sons bought premises in Auburn in the belief of the sons that the old-established firm needed to move on from its reliance on steam engineering. Unfortunately, the Caldwell-Vale company was beset by various problems and ultimately sold out to wealthy Queensland grazier Thomas Purcell in 1916 for £7500. Included in the sale were various patent rights including (particularly for this story) Commonwealth Patent No.4958, dated 15 May 1912: "Improvements in the construction of self-propelled vehicles running on rails" – the friction wheels patent. Purcell initially traded the business as T. Purcell & Company (he, his wife, and daughter being equal partners) before floating it in early 1921 as Purcell Engineering Co Limited with a capital of £100,000. In Part 1 a number of locomotives, their purchasers and uses were examined for both Caldwell-Vale and Purcell. In Part 2 we continue an overview of locomotives and rail vehicles produced by Purcell Engineering Co Limited and, later, for Felix Caldwell's own company, Caldwell Engineering (Australia).

State Brickworks, Homebush Bay, Sydney

In 1910, in response to alleged manipulation of the market for bricks in New South Wales by a cartel of brick manufacturers, the Labor Government put forward a proposal to build a state-run brickworks to supply bricks to the Department of Public Works. The DPW's requirement was for about 36,000,000 bricks per annum and in 1911 land was resumed from the State Abattoir site at Homebush Bay for the new brickworks. A standard gauge siding was laid for workmen's trains, to bring coal for the kilns, and to take bricks out to the required destinations.[1]

During 1911–1912 the NSW Department of Public Works linked the brickworks to a new jetty that had been erected off Wentworth Point, at the mouth of the bay, by a 2 ft gauge tramway some 35 chains long.[2] Bricks were packed into wooden boxes and loaded onto 4-wheel flat wagons on the light railway along which they gravitated to a lengthy jetty on Homebush Bay for loading onto a barge that was towed to Blackwattle Bay. Empty trucks were drawn back by horses.

The 1920s and the increasing demand for bricks for new buildings in the growing inner western suburbs of Sydney saw the need for an additional brick distribution depot. A site near Flemington railway station was selected and was linked to the works by an extension of the light railway. To operate over the extended track a 0-4-0 oil-engine locomotive was purchased from Purcell Engineering.[3]

The onset of the Depression saw a dramatic reduction in building activity and the demand for bricks. A change of government saw the state works sold to Brickworks Limited in 1936 and the complex was closed in 1940. The locomotive was still at the brickworks site in 1954, out of use.

Undated view of the Purcell locomotive heading a train of boxes of bricks from the brickworks probably down to the wharf on the southern bank of the Parramatta River. *Photo: Author's collection*

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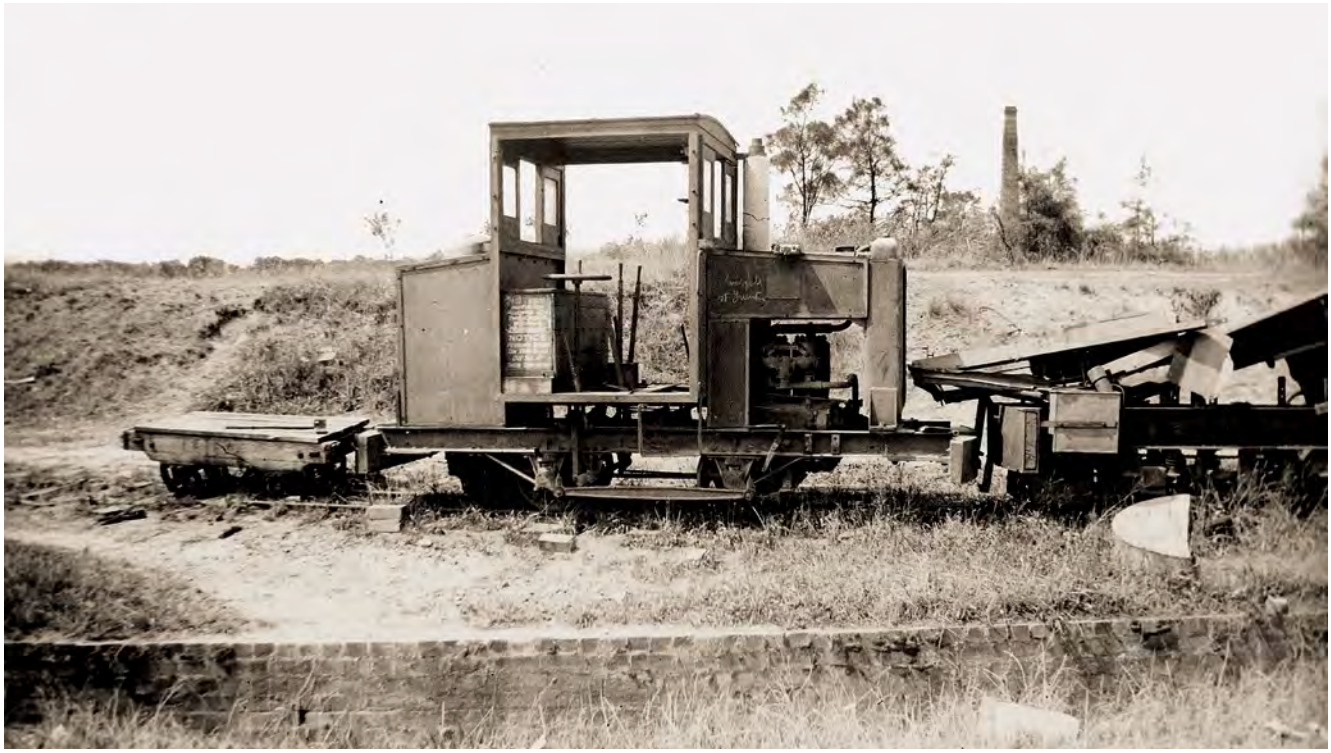

In 1954 Bruce Macdonald photographed the Purcell locomotive stored out of use at the former State Brickworks. Photo: Bruce Macdonald

Federal Capital Commission, Mugga Quarry, ACT

Following federation in 1901, construction of Australia's national capital, Canberra, formally commenced in March 1914, but the onset of World War I resulted in the postponement of most activity. With initiation of the main construction phase in the 1920s, extensive temporary railways were constructed to move material to various sites. Among these was a 2 ft gauge line to transport quartz-porphyry rock from the main quarry high on Mount Mugga Mugga (about 8 km south of the city) to nearby Mugga Lane. Purcell Engineering built a 3-ton 8–12 hp locomotive to operate this line. It hauled loaded side-tipping metal v-skips from the quarry, situated at about the 2450 ft contour on the south side of the mount, to the top of the double-track incline which lowered the trucks leading down to the crusher near Mugga Lane at about 2225 ft elevation. After processing, the aggregate was transhipped to steam wagons and motor lorries and taken to the various construction sites.[4] The locomotive possibly operated here until 1932 when quarrying moved to Mount Ainslie although a 1930 report mentions horses hauling trucks and makes no mention of a locomotive – was it already out of use?[5] The locomotive was advertised for sale "with all faults' in May 1936. The oil-driven locomotive was then located at the Federal Government's disposal store yard in the suburb of Kingston.[6]

Three workers pose with the Purcell locomotive and skips, Mugga quarry. Note the homemade sandbox made out of old gelignite packing cases from Ardeer, Victoria. Photo: Alexander Collingridge, National Library of Australia obj-142653501LA

Although of poor quality, this is thought to be the only known photo of Sailor Salt Co's Purcell locomotive at work on a salt lake near Linga. Photo: LR No. 120, April 1993

Sailor Salt Company, Linga, Victoria

Located on the VR's Ouyen-Pinnaroo railway line in the Mallee in north-western Victoria, the tiny town of Linga was the centre for extensive salt-harvesting operations from shallow lakes in the district. From 1912, some 16 km north of the town, salt was harvested with scoops, plough, and grader from four lakes known collectively as the Pink Lakes. Light railway track was laid across the pond beds to allow loose salt to be transported to the lake side from where, once bagged, it was taken by bullock-hauled dray to Linga station. In 1922 Sailor Salt Limited bought out the original proprietors and proceeded to upgrade the operations, including the

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construction of a light railway from the lakes to Linga railway station. Processed and bagged salt was then loaded onto bogie flat wagons running along the 2 ft 6 in gauge tramway for transporting to an interchange in the Victorian Railways' goods yard at Linga for on forwarding to Melbourne.

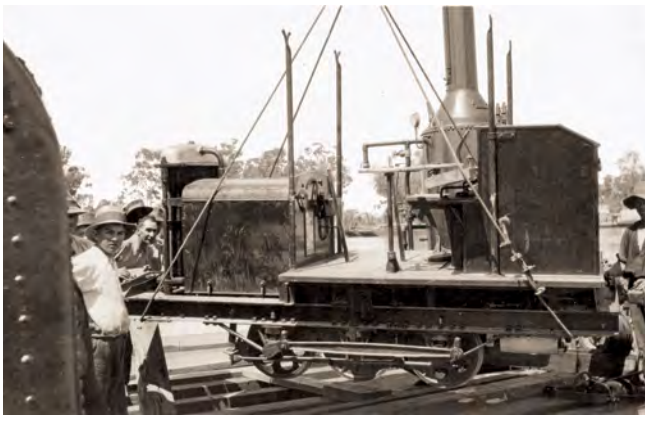
The tram line was operated by a Fordson-engined rail tractor of unknown make and a small Purcell locomotive. The Purcell had a two-cylinder engine developing 20 hp and had a one-speed gearbox, forward and reverse. The locomotive was out of use by 1926; but remained on site rusting away. It was inspected during 1938 for possible use by Cheetham Salt Ltd on Kangaroo Island; but this proposal fell through.[7]

Murray River Lock Construction, near Mannum, South Australia

The great 'Federation' drought of 1901-02 brought agitation from rural communities for more irrigation water from the Murray River. This finally resulted, between 1922 and 1935, in additional water storage capacity being constructed, together with a series of ten concrete weirs, plus associated locks for navigation purposes, along the river. As was standard engineering practice at the time, light railways played a critical role in the transport tasks associated with these large-scale civil engineering construction works.

Four industrial steam locomotives worked on the scheme, together with at least one Purcell internal combustion locomotive. The company advertised that it was "One of the several Locos supplied to the Murray River Reclamation Works", suggesting more than one locomotive was supplied though absolute details are lacking. What is known is that in June 1921, a unit was delivered to Mannum in South Australia. It was of the patent friction-drive type, of 3 ft 6 in gauge, and weighed four tons.[8] Its ultimate disposal is unknown.

At No. 1 Lock, Blanchetown, 21 June 1921. Photo: R T Horne collection



Probably taken during loading of the locomotive, with its canopy removed, after its work at Blanchetown was completed, 19 October 1921. Photo: Arnold Lockyer collection, NRM

Builder's photograph of the four-ton, friction-drive locomotive delivered to Mannum in June 1921.

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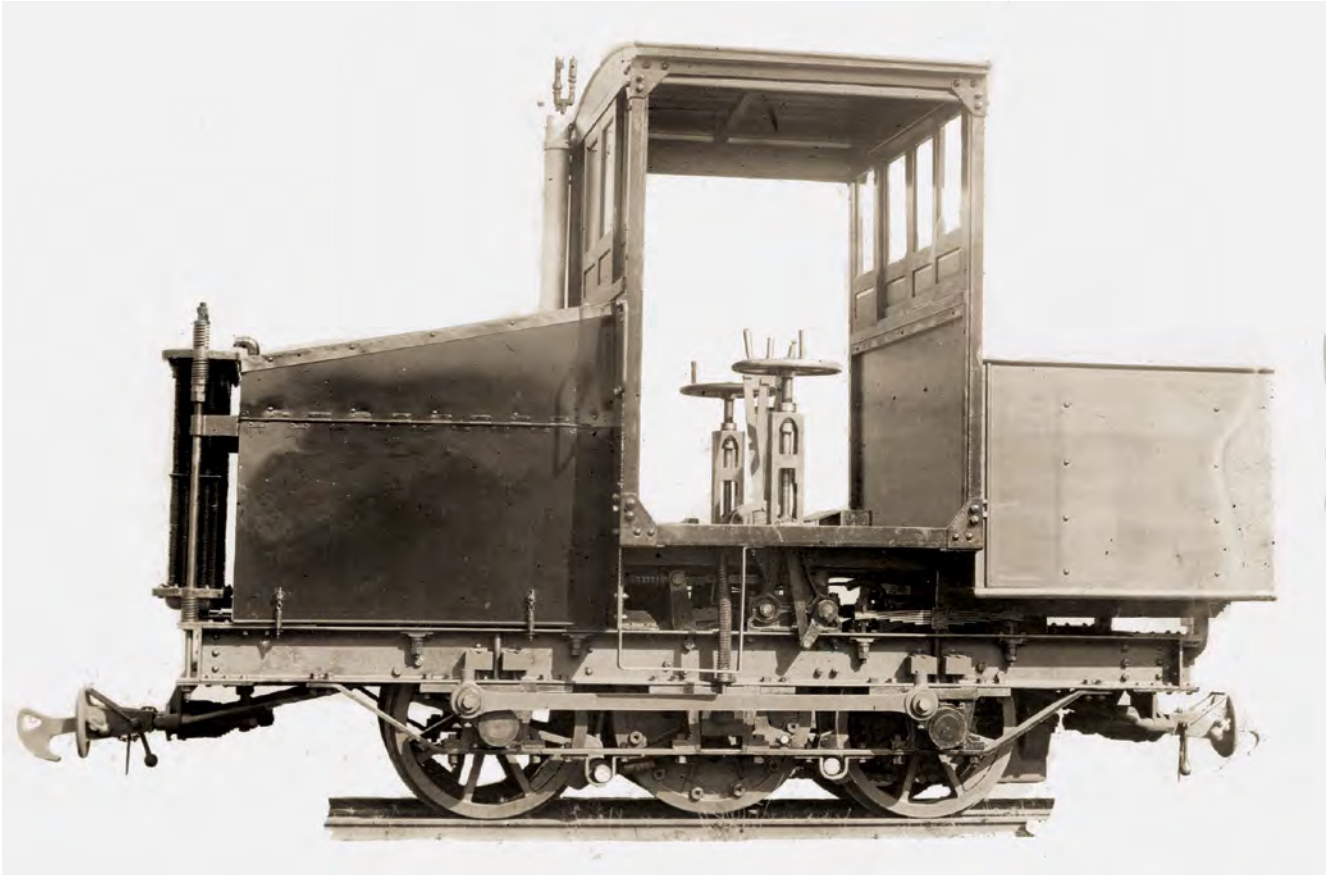

Above: *Builder's photograph of the BHAS locomotive with patent friction drive.*
Below: *Builders photo of two 25 hp oil-engined locomotives departing the Auburn works destined for one of the Bombo quarries on horse-drawn wagons, presumably heading to either a railway station or docks for despatch southwards.*

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Broken Hill Association Smelters (BHAS), Port Pirie, South Australia

As the export port for silver and lead from the mines at Broken Hill, Port Pirie had been the centre of smelting and refining works to process the ores since the 1880s. The British Broken Hill Blocks, an offspring company of the Broken Hill Proprietary Company (BHP), initially established smelters there, followed by an adjacent silver refinery opened by BHP in 1889. BHP subsequently withdrew from its operations at Broken Hill, but the other mining companies on the field came together in 1915 to establish the Broken Hill Associated Smelters (BHAS), which took over the existing works. Shortly afterwards the Zinc Corporation joined the company and, after expansion of the plant in 1925, the Port Pirie smelters became the largest of its kind in the world.[9]

The early railways around Port Pirie were of 3ft 6in gauge, and the sidings serving the smelting and refining works were of this gauge. Initial rail operations around the smelters relied on horses for traction, with the BHAS introducing four Andrew Barclay 0-6-0 industrial tank locomotives in 1918. During the 1925 expansion of the works, a 60 hp kerosene-powered locomotive, built by Purcell Engineering, was introduced. It is not known how successful it was, however we note that a fifth steam locomotive was purchased from Andrew Barclay in 1928 – was this a replacement for the Purcell that failed to live up to expectations?

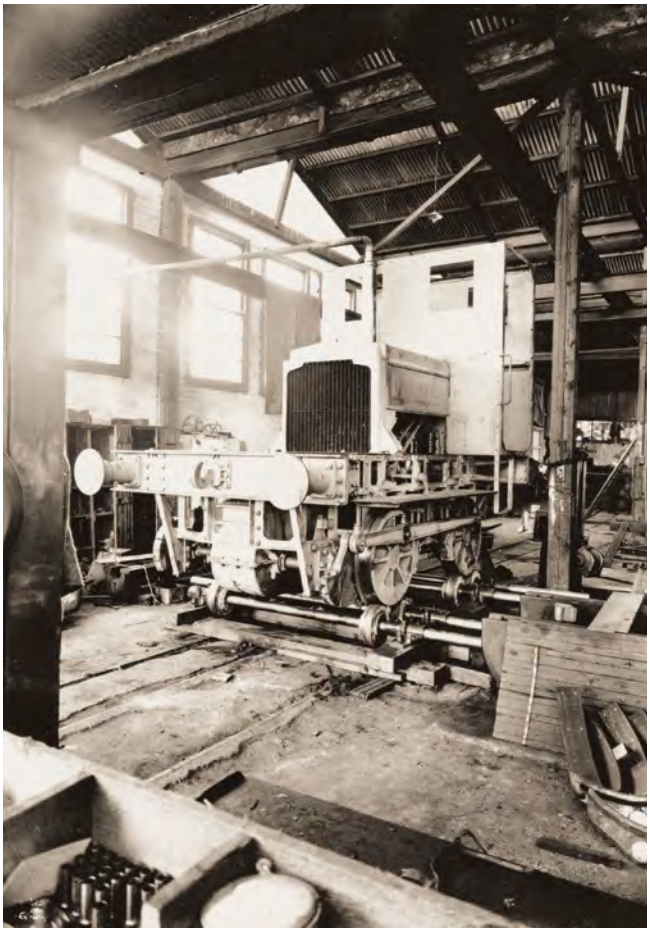
Bombo Metal Quarries, Kiama, NSW

A number of large blue metal quarries have operated on Bombo Headland north of the township of Kiama (90 km south of Sydney) since the 1880s. Several had internal standard or 2 ft gauge railway networks. Based on a builder's photo, Purcell supplied two internal combustion locomotives to one of the quarries, though details of their arrival, use, and demise have not been found. They appear to have been standard gauge units.[10]

NSW Public Works Department, Nepean Dam construction

The Nepean Dam was one of several major water supply dams constructed in NSW during the first half of the twentieth century. Its construction occurred over a period of ten years – between 1926 and 1936 – a protracted period that was directly related to the Great Depression and a period of government financial stringency. Its design and supervision drew upon the knowledge and experience of Ernest M de Burgh, Chief Engineer, and Gerald Haskins, the first Engineer-in-Chief of the former Water Board.

Builder's photograph of the ungainly-proportioned 0-4-0PM locomotive built for the Nepean Dam construction project. This photograph was selected for use on company advertising post cards.



Locomotive for the Nepean Dam construction work undergoing testing in the Purcell company's workshops, c.1926. The exhaust pipe has been diverted to vent outside of the workshops. Photo: Author's collection

To supply bulk construction materials, a standard gauge railway branch line was laid from a pair of exchange sidings at Bargo, on the main southern line, to the construction site. The line was used from 1925 until removed on completion of the dam in 1935. During 1925 the Public Works Department advertised a tender for the supply and delivery of a petrol-driven locomotive, with a closing date of 17 August. Purcell's tender was accepted. It was for a 10-ton locomotive, powered by 60 hp petrol-engine. The ungainly and, as it turned out, under-powered locomotive soon required augmentation with a second locomotive, namely a second-hand steam tram motor.[11]

The Purcell locomotive was advertised for sale in late 1936. Apparently, it did not find a buyer, resulting in follow-up advertisements through the late 1930s and into the 1940s, listing it as used construction plant.[12]

Electrolytic Zinc Company of Australasia, Risdon, Tasmania

This company was established in 1916 to mine lead, zinc and silver from mines at Rosebery and Williamsford in Tasmania and to establish an electrolytic refinery in the Hobart suburb of Risdon. Construction of the works commenced in 1916 and they opened in 1918. It employed 1300 workers in the 1920s, but activities were significantly reduced during the Great Depression.

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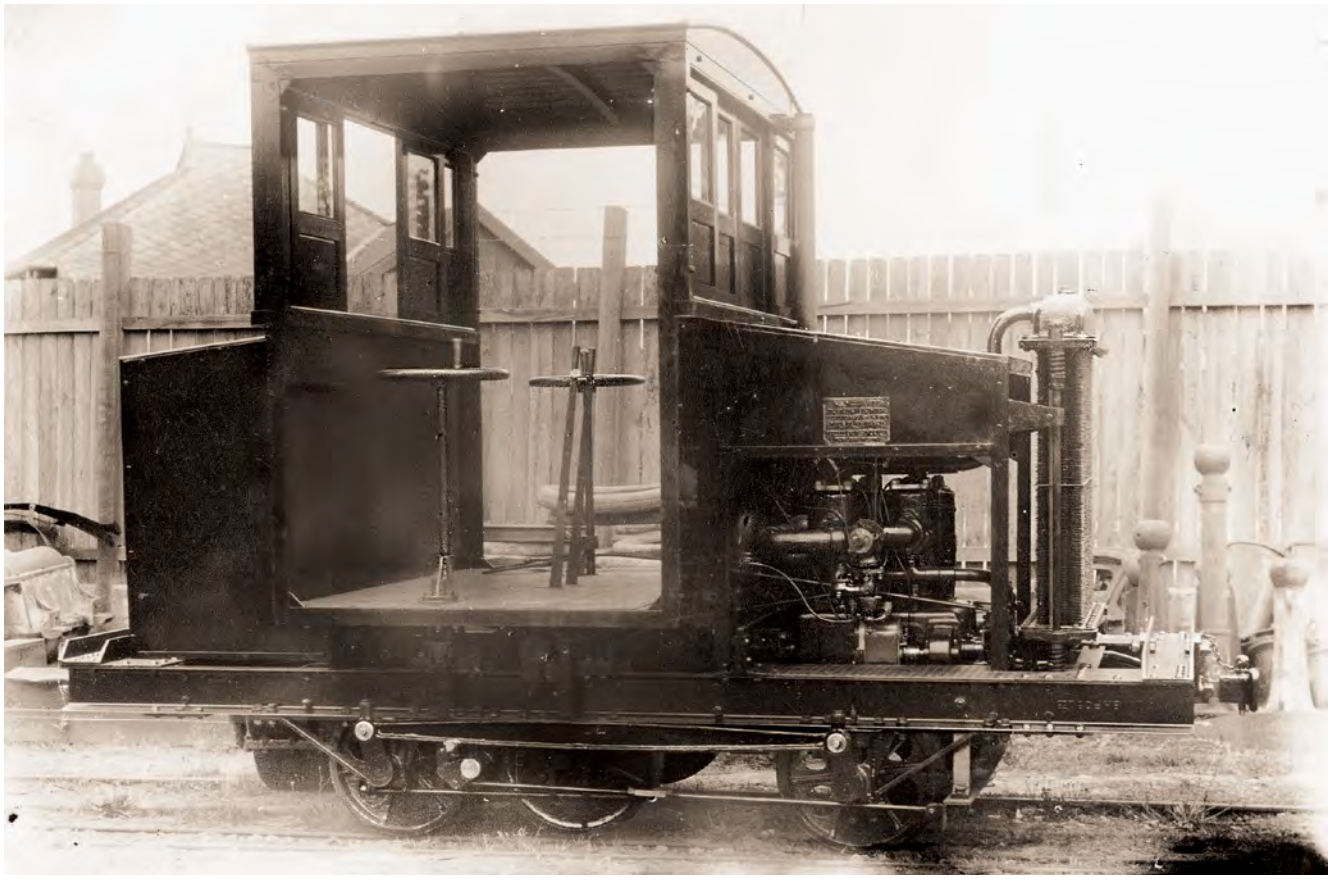
Above: *The Purcell locomotive shunts wagons with zinc ingots for loading onto the Neleus at the Electrolytic Zinc Company wharf at Risdon in 1959. Other photos in this series show it on the wharf, surrounded by piles of ingots. Photo: Wolfgang Sievers, National Library of Australia (vn4290605).*
Below: *The scattered scraps of the company archives contain this undated photograph of an as yet unidentified locomotive. It should be recognisable because of the very uneven spacing of the centre gripping wheels, being much closer to the rear wheels than the front wheels. Other company locomotives had the centre gripping wheels placed much more centrally between the outer wheels. To date its location of operation is unknown - can you help? Photo: Author's collection*



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The works were a protected industry during World War II and the boom period of the 1950s and 1960s saw it become the world's second largest zinc plant with a peak of 2300 workers in 1967.

An extensive 2 ft gauge industrial railway system operated within the works and onto the adjacent wharves on the River Derwent where zinc concentrate was unloaded and from where the zinc ingots were exported. A small internal combustion locomotive with typical Purcell under-carriage and wheel characteristics, but probably re-engined, operated on the internal 2 ft gauge network of this extensive zinc refining works. It is unknown whether the locomotive was acquired new or second-hand. It made an appearance in the film *Tasmanian Story* produced by the Post Master General's Department in 1954 and was still in operation in 1959.[13]

Unidentified

As well as the locomotives described herein, the company claimed to have exported, as yet unidentified, locomotives to Java and Singapore.[14]

Later developments at Purcell Engineering

In subsequent years the company continued the development of improved designs for internal-combustion engined locomotives; but no sales appear to have eventuated. The design of a light four-wheel industrial locomotive developed in 1927 showed a significant break from many traditional design features of Purcell locomotives. It had several features in common with the light locomotives then being manufactured by the Tractor Appliance Company Limited (TACL) to Malcolm Moore Pty Limited's patent for use in timber milling, quarries, sand pits and similar applications.

In 1929 Purcell submitted a tender to the Water Conservation & Irrigation Commission for the manufacture of three diesel-powered locomotives for use in construction of Wyangala Dam then being constructed on the Lachlan River in central-western NSW. These locomotives had a design weight of nine tons; four forward and four reverse gears; roller chain drive to transfer power to the axles; and a 3ft long wheelbase.

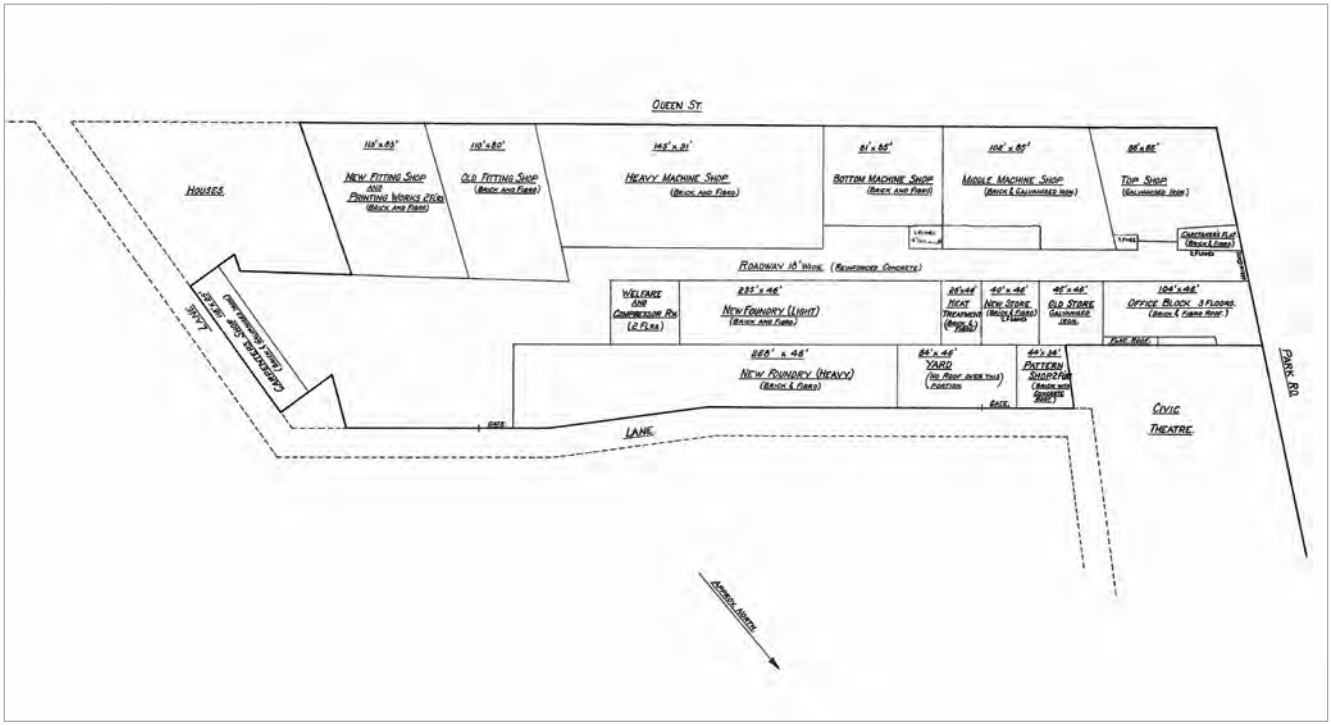
Track Inspection Vehicles

In addition to locomotives, Purcell manufactured a range of light railway vehicles for track inspection purposes. They included motorised versions of what had previously been manually powered inspection cars, colloquially known as 'trikes', even though they had 4-wheels.[15]

Builder's photo of a motorised inspection car. It was built for the Colonial Sugar Refinery in Fiji and it, or a similar vehicle was involved in a civil disturbance by 'coolies' in 1921 when its speed enabled a CSR electrician to reach headquarters and warn of danger. A highly dramatised account 'When Auburn Saved a Revolution' is in the Cumberland Argus and Fruitgrowers Advocate, *Parramatta, of 7 December 1921. The event may well relate to the Indo-Fijians' 1921 strike against CSR over pay.*[16] *How many of these vehicles were built, and to which CSR mills they were allocated is not known.*

Rail Trucks

At least two narrow gauge motorised rail trucks were also built by Purcell for unknown operators. They might have been used for transport of heavy items around large engineering works, or for carrying per-way maintenance tools around extensive sugar cane plantation networks.



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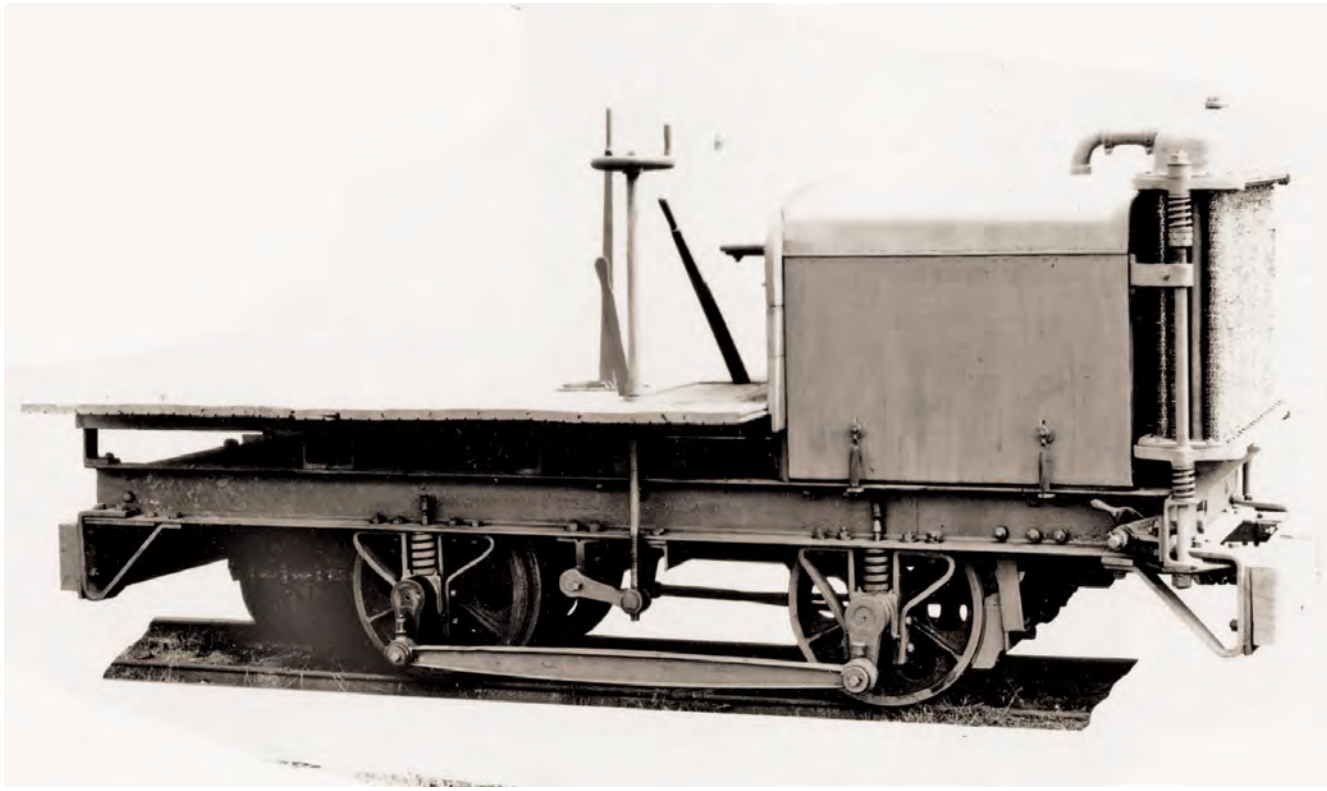
Above: *Conventional rail trikes and quads used wooden- or metal-spoked wheels similar to those on government railway systems, but the light bicycle-type wheels of this motorised quad would have been easily damaged. One assumes that the flooring has been removed so that the mechanical works are visible. Its purchaser is not known. Photo: CSR Archive, Noel Butlin Archives Centre, ANU (Z109 Box 110 Rolling Stock2)*
Below: *This is unit was a two-ton unit fitted with a 10bhp engine and rated to carry five tons on the flat-top. It could also haul 25 tons on the level. It bears some affinity with the EZ unit at Risdon, Tasmania but nothing certain is known. Photo: Author's collection*



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Builder's photo of the Purcell inspection truck for the Salt Lake to Muston tramway. Cheetham Salt Co records (1930) note this vehicle with a petrol engine, so the original oil engine must have been replaced. The builder's placard states "Builder: T.Purcell & Co." making its manufacturing date was prior to 1921, when Purcell Engineering Co Limited was floated. Seating is very basic though the roll-down blinds would have been appreciated on a wintery day when a south-westerly 'breeze' comes off the Southern Ocean!

Commonwealth Salt Refining Co., Kangaroo Island, SA

Salt harvesting on Kangaroo Island dates back over two hundred years with one newspaper report from 1810 referring to 40 tons of 'fine bay salt' being harvested on the island.[17] By 1897, tramways were in use by the Globe Salt Company at Salt Lagoon. In 1910 harvesting of salt by the Commonwealth Salt Co commenced at Salt Lake, near the south-eastern side of the island. The salt was transported from the evaporating ponds to a stockpile near the factory by horse-worked 2ft 6in gauge tramways. From the processing factory, two Kerr Stuart steam locomotives were used to transport the processed and bagged salt to the wharf, nine kilometres distant, at Muston for shipment. Sometime pre-1921, Purcell Engineering supplied a small internal combustion motorised inspection trolley for use on the line. It had a 3½ hp kerosene-powered engine.[18] In 1930 the Australian Salt Company (with backing from Cheetham Salt Co Ltd) took over the works. A 1954 inventory of railway locomotives and rolling stock makes no mention of the Purcell and its disposal is not known.

Caldwell Engineering (Australia)

Later in his working life, Felix Caldwell registered the name 'Caldwell Engineering (Australia)', on 5 September 1932. This provided him with a vehicle to undertake consulting and contracting work and building several locomotives. The locomotives discussed below represented a significant advance in design over the products previously built by Caldwell-Vale, T. Purcell & Co and Purcell Engineering.

Captain Cook Graving Dock construction, Sydney Harbour

A major World War 2 project was the construction of the Captain Cook Graving Dock at the Royal Australian Naval base at Garden Island in Sydney Harbour. As the Metropolitan Water Sewerage and Drainage Board (MWS&DB) had the best local experience in pouring mass concrete, it was chosen to manage pouring of the concrete lining for the dock.

Concrete was distributed from the on-site batching plant to the various sites for pouring via a network of two-feet gauge light railways. A fleet of small internal combustion locomotives hauled rakes of side-tipping U-shaped skips around the site. Two of the locomotives were designed by Felix Caldwell and supplied through his firm of Caldwell Engineering (Australia). Who actually built them is not positively known but a photo shows one of the locomotives at Kelly & Lewis, Springvale, Victoria.

Were the two for the Graving Dock project, being urgently required, actually built under sub-contract? One source says that Felix (and an apprentice) actually constructed several locomotives in a workshop at Marrickville over a period of a dozen years so each one would take a considerable period. That would appear to militate against the two for the Graving Dock being built there, leading to Kelly & Lewis, able to construct quickly, being sub-contracted for the job.[19]

The locomotives, named *Flora* and *Gwen*, were fitted with Fowler-Sanders heavy duty diesel engines manufactured by John Fowler & Company, Leeds, England, their Type 3B, and each weighed five tons and was rated at 42 hp. They were fitted with a friction clutch and an epicyclical gearbox, adjustable roller bearing axle boxes and cast steel horn guides.

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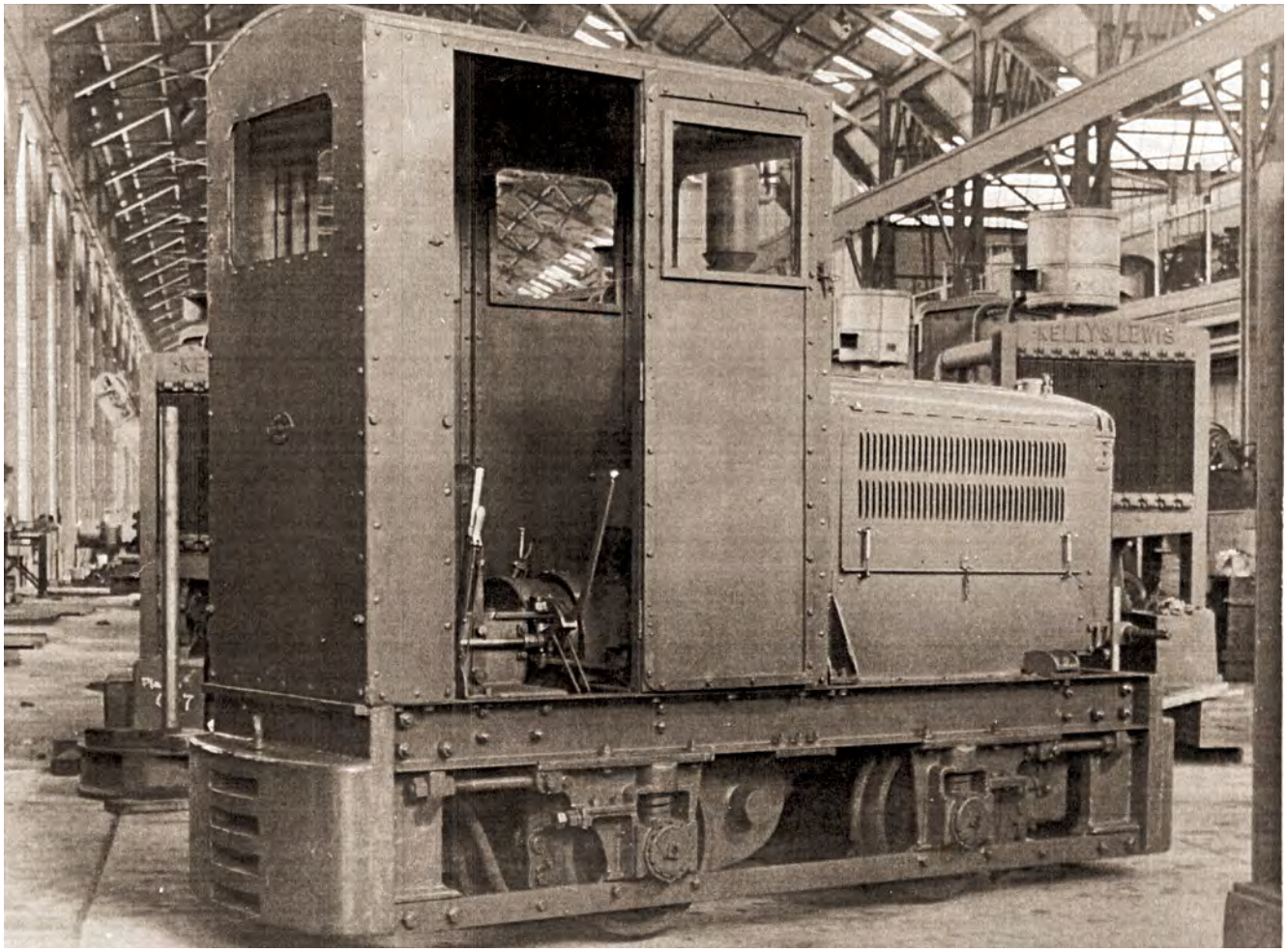
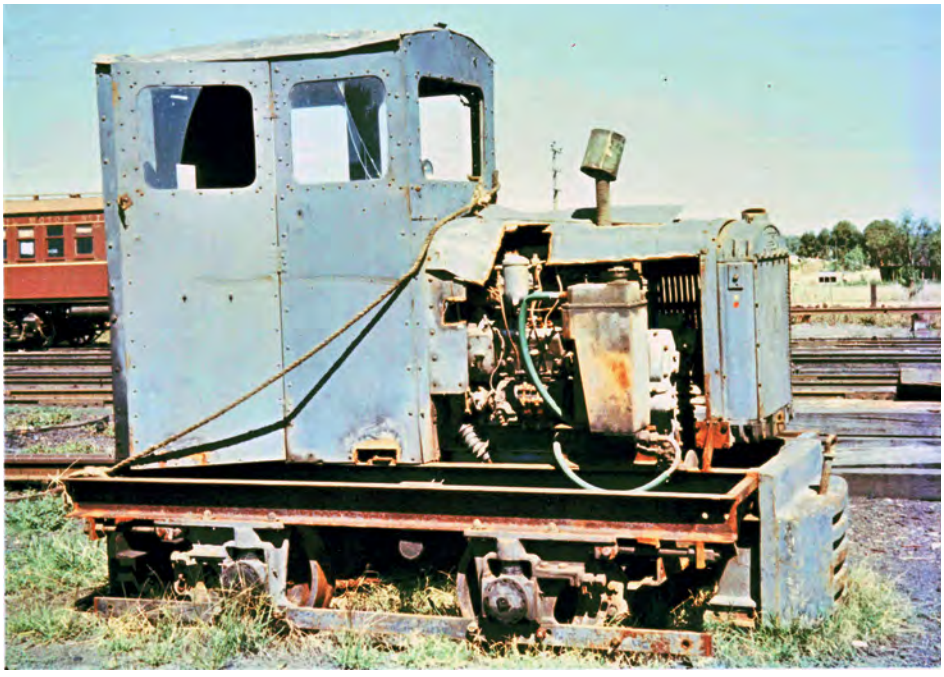
Following delivery, probably in 1940, they hauled rakes of hopper wagons loaded with cement from the batch mixing plant to the required position on the dock site.

About 1961, *Flora* was noted regauged to 4 ft 8½ inches at The Rock in southern New South Wales. It is believed to have been used for dismantling the branch line from The Rock to Westby. When the locomotive arrived at The Rock, it is reputed that the contractor did not realise that railways were sometimes of different gauges, and that it could not be used in its then present form. The locomotive was therefore converted to standard gauge by the simple expedient of cutting the axles in half and using tube steel to make up the difference, and by widening the frames. By this time a new engine had been fitted.

It was later noted at Uptons Engineering at Corowa, NSW. Alan Stebbing purchased the remains in 1993 and moved them to Belgrave South near Melbourne. Around 2006 the remains (frame and wheels) were moved to the Alexandra Timber & Tramway Museum.





Above: *One of a pair of Caldwell Engineering (Australia) locomotives for the Metropolitan Water Sewerage & Drainage Board for use at the Captain Cook Graving Dock project. The location is believed to be the erecting shops at Kelly & Lewis Ltd, Springvale as witnessed by several mobile air compressor units in the background bearing that company's name. Photo: R Schuster collection*

Right: *Regauged to standard gauge,* Flora *was photographed at The Rock, 28km south-west of Wagga Wagga, following its use by contractors dismantling the branch line to Westby, c.1961. Photo: Geoff Lillico*

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Flora at the base of the double-tracked incline descending down from the concrete mixing plant at the Captain Cook Graving Dock site, 5 April 1943. Two rakes of empty concrete trucks stand on track on either side of the locomotive. Photo: State Records NSW CGS 12490. 6/4496, 203

Undated view of the remains of Flora *at the Alexandra Timber Tramway & Museum, showing how the frame was widened on both sides to accommodate the longer axles for the wider gauge. Photo: Peter Evans*

Gwen, regauged to 2 ft 6 in, was used by contractor Tony Carr for dismantling the Victorian Railways' narrow gauge line between Walhalla and Erica in 1958. It was reported derelict at Knotts Siding in 1961. Its fate is unknown.

Titanium Alloy Manufacturing Company, Kingscliff, NSW

During 1942 Caldwell Engineering (Australia) supplied a similar small locomotive to the above units, through William Adams, to the Titanium Alloy Manufacturing (TAM) Company for the haulage of mineral sands. The tramway's northern end was at present day Casuarina, a residential area south of Kingscliff, a coastal town just south of the Tweed River in the Northern Rivers region. It was fitted with a John Fowler two-cylinder engine and radiator. The locomotive was used to haul rakes of side tipping V-skips from the sand pit to the sand treatment plant. The line ran among the sand dunes along the back of the beach. In 1955 TAM Co invested in two dredges which resulted in the end of the tramway. The Caldwell locomotive was later sold to Peachey Constructions, a machinery and construction firm of Ormeau, south of Beenleigh in Queensland.[20]

The Caldwell Engineering (Australia) locomotive out of use at Kingscliff. The John Fowler radiator and the oval builder's plate on the rear of the cab generated confusion among railway historians regarding the builder of this locomotive. Photo: Author's collection

In 1960 Peachey Constructions sold the Caldwell locomotive to the Byrne family who were Stotts Creek, Tweed River, cane farmers. Ted Byrne relates they used the locomotive to haul cane from 'Maher's farm', their annex style farm, across from Dodds Island in the Tweed River, 3km from their main farm which included a tractor-hauled kilometre-long cane line with exchange sidings with the CSR mainline. The Caldwell locomotive was obtained as the total haulage was 4km. They also combined with Dodds Island cane farmer Douglas 'Duggie' Richardson who eventually got his own Simplex locomotive.

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Until he did, the Byrne's Caldwell hauled his cane as well. Images taken during 1960 show the Caldwell locomotive bearing the name 'Duggie'.

In 1963 the Byrne family sold their Maher's farm to John and Noel Brinsmead, along with the Caldwell locomotive and associated trackage. John Brinsmead noted they also purchased other land adjoining the former Byrne-owned Maher's farm and named their combined property 'Riverside Plantation'. After selling the locomotive to the Brinsmead Brothers in 1963, the Byrne family fitted the locomotive with a four-cylinder International diesel engine around 1964. The discarded Fowler engine ended up stored on the Byrne farm, while the re-engined Caldwell locomotive continued to work on its new owner's Brinsmead tramway. In 1967 Richardson combined with the Brinsmead brothers to build a new link to the CSR mainline, with exchange sidings much closer, so the locomotives were retired and replaced by tractors. The retired Caldwell locomotive was placed in storage on Brinsmead's property until sold to Sea World (Southport, Qld) around 1975. David Mewes photographed the Caldwell locomotive in storage on Brinsmead's 'Riverside Plantation' tramway in November 1974.[21]

In 1976, Sea World used the locomotive frame to support a new body of an American-looking steam-outline locomotive, complete with wooden cab, diamond smoke stack, and cow-catcher. It was given the number '99'. Eventually Sea World operated three locomotives on its now closed internal tourist line. In 2016 the Caldwell Engineering/Seaworld rebuild was consigned by road transport, reportedly to Sydney, possibly initially to the former Adventureland site in Edmondson Park.[22] The locomotive is understood to currently be in the Blue Mountains on a private railway.

Further details of the tramways used at Stotts Creek are contained in an article by Peter Cokley in *Light Railways* No 279.

'Auto rail car' in South Australia

By the early 1900s various Australian railway systems were experimenting with new technologies to provide passengers services on lightly trafficked country branch lines. The Caldwell brothers were among the earliest world-wide, and possibly the first Australians, to fit internal-combustion motors to carriages to make independently-powered rail motors.

In 1911, following representation by the Caldwell-Vale company, to the South Australian Railways' Commissioner, Alexander B Moncrieff, an order was placed with the company through the SAR's South Australian agents, Clutterbuck Brothers, for one petrol motor car for use in connection with the passenger traffic between Victor Harbor and Goolwa. The estimated cost of construction was £2855, with the SAR providing wheels and axles for £95.[23] The auto car appeared to be a vehicle that would meet the demand for a low-cost, modern vehicle to address the challenge of meeting the demand for passenger services on lines such as this and was reckoned to be much cheaper than using steam-hauled

Steam outline internal combustion locomotive known as 'Old 99', built on a Caldwell Engineering (Australia) frame, on the railway at Seaworld, foldout postcard pack. Photo: G Fleming collection

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The Caldwell-Vale auto rail car photographed on the Adelaide Exhibition Line during a demonstration run, 1913. Whilst it was a fine-looking vehicle, thanks to the body work by Duncan & Fraser, underneath all was not well and mechanical problems brought about its demise including hot bearings, severe vibration and compressor troubles. Photo: Arnold Lockyer collection, courtesy NRM

trains. The company had made a specialty of road tractors, but the railway auto car was the first of that kind of work they had undertaken. While the Victorian Railways had introduced American-built petrol-driven rail cars, this was the first Australian-designed and built vehicle of this type.

The power unit and undercarriage were constructed at Caldwell-Vale's Auburn works, with the timber-bodied passenger section being provided by the Adelaide firm of Duncan & Fraser. The car bore some similarity in design to the Adelaide electric trams manufactured by that company, though on a much larger scale, and was capable of seating 60 passengers. The two petrol engines, each of 70bhp, were located in the centre of the under-carriage. The gear-box was similar to that in what was then considered to be an up-to-date motor car; except that it was much larger to handle the greater power. Power was transmitted by a longitudinal shaft bevelled to the front and back axles, no differential case being employed. If necessary one engine could be thrown out of gear and the car propelled with the other. Petrol consumption on level track and doing a speed of 40mph was estimated to be about a quarter of a gallon per mile. The overall weight of the car was 30 tons and the maximum speed was 45mph. A separate single-cylinder Gardner petrol engine generated electricity for ignition and lighting.

There were significant delays in construction of the carriage, with Felix Caldwell spending two months in Adelaide supervising its erection in the machinery hall at the rear of Adelaide's Exhibition Building. The car was tested under the eyes of officers of the Railways Department. The Chief Mechanical Engineer, Benjamin Rushton, and a party of about 20 railway officials and others on a trial run from Adelaide to Gawler and return on 23 April 1913. The auto car was finally issued to traffic on 15 December 1913. After a month's working, carrying 60 passengers, and running 105 miles per day, with an average of six stops each way on a ten mile long run, costs were calculated to be £13 12s 9d.

Despite optimistic claims by Caldwell-Vale regarding the advantaged of the auto-carriage, it was soon mired in controversy and there were questions in parliament regarding its suitability. These included requests for information on how often had the motor been in traffic; what had it earned to date; what reason did the Chief Mechanical Engineer give for recommending the purchase of this motor; and did the government intend to run the motor car between Goolwa and Victor Harbor during the summer months?

Well, it seems that if did just that, for some five years until the 1918/19 summer, when it was withdrawn. Mechanical problems continued and the engines were eventually removed in 1920, whereupon it was converted to a combined passenger and crew carriage numbered 500 for use on the Long Plains line.[24]

During 1923, the experience of Caldwell-Vale's SAR rail car came back to haunt the Purcell Engineering Company when Purcell sought to tender for the manufacture of rail cars for lightly trafficked branch lines in South Australia. The SAR Chief Commissioner reported that the rail car manufactured by Caldwell-Vale in 1911 was a hopeless failure. The engines for the original car were manufactured by the same organisation that put forward a tender under the current contract and it was the Commissioner's opinion the latest tender would likewise be pure experimentation as the firm could not produce any evidence of having produced similar cars to those specified in the tender documents.[25]

The Queenslanders are enticed . . .

On 5 December 1910 the Queensland government called tenders for supplying ten autocars for use on branch lines. Each car was to sit 40 1st-class persons only, and to have sufficient power to haul one or two trailers, of 10-ton capacity. Maximum speed was to be 40mph. Tenders were extended

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from 28 February 1911 to 28 March 1911. The McKeen Motor Car Co of Omaha, Nebraska, USA was awarded the contract at £4800 per car, carrying 72 passengers. Caldwell-Vale Motor Traction Co offered a tender of £1125 each, though actually this price was only for the chassis. A Rockhampton Labor-aligned newspaper promptly claimed the government had a foreign preference![56]

Three years later, during 1914, Caldwell-Vale offered to supply the Belmont Shire Council in Queensland with a 'motor railway car', for £990. It was presumably a narrow gauge version of the South Australian auto-carriage. The Council required the following terms of payment: one third cash with the order; one third on completion of 50 miles of satisfactory running; and the balance on completion of three months of satisfactory running.[27] The transaction failed to materialise.

Locomotive Conservation and Remains

Very few Caldwell-Vale or Purcell locomotives seem to have been reused on other lines. Their lack of reuse may have resulted from their inadequate structural robustness or unreliable mechanics. For those with the patented friction-wheel design, was that a step too far and ahead of the times? Remains of these locomotives are also few and far between.

Steam Tram & Railway Preservation Society, Valley Heights, NSW

As covered in Part 1 of this story, the 1921 locomotive for the West Ryde Pumping Station was possibly the only standard gauge locomotive built by the Purcell Engineering Company. After standing derelict in the yard at Carlingford since the 1950s the friction-wheeled locomotive was moved to the Masonic Home at Carlingford opposite the shopping centre and used as a playground climbing feature. In 1982, the Steam Tram & Railway Preservation Society (ST&RPS) obtained the frame and it was placed into storage at Kellyville. When the government's Randwick tram depot was being cleaned out, the facsimile steam tram motor body was made available to the society and subsequently the body was placed over the locomotive frame, which was then at Parramatta Park. The facsimile was used as a substitute for tourist tram operations when steam tram motor No.103A was not available for steaming.

The body was destroyed when the carriage shed was burnt down in 1993. After the fire Parramatta City Council sought to assist the group and removed certain items that council thought to be dangerous. Some items from the unit are suspected to have been accidentally taken away at that time.

From there, the centre friction wheel set went into storage at the Valley Heights Locomotive Depot and the main frame and other wheel set was placed on the frame of an NSWGR 'HG' guards van that was also destroyed in the fire. Both form part of the Valley Heights Steam Tramway collection. Some bits could be in the heap of castings, etc that were retrieved from the Parramatta Park museum site following the fire. When the casing of the centre friction wheel set was opened in 2012 it was found that the fire at Parramatta Park had done little, if no, damage. The casing has been thoroughly cleaned out and modifications re grease nipples, etc, fitted. A museum member has taken on the project to systematically rebuild the remains of the Purcell Engineering locomotive at Valley Heights.

Remains of the 1913 Caldwell-Vale ex-Moreton Mill locomotive Vanguard, *as saved by Graham Chapman in the 1990s. This loco, much altered though the chassis and wheels seem original, as well as the distinctive connecting rods, is now at the Kerosene Creek Tramway in the Blue Mountains, NSW. The headlight remains mounted centrally on the cabin firewall, while the cylindrical sand boxes are also prominent. Full details were covered in Part 1. Photo: Graham Chapman*

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Undated view of the gearbox and driving wheelset of the Purcell at the West Ryde Water Pumping Station now at Valley Heights Locomotive Roundhouse Museum. Photo: Peter Stock

Stuart Landry, Leongatha, Victoria

Kurt Johanson acquired a two-cylinder Caldwell-Vale engine from Darwin, which appeared to have come from a railway locomotive. If so, it was probably from one of the 2ft gauge locomotives that had been used during construction of the Vestey's meatworks. When Kurt relocated from Darwin to Alice Springs, he took the engine with him. This engine was subsequently acquired by Stuart Landry.[28]

North Head Quarantine Station

This Caldwell-Vale locomotive was covered in Part 1. It was supplied to the quarantine station in 1913, of 2 ft 3 in gauge. According to records of the National Parks and Wildlife Service (controllers of the former site), the loco was sold to a person in Wollongong in 1956 for use with an amusement train. No definite records have since been found though there was an amusement railway in Stuart Park, North Wollongong in 1959/60. Did it use the former quarantine station loco? Do you know anything? Readers' comments would be most appreciated.[29] If you know any more about any of the locomotives covered in this two-part series please let the Hon Editor know, thank you.

Acknowledgements

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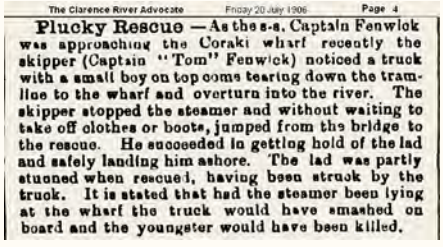
Treasures from Trove: Coraki wharf, Richmond River, NSW



The Clarence River Advocate Friday 20 July 1906 Page 4

Plucky Rescue — As the s.s. Captain Fenwick was approaching the Coraki wharf recently the skipper (Captain "Tom" Fenwick) noticed a truck with a small boy on top come tearing down the tramline to the wharf and overturn into the river. The skipper stopped the steamer and without waiting to take off clothes or boots, jumped from the bridge to the rescue. He succeeded in getting hold of the lad and safely landing him ashore. The lad was partly stunned when rescued, having been struck by the truck. It is stated that had the steamer been lying at the wharf the truck would have smashed on board and the youngster would have been killed.

Sometimes the only way we find out that a particular wharf or jetty was graced with a tramway is due to a personal accident. Fortunately, the one detailed in the following newspaper report resulted in no deaths or serious injuries. Coraki is a small town at the junction of the Richmond River and Wilsons River, 40 river miles upstream from Ballina, in Northern NSW. From Coraki vessels could reach Casino on the Richmond River or Lismore on the Wilsons River. The vessel concerned was the ss *Captain T. Fenwick*, a steamship built at Ballina (the first coastal and river trading vessel built there) and launched in May 1900 for Fenwick Bros, a well-known steamship company on the Northern Rivers. She was fitted with a compound engine (cyls: 11 + 22 x 16-inch) supplied by a 50hp boiler (working at 120lbs), both manufactured by Plenty and Son, Newbury, England. The *Captain T. Fenwick* was 97ft-long with a beam of 18ft and draught of 7ft. Top speed was reckoned at 14mph and in theory could accommodate 600 persons. [*Northern Star*, Lismore 19 May 1900 page4]. In 1893 the wharf was recorded as being 148ft x 26 ft and fitted with a 5-ton crane and goods shed. [Votes and Proceedings, NSW Legislative Council 1893]. Thanks to this newspaper snippet we now definitely know it had a tramway. *Phil Rickard*

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The Luggage Point Tramway, Brisbane – Part 2

by John Browning

Introduction

The first part of this article appeared in LR 276 in December 2020 and covered the planning and construction of the tramway. We continue the story here and cover the operation of the tramway, its locomotives and rolling stock, and other equipment that was used.

Transport for materials and men

The tramway carried all the requirements of a complex civil construction project. Bulk commodities included gravel, sand, and coal, with cement in bags. Storage facilities for these materials were provided near the wharf at Luggage Point. Quantities of construction materials including timber, ironwork, concrete blocks and pipes, and sheet piling had to be transported as well as a variety of machinery and equipment. Goods had to be delivered to the power house and the treatment works site as well as to work sites along the length of the sewer where steam machinery had to be provided with fuel.

The initial conception of the tramway was that the wharf at Luggage Point would be the main point of delivery for supplies to the project but changes in technology and transportation costs meant that over time deliveries to the tramway were also made from the Pinkenba end, commencing with materials delivered by road vehicles and later by rail at the Pinkenba station exchange siding.

Man transport was an important role of the tramway. The remoteness of Luggage Point, the lack of all-weather roads to and beyond Myrtletown, and the distances from Pinkenba railway station meant that the Board had little choice but to provide transport in order to attract and retain workers, although some camped on the job, particularly during the week. The requirement for man transport proved to be expensive and inconvenient. Visitors and those involved in official inspections also travelled by rail, especially on the section beside the outfall sewer where the only alternative mode of access was on foot.

In September 1915, the Board gave its attention to the matter of man transport when it directed the Engineer to run a service on the electric tramway to convey passengers at times to suit changes of shift and the arrival and departure of trains at Pinkenba.

> Timetables should be posted at the termini and 'intermediate stations'. Tickets should be issued free of charge endorsed 'accepted and used at employee's own risk'.[1]

The Engineer, Gordon Thom, did not favour this course of action. He indicated that he would run a train at the start and end of work each day using the existing locomotive although additional rolling stock would be required. He stated that to convey the underground workers only, the locomotive would have to be taken away from other duties for 3¾ hours a day. He added that the line had not been built to carry passengers, and it would be dangerous to run at night. With about 120 men employed on the work, including 50 or 60 miners, extra rolling stock would be required to carry them. If the Board's other work was not to be disrupted, the full costs of the service would include £730 for a locomotive and five carriages, and £575 for line alterations, ballasting and sheds. Three shifts of drivers and guards, running costs, and additional maintenance men to keep the line in a state fit for passenger traffic would cost an additional £1500 a year. As Thom no doubt intended, these costings caused Board members to canvass alternative transport arrangements for the men.[2]

It was soon realised that the only available alternative method of transport would be by bus, and tenders were called. There was only one offer received, from a local company, Wm. Miller, at a price of £1300 for the year. The Engineer recommended acceptance, but the Board declined to agree, considering the price to be too high. The President of the Board remarked that the cost of a small locomotive and carriage would be cheaper than the tender received.[3] Given the state of the road from Pinkenba to Luggage Point, this outcome could hardly have been unexpected and there are no more recorded deliberations of the Board on this topic for several years. However, at some time subsequently at least one pumper trolley was put to use for man transport. This may well have been with the major reactivation of works in 1918 following the period of wartime relative inactivity. With only one electric locomotive available, the demand for the tramway's services for construction purposes would have left little capacity for man transport.

In January 1919 it was reported that carpenters required for the construction of the Luggage Point treatment works would not take employment there unless they were paid to walk there from Pinkenba in the Board's time. The Engineer was instructed to provide transport from Shaft 33A to Luggage Point, preferably by obtaining a second locomotive and more pumper trollies. The Engineer stated that he had stopped the use of the pumper trolley because it was dangerous but was directed to allow its use until a better solution was found. A few days later the Board was summoned at short notice to the Arbitration Court to attend a compulsory conference on this matter. It was stated that the men arriving by train travelled to and from work by pump trolley, that the Railway Department was building three new pump trollies for the line and that the men had refused an offer to provide them with bicycles.[4]

Providing the motive power to transport tradesmen on pump trollies fell to the lot of labourers. It seems that the pump trollies were sometimes overloaded for in March 1919 at an Amalgamated Carpenters Union meeting it was said that more pump cars needed to be provided, and that 'the labourers at present engaged to pump the trolleys to and fro were not equal to the strain put upon them'. Labourers were transported through their own pumping efforts. In March 1919, Mine Manager Fletcher spoke of having to dismiss six Russians who it was alleged did not understand the work, stating that he had heard they would not assist on the pump trolley.[5]

The presence of pump trollies on the line must have been a temptation to those inclined to use them for unauthorised travel during the working day. In June 1919, Inspector Upton said that men had been dismissed for using the pumper in defiance of instructions.[6] New pumpers must have arrived from the Railway Department eventually as in December 1919, a payment of £77 14s 2d to the Commissioner of Railways was approved in payment for pump trollies.[7]

By April 1920, a second locomotive had arrived and this coincided with a new report of electric haulage of a workers' train. 'The 'carriages' are not of the modern type, but they fill the purpose admirably, and tired workmen do not look for upholstered cars'. The question of whether the travelling time from Shaft 33A to the treatment works should be paid was an industrial issue that was before the Arbitration Court in May 1920. In October of the same year it was noted that

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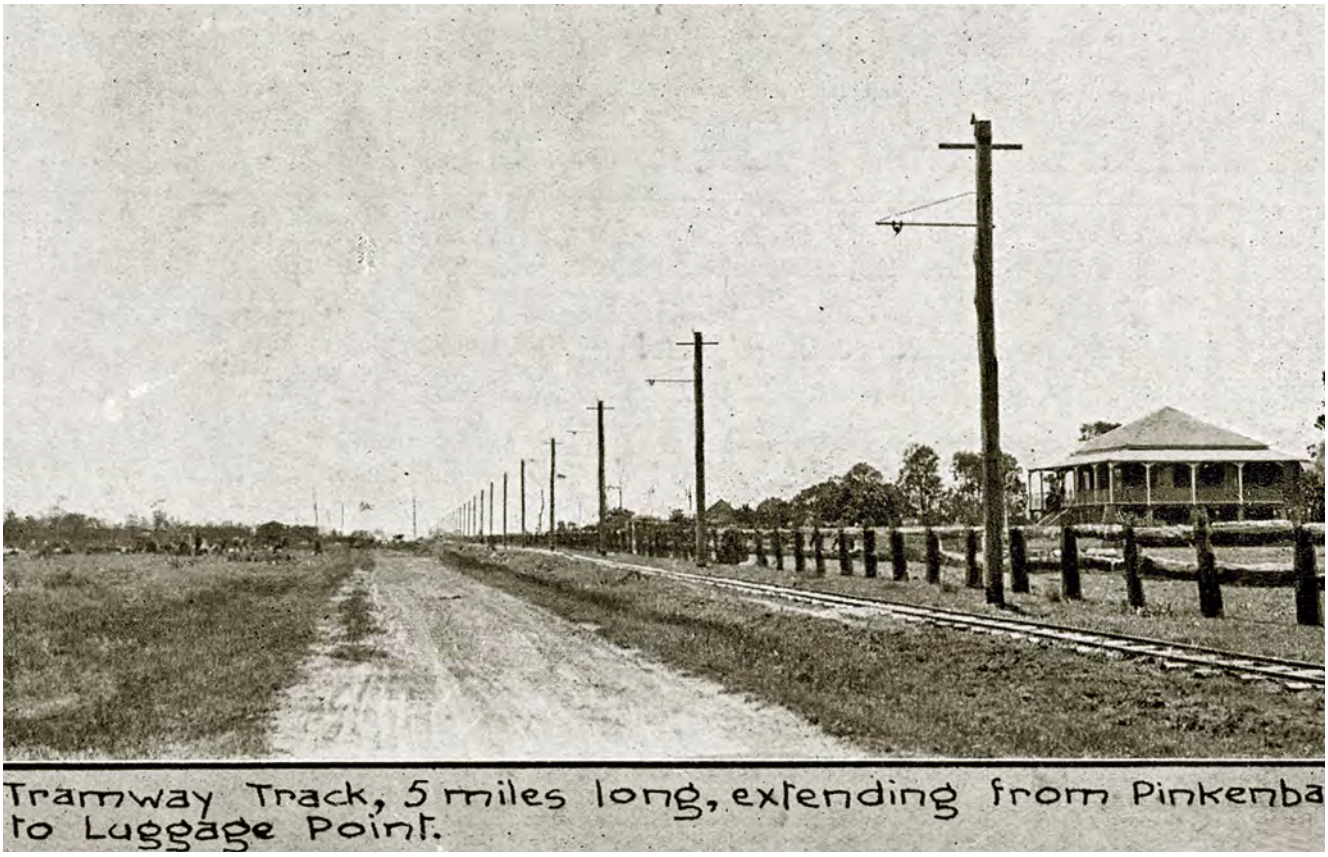

The tramway track with poles and brackets erected awaits the remainder of the transmission gear. This scene is in Myrtletown Road or Beach Road. Photo: The Queenslander *27 February 1915*

Inspector Upton's men at the treatment works site were allowed to finish work 15 minutes early on Saturdays at 11.45 to give them enough time to catch the train departing from Pinkenba. The issue of paid travelling time on the high-level sewer construction had been resolved by October 1921, when Superintendent Corless was reminded that men on Sections 1 & 2 should receive an hour of paid travelling time per day and men on Section 3 half an hour. The Award was updated in September 1922 to state that all employees working beyond Shaft 33A should be paid 1/6 for each Saturday 'when prevented by the Board from catching a train at Pinkenba arriving at Central not later than 1.15pm'.[8]

Route, track and overhead equipment

As mentioned previously, the route of the electric tramway as built from Pinkenba to Luggage Point was along gazetted roads. It commenced on Myrtletown Road (now Eagle Farm Road) near Pinkenba State School at its junction with Esker Street, and continued onto the current Main Myrtletown Road and beyond into what is now Brisbane Airport, a total distance of just over two miles. It turned right into John Street, which has been erased from the map until outside the airport perimeter it now exists as Brownlee Street, a total of about half a mile. From John Street, the line turned left into Beach Road (now Main Beach Road) for about 1¼ miles until it reached the treatment works. It then turned to the right for about half a mile and then to the left for about a quarter of a mile to reach the sewer outfall at Luggage Point. The branch to the wharf diverged about a quarter of a mile before the terminus.

Far less has been discovered about the other tramways that were constructed. The site of the temporary power house and depot in John Street, Myrtletown, has not been definitively identified. It may have been at the western end of John Street, within the current Brisbane Airport perimeter. The routes along the high level sewer deviation and the line back towards the city from Esker Street along the Dunlop Deviation can readily be surmised. Access to the QR fork line at Pinkenba involved a 350 yard branch along Myrtletown Road off the Dunlop Deviation line. The route taken by the tramway from a wharf near the Queensland Meat Export works at Pinkenba to the Dunlop Deviation is not known. Also not known are the locations of the various branch lines associated with concrete pipe and block manufacture at the Luggage Point end.

The rails supplied were enough for about 1500 yards of track laid in 28 lbs rail, about 4 miles of track laid in 14 lbs rail and about 400 yards of track in 12 lb rail. This indicates that most of the tramway was built in 14 lb rail, with the 28 lb to be laid alongside the outfall sewer beyond the treatment works where conditions were harsher, and the line was likely to be more permanent. The 12 lb rail would be used within the tunnel sections during construction. Perhaps as an afterthought, fourteen sets of points in 14 lb rail and just one in 28 lb rail were obtained, together with a turntable for use at the wharf. The large quantity of timber from local timber merchants A J Kirby & Co included 9800 sleepers with dimensions 3 ft 6 in x 6 in x 3 in and quantities at other lengths to account for pointwork. An offer from Kirby of a further 2000 sawn sleepers at 10d each was accepted in June 1914.[9] The 14 lb track materials were rather light for a main line tramway and would explain some of maintenance problems that later emerged and the large amount of ballasting work that was needed. It also explains why the locomotive was specified with a 1½ ton axle load.

The overhead transmission gear was mounted on 30 foot poles, erected 120 feet apart. There were 245 of these posts supplied by A J Kirby & Co at a price of 35 shillings each.

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The trolley cable was hung from bracket arms attached to the posts with an assembly consisting of an impressive array of specialised components, and there was also a return feeder cable with associated insulators and lightning arrestors. The posts also carried a telephone line. The rails were bonded, and connections were provided to supply power to cranes, compressors and other equipment along the line.[10]

Between Pinkenba and the treatment works the route was fairly level. There were a couple of creek crossings on Myrtletown Road and one on John Street. (The present Boggy Creek is a canalisation of part of the old Serpentine Creek to take it away from the airport.) The last mile at the Luggage Point end was across low lying tidal mangrove swamp and the line had to be built elevated on a 6 foot high timber trestle. As time went on, spoil tipping transformed this part of the route into an embankment. There were two major concrete bridges along the course of the outfall sewer, each 200 feet in length.[11]

The overhead electricity supply for the tramway came from the Board's powerhouse, initially the temporary one in John Street which was relocated to Luggage Point in 1918. The permanent power house at the treatment works was not completed until 1925. In June 1921, the question was asked of the Engineer for Sewerage as to whether, as an economy measure, the powerhouse at Shaft 41 near Pinkenba station could take over the entire load of electrical generation for all the works until the permanent power house was built. This inquiry presumably led to the tabling of an electrician's report a week later which stated that the voltage drop on the tramline serving the high level sewer had been found to be about 50% and recommended that the powerhouse at Shaft 41 should be used to boost the existing supply provided by the temporary power house at Luggage Point rather than eliminating it.[12]

Locomotives and rolling stock

The full specification from 1914 for the 2 ft gauge electric locomotive has not been located but the simple description was:

> 'Electric locomotive complete with motor controller, double pole switch and fuse, trolley arm and connections, head and tail lights, motorman's house and all necessary fittings as specified'.

The successful tenderer for the electric locomotive in May 1914 was local electrical contractor Gordon Faine Ltd. It is believed that Faine's supplier for the locomotive and overhead transmission gear was the Jeffrey Manufacturing Co of Columbus, Ohio, through Jeffrey's local agent, Gibson Battle & Co Ltd, Sydney. The tender price for the locomotive was £435. Unfortunately, the tender documentation has not been located. The locomotive was delivered in January 1915 and put into use during April. It appears almost certain that it was Jeffrey 3561, despatched to the order of Gibson Battle and ex works on 17 October 1914. This was a 3-ton unit with a 33 inch wheelbase.[13]

The 15 hp 'electric motor' was of a design commonly used in underground mining. In its appearance it was an exercise in minimalism, with a basic cab providing scant protection from the elements in wet weather and a tram-like collector pole. Its stark appearance can partly be explained by the need to keep weight to a minimum in view of the 14 lb rails on which it was to run.

The Engineering Supply Company of Australia [ESCA] had offered a locomotive and transmission gear from the General Electric Company in the USA at a price of £508. Its tender was in excess of the required specification and offered a 4-ton Model LM2T4 locomotive with chilled iron wheels. Steel wheels could be supplied at an additional cost of £35. Length was 11 ft 1 in, width 2 ft 8 in, and the wheelbase 37 inches.

The headframe and powerhouse at Shaft 41, Pinkenba, at the eastern end of the Dunlop Deviation, looking east. The tramway was on the other side of the power house. *Photo: C.A. Gilmour,* The Queenslander *10 September 1921*

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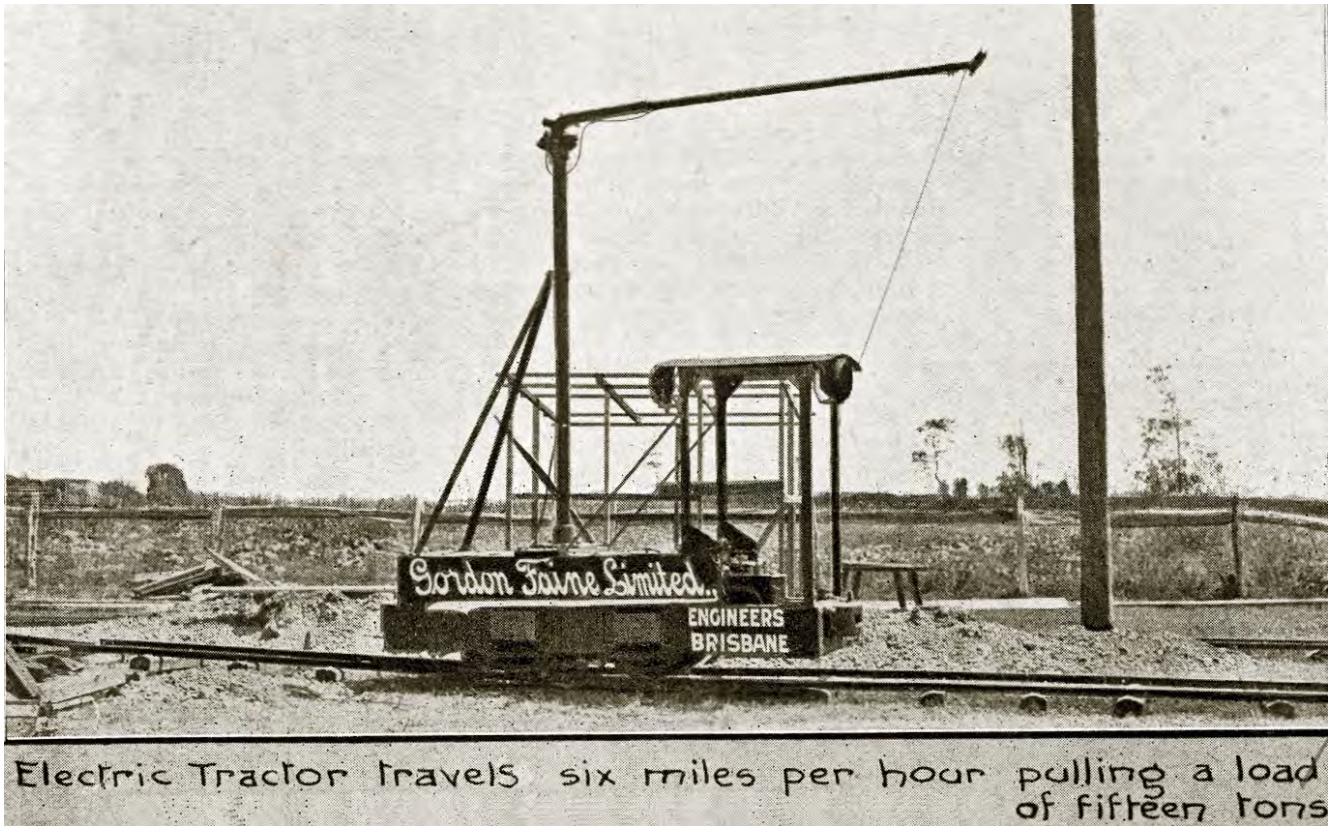

The new locomotive supplied by Gordon Faine Ltd at the site of the first temporary power house. There is a partially-constructed building behind it and the photographic artist has added detail for the benefit of Gordon Faine. A somewhat spartan appearance and the substantial trolley pole structure are prominent features. *Photo:* The Queenslander *27 February 1915*

The wheels would be 24 inches in diameter with the maximum height of the trolley wire 9 ft. The frame would be made from channel sections bolted together.[14]

During the construction phase of the line, it was realised that a small internal combustion-engined locomotive would be useful. On 3 November 1914 the Engineer proposed that a locomotive frame should be acquired at a cost of £20 and that it should be fitted with a Brooke oil engine available for £50 from the Evers Motor Co. The engine was purchased but no record of the construction or use of the locomotive has been found. A Brooke marine engine was noted as stored at the power house in May 1917 but it is unknown if this was the engine purchased for use in the locomotive.[15]

It appears likely that some small internal-combustion units did operate on the tramway. In July 1919 it was reported that repairs to 'the motors' had been carried out even though at this time there was only one electric locomotive on the line, and the following month the Award rate for 'motor drivers' (as distinct from more highly paid engine drivers) was 1s 6½ d per hour. In September 1927, it was reported that 'the pumpers, particularly the hand pumpers' were not in the best of condition, suggesting that the non-hand pumpers were mechanically powered.[16] It would be surprising on a job like this if petrol inspection cars at least had not been constructed for the use of supervising staff in the post-war period.

With the resumption of full-scale work, it was recognised as early as January 1919 that a second electric locomotive would be needed. Invitations to tender were published on 25 March, with tenders due on 15 April. On 15 April, a letter arrived from ESCA requesting more time because it was about to receive a telegram quote from the General Electric Co to allow it to submit a tender. Even though it was acknowledged that the Board was urgently in need of the locomotive, no time extension was granted and only the two tenders that had been received were considered. Evans Deakin had also asked for an extension of time but submitted a tender for £1300. Machinery merchants Filmer & Mason submitted a tender of £635. The Engineer's estimate had been £650. On 25 April, the Engineer recommended that neither tender be accepted. He was reported to have stated that the offer from Filmer & Mason was for a second-hand item and that Evans Deakin's price was excessive. Why it was appropriate to take this course of action must be a matter for speculation but it might be noted that this was during the period of conflict between the Engineer and Dunlop so the lack of a second locomotive would bolster the Engineer's claims of his difficulties in being able to get supplies to Dunlop. The Board did not press the point other than inquiring how the Engineer proposed to get supplies of sand, gravel and cement to Dunlop's section with only one locomotive.[17]

In September 1919 the Engineer reported to the Board that the Electric Construction Company of Australia Ltd was offering a locomotive of the type that had previously been tendered for by Evans Deakin, and that it was needed for work on the high level sewer. Acceptance of this offer was apparently approved, but the price was not recorded in the Board's minutes. On 17 February, a payment to Evans Deakin of £101 11s 6d for 'spares for electric loco' was approved, presumably for the first locomotive. Nothing further about the new locomotive was recorded (apart from its non-arrival) until 16 March 1920, when payments to the Bank of Queensland of £1259 17s 2d for the electric loco and £336 18s for 'a power traction tamper' were approved. On 13 April, a payment to Nobles Ltd of £328 18s 5d for 'duty on electric loco' was approved. By March 1921, one electric locomotive was allocated to the high-level sewer while the other was allocated to the treatment works and ran between there and Pinkenba.[18]

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It is not definitely known who the maker of the second locomotive was, but Jeffrey is suspected, as only one type of locomotive appears to be shown in the few available photographs. One locomotive survived in an abandoned state until the late 1960s. An inspection of the Jeffrey builder's list reveals a very likely contender, 5447 ex works on 6 December 1919. It was a 4-ton machine ordered by agents R W Cameron & Co, New York. R W Cameron & Co were well known importers and commission agents, with offices throughout Australia.[19]

The use of several pumper cars on the line has been described above, with three purchased from the Railway Department in 1919. It is not known how many pumpers were used on the line. Several survived at the Luggage Point treatment works until the 1970s and one has been restored in preservation. This has pressed steel wheels with teardrop spoke holes, identifying it as coming from the Sheffield Car Co of Three Rivers, Michigan, USA. It is not known whether this example came direct from America or was a modified ex-QR pumper car. [20]

Gordon Faine was contracted to supply four 2-ton capacity electric single motor jib cranes on 30 May 1914 at a price of £256 15s each. The summary description was

> 'Electrically driven single motor jib crane suitable for hoisting weight of not less than 2 tons and to be complete with winch, motor, motorman's house, starting rheostat, main switch and fuse, and all necessary fittings and accessories as specified'.

We know from photographic evidence that the cranes were rail mounted but there was no sign of a 'motorman's house'. They were very basic machines with the crane mounted on a turntable platform above a very sparse four-wheeled chassis, and with a large counterweight balancing the long jib. They were apparently quite unsuitable to be hauled in a train and were intended to lift spoil from the excavation shafts.[21] The

Electric locomotive lying abandoned at Luggage Point in 1958.
Photo: Keith McDonald

ESCA tender price for rather more sophisticated jib cranes with hoisting, slewing and travelling motion, capable of being hauled in a train, had been £710 each.[22]

The main item of rolling stock would have been the familiar type of side tipping trucks. An initial tender from the Australian Metal Co Ltd was accepted on 9 April 1914, most probably of German manufacture as the company was German-owned. It was for sixty trucks of ½ cubic yard capacity at £8 18s 6d each and twenty of 1 cubic yard capacity at £9 16s each, making a total contract price of £731 10s. At a later date, six more trucks of ⅔ cubic yard capacity at £10 5s each were added to the order. On 4 August, 32 packages of truck parts had arrived at Pinkenba and the contractor was informed it was his responsibility to assemble them otherwise the Board

Luggage Point pumper car, restored by ANGRMS, outside the site of Pump House No.2 at Pinkenba in 1997. *Photo: Ken McHugh*

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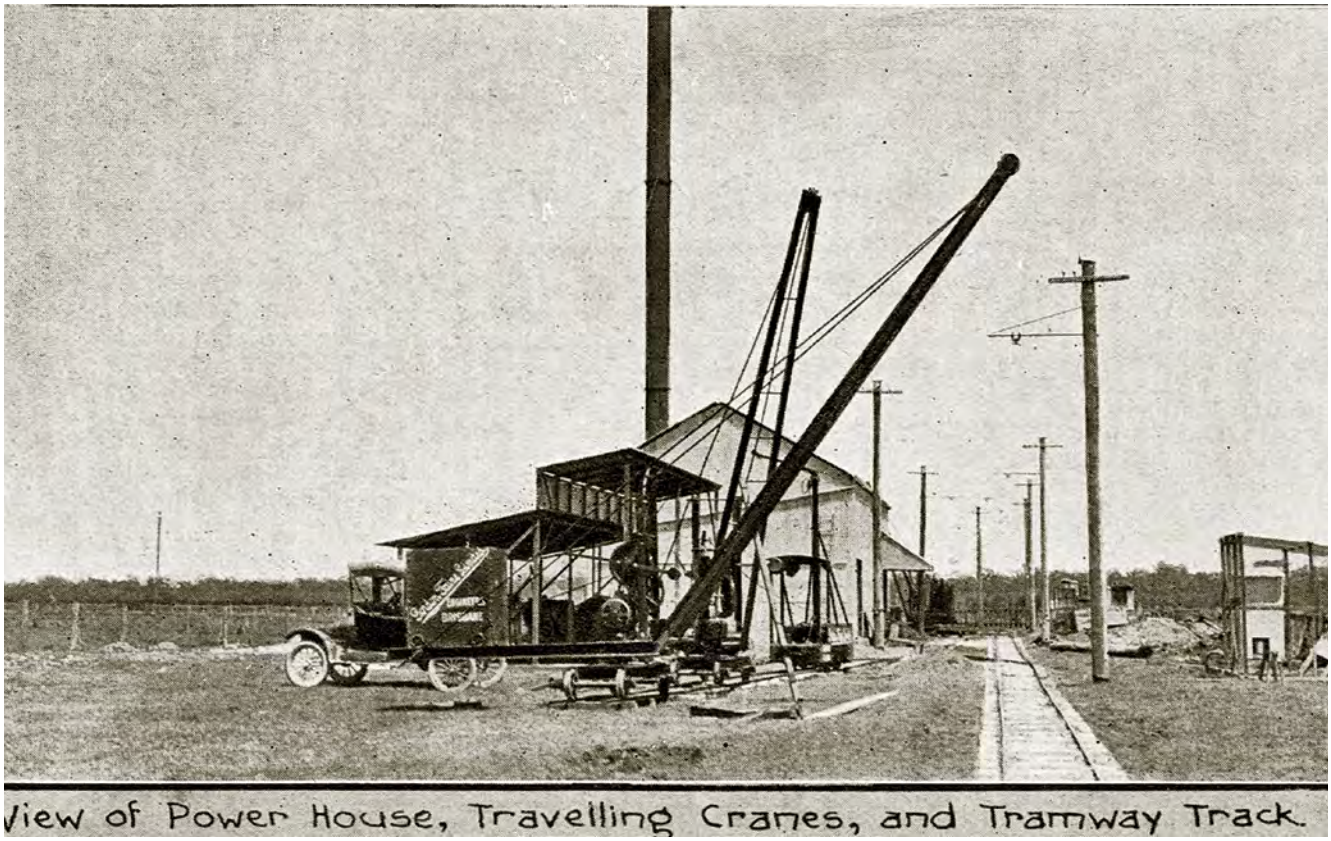
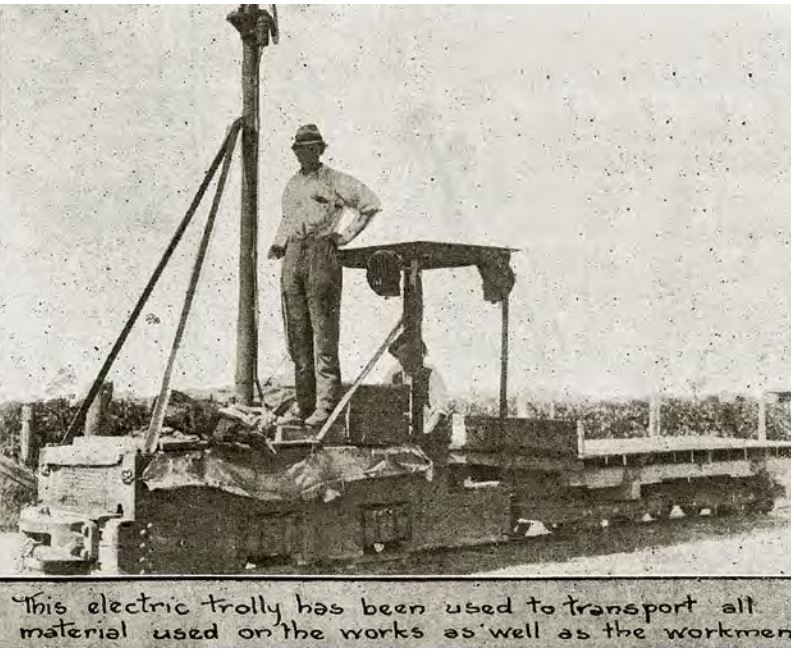


Two of the brand new jib cranes, with their prominent lengthy jibs and large counterweights, await their duties at the first temporary power station site. The design appears very simplistic and the cranes may have been locally built. The inscription on the counterweight is a contribution from the photographic artist.
Photo: The Queenslander *27 February 1915*

would do it at the contractor's expense. The purchase of many tip trucks was recorded over subsequent years, but some were for the Board's water supply projects rather than for sewer construction. Not all trucks supplied for the sewer project were for use on the electric tramway; some were used for transporting muck in the underground excavations. A shortage of trucks for use on the high level sewer construction section was addressed with 100 on order from J E Toole in December 1919. In March 1921, Superintendent Corless reported he had only about 40 on the high level sewer while 80 were reported at the treatment works in May. [23]

Further details of the man transport cars used on the line are unknown other than that they were fairly basic.[24] There must also have been a variety of wagons used. A photograph exists of a bogie flat wagon with a timber deck that appears to have been constructed using a pair of tip truck frames as bogies. In 1958 some timber bodies from four-wheel trucks as well as some metal tip trucks were scattered within the treatment works and some metal tip trucks remained in use there until the 1960s.



Left: *This image shows a bogie flat wagon behind the locomotive, with its bogies apparently made from a pair of tip truck chassis.*
Photo: The Queenslander *28 April 1923*
Above: *Steel tip trucks abandoned at Luggage Point in 1958.*
Photo: Keith McDonald

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Wooden tip truck bodies abandoned at Luggage Point in 1958. Photo: Keith McDonald

Incidents and accidents

A number of accidents and incidents on the line have been recorded. The construction work was hazardous but major accidents seem to have been rare. Incidents and accidents that involved the tramway were recorded as follows:

- 13 March 1919. Harold Lilliwell of Ascot, fell from a trolley at Pinkenba and struck the back of his head against a piece of piping, sustaining a lacerated wound. First aid was rendered by the Ambulance Brigade and he was advised to seek medical attention.[25]
- 6 September 1919. Accident to W. Meckleburg while being conveyed to work at Myrtletown caused by a derailment of two trucks opposite the high level sewer office.[26]
- 10 September 1919. Accident to Roy Johnson while being conveyed per locomotive from work at Myrtletown to Pinkenba when he injured his finger between the carriages.[27]
- 28 October 1920. At about 8 o'clock, while riding on a trolley at Luggage Point, Pinkenba, Albert Dent, of Eagle Farm, was struck by a projecting earthenware pipe, lacerating his left foot, and injuring both ankles. He was attended by the ambulance and transported to the General Hospital. It is probable that one or both ankles were broken.[28]
- 24 August 1921. Accident to R. Robin, employed as builder's labourer on the tramline beyond High Level Sewer Section 3.[29]
- 30 September 1921. Police at Pinkenba asked to keep a look out and take necessary action because pumpers and trucks have been constantly interfered with and thrown off the line on the high level sewer section.[30]
- 1 April 1924. Some embarrassment was caused when, during a trip on the tramway put on for delegates attending the annual conference of the Australian Institute of Engineers in Brisbane, the train was derailed at a speed of 3 miles per hour.[31]
- 25 June 1924. Thomas Burr of Pinkenba sustained a compound fracture of the first finger of the right hand when it was crushed between a log and a tramline at Luggage Point.[32]
- July 1927. Two accidents were reported caused by pumpers overturning while men were on their way to work. The reason stated was faulty rails. On an inspection by the Board on 2 September, it was noted that the pumpers, particularly the hand pumpers, were not in the best of condition, the wheels having 'too much play'.[33]

Closure and removal

Following the completion of construction in 1926, the tramway remained in use for man transport, and in July 1927 a locomotive driver and a guard were still employed at the Luggage Point pump station, with additional duties allocated to keep them fully occupied. Some surplus tramway material was being disposed of. For example, in February 1928 half a ton of obsolete rails lying along the track between Shaft 33A and Luggage Point was offered for sale at price of not less than £3 per ton, while L H Spiro's offer to buy six wheelsets at Pinkenba at £1 each was recommended for acceptance. By this time, Myrtletown had developed as a small farming community noted for its fruit, including grapes and bananas, and vegetables (with cauliflowers a speciality) as well as dairies. A state school opened in 1928, and there was also a church and postal service by then. During 1927, thought had been given to relaying the tramway as the lack of all-weather road access was still a problem. The Myrtletown farmers still had difficulty in getting their produce to market, and idle thoughts speculated whether the tramway might be able to be used for this purpose.[34]

In April 1928, the sewerage undertaking passed to the Brisbane City Council. The Council wasted little time in commissioning the Town Clerk, Colonel Frederick William Gadsby Annand DSO, to investigate the state of the Board's operations. He tabled a scathing report in November 1928 that was reported to include findings of gross extravagance, the flouting of awards, interference by Board members, the duplication of work, obsolete methods, and divided authority. Annand made recommendations to save £37,728 annually. The defenders of the Board characterised his findings as a thinly-veiled politically-motivated attack.[35]

Annand pointed out that one of the labourers had an engine driver's certificate and drove the electric locomotive that took men back and forward between the Pinkenba Shaft and Luggage Point. He stated that in view of the anticipated early completion of the improved road between Pinkenba Station and Luggage Point, there was no necessity for the retention of the electric tramway system to transport men and supplies, nor for maintaining the power generator employed to provide the direct current for the service. He suggested that a utility truck be provided for the electrician in charge and that another utility truck be used in transporting men and material between Luggage Point and Pinkenba. It had already been resolved by Brisbane City Council in August 1928 that 153 chains of roadway would be metalled to provide a permanent road replacing the tramway.[36] South of Myrtletown almost a mile of this permanent route did not follow the electric tramway but ran along Priors Road and Bancroft Road.

With the roadworks completed, in September 1929 it was decided that the tramway should gradually be dismantled, and the rails, copper wire and other material sold, with the exception of the poles. The poles were to be retained in order to accommodate the telephone wires. However, even this proposal had a short life because in December 1929 the following advertisement appeared in the press:

'BRISBANE CITY COUNCIL. WATER SUPPLY AND SEWERAGE DEPARTMENT.
TO CONTRACTORS. BUILDERS, AND OTHERS.
On account of the dismantling of its Tramway from Pinkenba to Luggage Point, approximately four (4) miles in length, this Department has for sale the POLES used in connection therewith, for which prices are invited. (These Poles, when cut to lengths, would make suitable House Stumps.)

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Price to be at per each as they stand, and not selected; but if selected, a separate price for each. Delivery to be taken where they stand, and Terms are Deposit or cash.

For particulars, apply to THE STOREKEEPER, Water and Sewerage Department, Waterloo-street, Newstead.

W. E. BUSH, Chief Engineer. Brisbane, 9th December, 1929'.[37]

Epilogue: the Treatment Works tramway after 1929

This was not the end of the Luggage Point tramway. The section of tramway alongside the outfall sewer was still needed to provide access to this part of the sewerage system. It seems that at least one of the electric locomotives was retained. In addition, light tramways laid around the treatment works were used for materials handling, and it is known that an assortment of small locally-built petrol-engined locomotives was in use at the works, and for maintenance of the outfall sewer, after electric traction ceased. When the outfall sewer was reconstructed in the 1950s, the tramway alongside it was also rebuilt. But all that must be a story for another day.

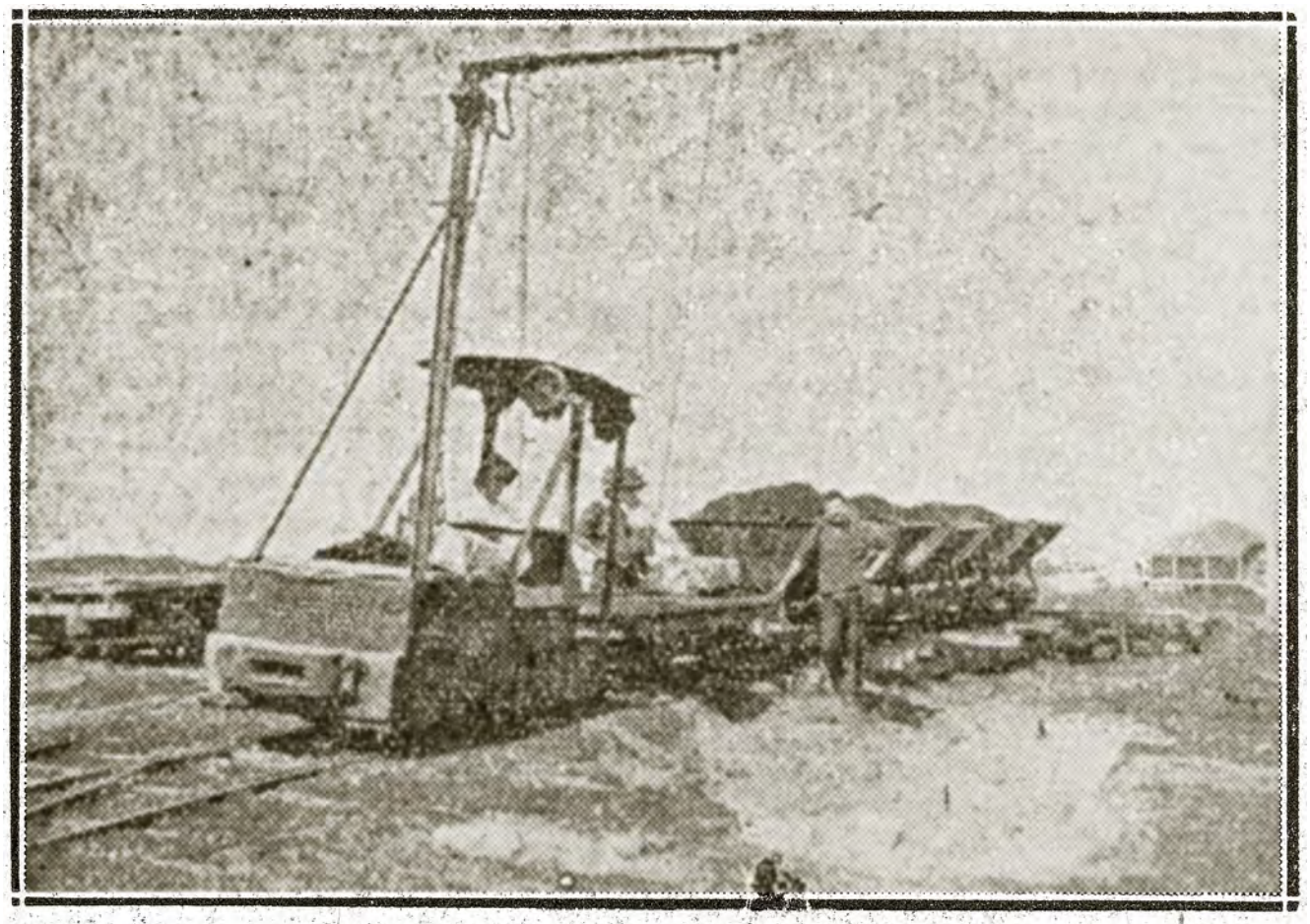
Remains today

A modern sewage treatment plant has replaced the old installation at Luggage Point but the original permanent power house survives, repurposed as an Innovation Centre.

Given that the tramway was a roadside construction line, it would not be surprising if no remnants could be found today. Modern day aerial photographs still show traces of the route adjacent to the Queensland Government Air Wing within Brisbane Airport, and across private land at the Pinkenba end of the Dunlop Deviation. Amazingly, a section of track set in concrete is still in place and visible at the side of the road reserve adjacent to the site of Pump Station No.2 at Pinkenba. This appears to be 14 lb rail and is exactly where the electric tramway ran. Who knows what other remains lie hidden along the route?

Acknowledgments

Special thanks are due to Rod Milne, whose initial research on this tramway stimulated this article and who generously allowed the author to take over his project. Queensland Urban Utilities' resident historian, Colin Hester, provided great encouragement. Thanks are also due to the most helpful staff at the State Library of Queensland, the Queensland State Archives and the Brisbane City Archives, to Ian McNeil for his superb maps, to the late George Bond, who in 1977 first made me aware of the railway, and to Ken McHugh, Greg Wagner, Ross Mainwaring, Pete Jedlicka (American Industrial Mining Co. Museum), and Keith McDonald for providing additional information.



The municipal electric tramway which serves the sewage treatment station. It runs between Pinkenba, Myrtletown, and Luggage Point.

The tramway was still in use in late 1928 but its days were numbered. *Photo:* Brisbane Courier *20 October 1928*

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A section of track set into concrete outside the former site of Pump Station No.2 at Pinkenba, 20 February 2020. Photo: Author

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Tulloch Limited Memorial

by David Jehan

Tulloch Limited and its predecessors (R Tulloch & Co. Ltd. & Tulloch Phoenix Iron Works Ltd.) were engineers and manufacturers who originally commenced operations in the inner-Sydney suburb of Pyrmont in 1883. It later moved to a much larger plant it built at Rhodes in 1915 to gain rail access. It became a major rolling stock supplier to the NSWGR and other mainline railways.

The company also manufactured many items of light and industrial rolling stock for various clients including diesel-hydraulic railcars, diesel-hydraulic locomotives, hopper wagons, dump cars, tank wagons and many specialist rail vehicles for the AI&S steelworks at Port Kembla.

In 1945 the Tulloch family erected a memorial to the company founder Robert Tulloch in the park across the road from the works at Rhodes, now known as Churchill Tucker Reserve. This memorial took the form of a streetlamp with a plaque honouring ROBERT TULLOCH cast in its base.

The works closed in 1974 and unfortunately over the years the memorial had been heavily vandalised and in recent times was considered by some members of the City of Canada Bay Council to be an irrelevant eye-sore. Moves were then made to remove the structure in 2016, but fortunately the local Heritage Librarian contacted the Tulloch family to alert them to the situation.

An agreement was later reached between the Council and the family where upon the memorial was restored as a partnership between the two groups. It now once again proudly stands as a memorial to Australian manufacturing.

For further information on the company refer to *TULLOCH – A History of TULLOCH Engineers & Manufacturers, Pyrmont & Rhodes 1883–1974* by David Jehan, available from Eveleigh Press.

Light and Industrial rolling stock manufactured by Tulloch, clockwise from bottom left: Coal Cliff Colliery diesel-hydraulic locomotive and personnel carriers • Mount Lyell Mining & Railway Company diesel-hydraulic locomotive • South Maitland Railways diesel-hydraulic railcars • Stenhouse Bay gypsum wagons • State Electricity Commission of Victoria coal hopper wagons • NSW colliery flat car • Restored Tulloch Memorial in Churchill Tucker Reserve, Rhodes, NSW. All photos: David Jehan

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Victorian jetty tramways

Over the last 230 years there have been many thousands of jetties and piers built around the Australian coast, its offshore islands and along its rivers and lakes. Hundreds of those jetties were blessed with a tramway or railway, from a few yards in length to many miles. Jetty tramways are often considered mundane, even boring by some but their importance was vital. Many small ports, having received a jetty, then had to battle bureaucracy in far-distant capitals to get a tramway. Without it the jetty was usually rendered useless. Some never received a tramway, trade went elsewhere and the jetty succumbed to the ravages of time – the public jetty at Mulgundawar, on Lake Alexandrina in South Australia being an example. Jetty uses were countless – military and naval depots, quarantine stations, asylums, lighthouses, salt works, quarries, sugar refineries, stone ballast for ships, explosives reserves, limestone, gypsum, bananas, sea grasses, collieries, fisheries, sawmilling, guest houses, brickworks, cement works, blue metal, whaling and even a turtle soup factory! Not forgetting the many hundreds of public jetties, to service towns and villages around our coast to send and receive merchandise and agricultural products of infinite variety. Before railways and roads reached many coastal and river towns the arrival of the coastal schooner or steamer was a welcome affair, with details published in the local papers. Vessels often brought news of the world – captains would be sought for interview. Women sought news of changing fashions – what style of boots was the rage in town; ships brought dress-making supplies, beer for the local hotel, chaff for the horses and a new boiler for the local mill. This issue, Looking Back looks at a tiny selection of Victorian public jetties, one from the west and two from Port Phillip. All played a vital part in their respective areas.

Notes and captions: Phil Rickard

PORTARLINGTON, Bellarine Peninsula, Port Phillip

An overcast day in 1916 and most day-trippers are seeking shelter from a blustery north-westerly, either in the lee of the goods shed or the waiting shed at the pier head. Not a day for making sand castles. It's going to be an uncomfortable trip back to Melbourne on the bay steamer (when it arrives) with a fair amount of 'chop' on the water. No doubt some picnic lunches will be lost! Shown in this wonderful photo by "G.G.M." is the jetty tramway layout at its peak. The earliest drawings found (1880's) show a double track but this was later altered to a single track, possibly in the 1920s. The jetty tramway probably dates to 1861 in which year a contract was awarded to one Henry Gardner for £114 for "Tramway, Portarlington Jetty". Traffic must have been heavy as in 1876 the PWD called for tenders for two more tramway trucks – the winning tender being W J Parlett at £49. Additional trucks were added as traffic required; the photo here depicts at least ten 4-wheel flat trucks. The sets of points at the jetty crossover are very basic being of the 'kick-over' stub variety – no point levers required! Beyond the points, there is timber laid between the rails to avoid damage to the jetty planking from the tram horses. The large goods shed appears in early drawings and indicates the flourishing coastal and bay shipping trade that existed in the second-half of the 19th century around the Bellarine Peninsula. Jetty tramway gauge unknown but 3 ft 6 ins seem most likely. Photo: G.G.M., State Library of Victoria H2002.198/63

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APOLLO BAY, Otway Coast, Bass Strait

A busy scene on a sunny day on Victoria's west coast, circa 1930. The SS Casino *is in port and at the jetty head it is all organised chaos. General merchandise for the town's stores is being unloaded then the hundreds of bags of potatoes need lifting aboard. The jetty trucks stand ready, tarpaulins, loading nets and ropes lie scattered about; the wharfinger and ship's mate discuss the prospects of Phar Lap in the 3:30 at Flemington – can 'Big Red' win from number thirteen? Meantime the wharf labourers take a breather from their efforts with the jetty crane. Carefully threading their way through are a couple of well-heeled tourists. The* Casino *was built by Gourlay Bros. & Co, Dundee, Scotland in 1882 for the Newcastle & Hunter Steam Navigation Co. but was sold to the Belfast & Koroit Steam Navigation Co. before entering service. She was 160 ft long, 24 ft breadth and drew 10 ft. and never saw the town after which it was named, serving for fifty years the ports in the Western District. She was lost at Apollo Bay in July 1932. Photo: Valentine Series No. 735; SLV image H32492/1091*

DROMANA, Mornington Peninsula, Port Phillip

Possibly 1940 – Europe and the war are faraway. Meanwhile, quiet in the midday sun we see Dromana, redolent of a small bayside town and idyllic holidays. A group head down the jetty, maybe to a boat, the tall gent clutching his Gladstone bag. On the beach a group sun themselves around a dinghy whilst on the grassy verge a family have started lunch – maybe a meat pie with some White Crow tomato sauce? The Esplanade (Point Nepean Road) isn't exactly choked with traffic. Once the pie is gone, Dad might give the kids 3d each and send them over to the Dromana Café for a Peters' Kreem-B-Tween. Into the distance, a dusty Pier Street, yet to be swamped by the post-war tide of urbanisation, meanders towards the eastern slopes of Arthur's Seat. The jetty, built in 1862, once had a considerable trade in firewood, other local produce and excursion traffic. Now, the siding and goods shed at the jetty base have gone and the light rails are rusty and rarely used. The end is nigh. Photo: Rose Stereograph Co. P3703; State Library of Victoria (SLV) image H32492/5128

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

QUEENSLAND

MSF SUGAR LTD, South Johnstone Mill
(see LR 279 p.32)
610 mm gauge
Com-Eng 0-6-0DM 28 (AA1544 of 1960) was parked in the vicinity of the full yard on 1 May. It is missing rods and cranks plus the final drive had been removed by cutting big hunks out of the frame under the rear end. Clyde 0-6-0DH 12 (55-60 of 1955) was seen stabled with the ballast train on Wright's line in the Silkwood area on 22 May. The usual ballast loco, Com-Eng 0-6-0DM 27 (AI57111 of 1975), was isolated at Goondi due to washouts. The Tamper SVT-JWL tamping machine (573 of 1979) was stabled in the Walter Lever Estate area near Silkwood on 22 May. The Plasser KMX-12T tamping machine (249 of 1982) was scrapped in 2011 or later.
Luke Horniblow 5/21; Editor 5/21; Arthur King 6/21

WILMAR SUGAR (HERBERT) PTY LTD, Herbert River Mills
(see LR 279 p.32)
610 mm gauge
Victoria Mill's Clyde 0-6-0DH *Perth* (69-682 of 1969) was working with the ballast train in Upper Stone on 22 May. In the consist was a ballast plough on loan from Proserpine Mill. It appears to be home built with the plough mounted midships. Victoria Mill's Clyde 0-6-0DH *Ingham* (64-382 of 1964) was transferred to Invicta Mill on 3 June. During the slack season, a direct connection was laid in the Victoria Mill yard between lines Half Acre 1 and 2 to the main line which goes to the 4 Mile and Macknade. This will facilitate the working of Macknade Mill trains in and out of the Victoria yard, avoiding congestion in the rest of the yard. It has also necessitated the turning of the exit from the Gairloch line to face Macknade. From this crushing season, Macknade will no longer work Victoria Mill's Fairford and Hamleigh areas. Instead, Macknade will draw cane from Victoria Mill's Gairloch, Danger Camp, Nyanza and 4 Mile areas. 25 new sugar bin frames and bogies were assembled at the Macknade Mill truck shop during the slack season from components manufactured at Wilmar's Ingham workshop. Twenty-three of these had old sugar boxes fitted to them and the remaining two frames will be fitted with new boxes being manufactured at the Ingham workshop.
Editor 5/21; Luke Horniblow 5/21; Shane Yore 6/21

WILMAR SUGAR (INVICTA) PTY LTD, Invicta Mill, Giru
(see LR 279 p.32)
610 mm gauge
Newly rebuilt Walkers B-B DH locos *Rita Island* (601 of 1969) and *Kilrie* (604 of 1969) were delivered from rebuild at Pioneer Mill by 16 May. *Rita Island* was ready for delivery on 16 April and the *Kilrie* was still at Pioneer during the week ending 15 May. *Rita Island* had previously been the *Jarvisfield* at Invicta and the *Kilrie* was from the stored ex government railway locos at Pioneer. On 1 or 2 June, the former Walkers B-B DH *Kilrie* (632 of 1969) and *Rita Island* (625 of 1969) locos left for Pioneer Mill where they will eventually be rebuilt with new identities. Invicta Mill bogie brake wagon *Rita Island* (built in 1994 or 1995), originally named *Burdekin*, had an above deck rebuild and repaint at Pioneer Mill during the slack season. Significantly, the concrete block ballast weights have been replaced by steel deck plating. As well, it is now painted white with silver bogies, red headstock stripes, green deck, black air reservoirs and yellow upper parts. *Rita Island* and its brake wagon *Rita Island* were in use by 7 June when they were delivering empties ready for the start of the crushing season. *Kilrie* was in use by 12 June but running without a brake wagon.

South Johnstone Mill's Clyde 0-6-0DH 12 (55-60 of 1955) with the ballast train on Wrights line near Silkwood on 22 May. Photo: Luke Horniblow

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Above: *Victoria Mill's Clyde 0-6-0DH* Perth *(69-682 of 1969) with a ballast train at Upper Stone on 22 May. In the consist is the ballast plough on loan from Proserpine Mill. Photo: Luke Horniblow*
Below: *Invicta Mill's newly rebuilt Walkers B-B DH* Rita Island *(601 of 1969) makes a preseason delivery of empties at Allen Road 1 on 7 June. Photo: Luke Horniblow*

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Com-Eng 0-6-0DH *Barratta* (AH4098 of 1965) was seen stabled with the ballast train in Upper Haughton 2 on 24 May. The Plasser KMX-12T tamping machine (255 of 1982) was stabled in Upper Haughton 1 on the same day. The *Barratta* is to be transferred to Kalamia Mill. Clyde 0-6-0DH *Ingham* (64-382 of 1964) arrived here on transfer from Victoria Mill on 3 June.
Luke Horniblow 5/21, 6/21; Simon Wilson 5/21; Gary Vaughan 5/21; Kieran Koppen 4/21, 5/21; Shane Yore 6/21; *Townsville Bulletin* 18/5/2021

WILMAR SUGAR PTY LTD, Pioneer Mill, Brandon
(see LR 279 p.32)
1067 mm gauge
Walkers B-B DH locos *Rita Island* (601 of 1969) and *Kilrie* (604 of 1969) as well as Invicta Mill bogie brake wagon *Rita Island* (built in 1994 or 1995) have been rebuilt here for Invicta Mill with the locos delivered by mid-May and the brake wagon by June. Locomotive maintenance for Kalamia and Inkerman Mills in now done at Pioneer Mill and Inkerman's EM Baldwin B-B DH *Iyah* (6558.1 6.76 of 1976) was here receiving attention in mid May. Three Walkers B-B DH locos are to be rebuilt here during the 2021 crushing season. A new cab suited to a Walkers loco was at Blakoe's Sandblasting and Protective Coatings Pty Ltd of Brandon, freshly painted, late in May. Walkers B-B DH *Jerona* (611 of 1969), Pioneer Mill bogie brake wagon 2 (built in 1993) and a rake of cane bins were being used for RSU remote control training in May. On 24 May, the train was stabled near Pelican Road and brake wagon 2 was seen to have had its loco's name *Jerona* stenciled on the side.
Luke Horniblow 5/21; Blakoe's Sandblasting and Protective Coatings Pty Ltd 5/21; Simon Wilson 5/21; John Marano 5/21; Carlo Tomarchio 5/21; Kieran Koppen 4/21, 5/21; *Townsville Bulletin* 18/5/2021

WILMAR SUGAR PTY LTD, Inkerman Mill, Home Hill
(see LR 279 p.33)
610 mm gauge
EM Baldwin B-B DH *Iyah* (6558.1 6.76 of 1976) was at Pioneer Mill for maintenance in mid May.
EM Baldwin 0-6-0DH *Carstairs* (6/2715.1 9.68 of 1968) returned from overhaul at Proserpine Mill on 27 May.
Tom Badger 5/21; Simon Wilson 5/21

WILMAR SUGAR (PROSERPINE) PTY LTD, Proserpine Mill
(see LR 279 p.33)
610 mm gauge
On 28 April, Clyde 0-6-0DH 7 (65-442 of 1965) was with the ballast train in the area north of Proserpine where the mill line parallels the QR line. The ballast plough in this train was seen on loan to the Herbert River Mills on 22 May. The Plasser PBR-201 ballast regulator (243 of 1984) has been rebuilt and repainted by Harsco in Brisbane and was delivered by late April. On 24 May, it was seen at Stanilands Loop in the Glen Isla area where it was in attendance

Top: *Invicta Mill's newly rebuilt Invicta Mill bogie brake wagon* Rita Island *(built in 1994 or 1995) poses at Allen Road 1 on 7 June. Photo: Luke Horniblow* ***Centre:*** *nvicta Mill's Com-Eng 0-6-0DH* Barratta *(AH4098 of 1965) and ballast train stabled at Upper Haughton 2 on 24 May. Photo: Luke Horniblow* ***Above:*** *Mackay Sugar's Eimco B-B DH 18* Gargett *(L255 of 1990) propels its Farview Engineering bogie brake wagon B VAN 6 (built in 2011) across Eungella Road as it nears Pleystowe on 28 April. Photo: Steven Jesser*

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Farleigh Mill's Walkers B-B DH locotrol locos, master Calen *(692 of 1972) and slave* Miclere *(664 of 1970) on a load of fulls at Carlisle Loop with Mackay Sugar bogie brake wagon B VAN 3 (built in 1997) at the rear on 25 June. Photo: Steven Jesser*

at track works. Clyde 0-6-0DH 5 (65-433 of 1965) was overhauled during the slack season this year including a partial repaint. The hood front, top and upper third of the sides have been painted dark green as well as a broad band of the same colour mid way round the cab. The rest of the cab and body remain yellow in colour. EM Baldwin 0-6-0DH *Carstairs* (6/2715.1 9.68 of 1968) returned to Inkerman Mill after overhaul here on 27 May.
James Bedford 4/21; Greg Hall 4/21; Tom Badger 5/21; Luke Horniblow 5/21; Peter Crossley 5/21; John Flynn 6/21

MACKAY SUGAR LTD, Mackay mills
(see LR 279 p.33)
610 mm gauge
After about five years, Clyde 0-6-0DH *Te Kowai* (56-103 of 1956) has been taken out of the North Eton storage site. It has been fitted with a new jack shaft and will be spare loco at Racecourse Mill this crushing season. Clyde 0-6-0DH *Conningsby* (61-232 of 1961) was seen with the bridge gang near Kuttabul on 11 April. Eimco B-B DH 18 *Gargett* (L255 of 1990) and Farview Engineering bogie brake wagon B VAN 6 *Gargett* (built in 2011) were seen returning to Pleystowe from the Marian Mill network on 28 April. They have been moving bins around for the Pleystowe bin repair facility. On 25 May, EM Baldwin B-B DH *Shannon* (7126.1 5.77 of 1977) was working with the ballast train between Constant Creek and Howells Loop on a newly relaid section of the main line. Plasser KMX-12T tamping machine Tamper 5 (376 of 1990) was doing the final pass of this relay from Quarry to Howells Loop on 26 May. On 7 June, Tamper 5 was engaged on the final tamping pass of the deviation between Palmyra 4 and Palmyra 7. This deviation was caused by the construction of the Walkerston bypass road. Farleigh Mill's Walkers B-B DH *Dulverton* (690 of 1972 rebuilt Walkers 1997) was seen at Agius Loop on 2 June with the first rake of cane for the Mackay Sugar 2021 crushing season. Marian Mill's Mt.Jukes line has been closed beyond Jukes 5 through the Coffee Creek gorge due to reduced cane supply and near misses with trespassing members of the public plus interference with rail operations by the same. The remaining cane will go to Ossa 5 on the Farleigh network. At Church Hill, a check rail has been installed down towards the level crossing to allow Baldwin bogie locos to take 100 empties down the hill and Walkers bogie locos with a brake wagon, 110 empties. This is up from 80 bins and 100 bins respectively. Mackay Sugar originally had 195 x 15 tonne bins. At least three of these have been converted to track maintenance vehicles.
Tom Badger 4/21; Daniel Dutton 4/21; Steven Jesser 5/21, 6/21; Kevin Bryant 5/21, 6/21

BUNDABERG SUGAR LTD, Millaquin Mill
(see LR 279 p.33)
610 mm gauge
The roll on, roll off siding complex near Fairymead for ex Bingera Mill cane going to Millaquin Mill had been completed by 13 May. It consists of four parallel lines ending in loading ramps.
Gary Kemp 5/21

ISIS CENTRAL SUGAR MILL CO LTD
(see LR 279 p.35)
610 mm gauge
Clyde 0-6-0DH 9 (75-812 of 1975) was seen stored in the mill siding at the mill on 16 and 18 April and 8 May. By 13 May, it was at Promiseland Road and weighted up to 29 tonnes for testing bridges on the new line to Duingal which is being referred to locally as the Wallaville line. EM Baldwin B-B DH 10 (7267.1 6.77 of 1977) was running ballast at Promiseland Road on 7 and 11 May. The Plasser KMX-12T tamping machine (414 of 1995) was tamping the Wallaville line in mid May. The Wallaville line is expected to be open for use by the crushing season but not completed.
Construction of the transloader at Childers for the Maryborough cane had commenced by 11 April and was almost finished on 12 June. Trackage consists of a long loop parallel to the main line with a crossover between them near the far end of the transloader. 10 was running ballast there on 30 April.

Following is a report by John Browning from his visit to the area on 23 April:
At Duingal, the northern end of the new Wallaville line, track is laid as far as a large road dump. The dump is about 400 metres north of where the new line joins McLennan Drive and is on the eastern side of the main line with the loading/unloading docks at the south end. There are six tracks in the road dump, each about 400 metres in length. Five lines are on the eastern side with a gap for a roadway separating them from the sixth, most westerly line.

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Top: *Mackay Sugar's EM Baldwin B-B DH* Shannon *(7126.1 5.77 of 1977) with the ballast train at work on a newly relaid section of line between Constant Creek and Howells Loop on 25 May. Photo: Steven Jesser* ***Above:*** *Isis Mill's Clyde 0-6-0DH 9 (75-812 of 1975) and EM Baldwin B-B DH 10 (7267.1 6.77 of 1977) pose at the junction for the new Wallaville line in mid May. Photo: Mitch Zunker*

The current head of steel on the main line is just to the north of the road dump. The main line will need to be further extended and a loop line added to allow shunting operations at the road dump. Beyond this point, formation work along the east side of McLennan Drive is continuing. After about 2.3 kilometres, the formation turns away from McLennan Drive to intersect Duingal Road, where a crossing has been laid in concrete. It is understood that the line will extend about 2 kilometres north-east from this point.

The ballast tamper was working on the curve south of the road dump where the line joins McLennan Drive. Two days earlier EM Baldwin 10 had been noted working here with two ballast wagons but had since been moved to near the new transloader site to the south of Childers.

The ballast train must have been moved using road transport. Observations indicated that the new line has not seen through traffic, with work at the site of the Duingal Creek bridge adjacent to Loeskows Road, Booyal, nearing completion. Most, but not all, sections of the new line readily observable by road have been ballasted but there is still a fair bit of lining and tamping work to be done before it can be used for traffic. All the road crossings on the new line have been installed – only the Promisedland Road crossing is protected by flashing lights; the other crossings, of Marule Road (twice) and Loeskows Road, only have "Give Way" signs.

The points at the junction of the new line with the New Valley line have been cut in but there is no mechanism installed to change them. The 100 metres of track on the new line from just past the junction to the Promisedland Road crossing is unballasted.

South of Childers, the transloader where cane from the Maryborough area will be transferred from road transport into rail bins is being constructed off Goodwood Road. About 800 metres of line has been replaced between Brown's Road and the area behind the Childers caravan park on the Bruce Highway. There was previously a cane loading siding at the Browns Road end but that has been removed and double track is being installed through the whole section. One line of the duplicated track will be the main line while the other will serve the transloader. B-double road trucks will run onto an elevated platform and the cane will be side tipped into rail bins on a parallel track at a lower level. None of the track laid here has been ballasted as yet but the presence of the ballast train parked behind the caravan park indicates that this will be taken in hand shortly. Full details of the location and design of the transloader can be found in the planning applications section of the Bundaberg Regional Council web site.

Although cane on the new line to Duingal and from the transloader will generate significant rail traffic, indications are that with a reduced district cane crop in 2021 due to unfavourable growing conditions, there will be no need to increase the fleet of locomotives on cane haulage in the coming season, although scheduling will be much changed.

John Browning with thanks to John Hoyle for additional information.

https://da.bundaberg.qld.gov.au/Application/ApplicationDetails/522.2020.00000228.001

Brian Bouchardt 4/21, 5/21, 6/21; Ben Glossop 5/21; John Browning 4/21; Mitch Zunker 4/21, 5/21, 6/21; Isis Mill Shareholder Update May 2021

DOWNER EDI, Maryborough

(see LR278 p.31)

1067 mm gauge

Walkers B-B DH 1104 (641 of 1970) was registered and ready for use by 16 April. It had been seen on test around Maryborough on 9 April and also outside the factory on 23 April.

John Browning 4/21; Paul Bailey 4/21; Glen Reynolds 4/21

NEW SOUTH WALES

BLUESCOPE STEEL LTD, Port Kembla Steelworks

(see LR 279 p.36)

1435 mm gauge

Pacific National's General Electric Australia Bo-Bo DE D40 (A-241 of 1972) was shunting at Cringila on 13 April.

Chris Stratton 4/21

OVERSEAS

FIJI SUGAR CORPORATION

(see LR 279 p.36)

610 mm gauge

30% of cane in Fiji is now machine cut with the remainder still cut by hand. Lautoka Mill was scheduled to start crushing on 4 June, Rarawai Mill on 23 June and Labasa Mill on 7 July. As of 13 April, no work had been done to repair the cyclone damaged Labasa Mill line to Wainikoro and Daku although repairs can be completed in three to four months. It is being said that these areas are not suited to road haulage and nor can the farmers afford it.

The Fiji Times 13/4/2021, 4/5/2021, 20/5/2021

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Pacific National's General Electric Australia Bo-Bo DE D40 (A-241 of 1972) shunting at Cringila on Bluescope Steel's Port Kembla network on 13 April. Photo: Chris Stratton

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But the book goes further than just liveries. The author explains the influence of classical architecture on the development of the style of American steam locomotives in the nineteenth century. The influence of British locomotive architecture on the gradual simplification of that style is also explored.

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LETTERS

More on Davenport locomotives in NSW (LR 278)

I thank Bruce Rankin for his observations on Davenport locomotives in Australia, and his interest in Locomotive Shop No 1618.

I am happy to advise information on that particular locomotive is near at hand. While doing my research on Davenports, I used John Buckland's excellent article on the Mortlake Gasworks to find out more about 1618. The article is available on the *Light Railways* website - see Issue 97 (July 1987), entitled "The Mortlake Gasworks Railway of the Australian Gas Light Company." The article has a photo of the loco in the process of being scrapped on site, and notes the boiler went into the possession of a resident of Sutherland, NSW.

Issue 63 of *Light Railways* has a substantial article by Ken McCarthy on the Kiama Tramway and its locos, and has a photograph of a Davenport boiler at the Southern Highland Steam Museum - this was believed to be the boiler from 1595, but an update by Ken in *Light Railways* Issue 64 confirmed that the boiler in question was from 1613. At this point, the trail goes cold - of the present whereabouts of the boiler, sadly I have no clues.

I hope this information does satisfy some of Bruce's curiosity!

Greg Oehm
via email

Editor's Note: Most back issues of *Light Railways* are available for free, On-line at lrrsa.org.au

Caldwell-Vale and Purcell Engineering locomotives (LR 278) The Australian Portland Cement Company's Purcell Locomotive.

The very interesting article in *Light Railways* No. 278 on Caldwell-Vale and Purcell Industrial Locomotives makes mention of the three foot six inch gauge Purcell Locomotive purchased by the Australian Portland Cement Company at Fyansford, in Victoria.

Interestingly, this locomotive survived on the Company's railway until the early 1960's although apparently out of use for many years. It was ordered by the Company in mid-1923 to work on the floor of the old quarry where much of the existing two feet gauge railway was being converted to 3 ft 6 in gauge, apparently to allow a greater amount of limestone to be moved. The Company had the option of purchasing more Purcell locomotives at a reduced price if the first one proved satisfactory.

Company records show that it was 13 ft 10 in long and had a two-cylinder petrol engine of 6½ in bore x 8 in stroke. It had a two-speed gearbox which allowed 5 mph in low gear and 15 mph in high. It ran for five miles on a gallon of fuel, weighed three and a half tons and pulled thirty tons on the flat or slight grade. Purcell's sent an expert to instruct the Company staff in its operation.

A January 1924 report to the Board of the Company stated that "at present it appears highly successful", but by May of that year it was reported to be out of action again and was found to be not strong enough. The Company approached Purcell's what price would be required for them to take the locomotive but a deal could not be done. A Company drawing for a coil spring for the Purcell locomotive is in the writer's possession refers to the locomotive as No. 1 locomotive. (Purcell)

The locomotive did see some use for quite a few years including work on the tunnel construction in 1927-30 at the cement works end. The late Bert Gunsser [a loco driver at Fyansford] said it could pull two loaded spoil trucks out of the tunnel although he always referred to it as a 'Ruston Hornsby'. A battery-electric locomotive was used for tunnel construction work at the quarry end. The Purcell must have had some use after that as new universal joints were ordered in early 1930.

There were several attempts to sell it including the one mentioned in March 1936 but no interest was shown.

By the early 1960's it was stored, well out of use, and scrapped at about that time.

Bob Butrims
via email

Caldwell-Vale and Purcell Engineering locomotives (LR 278)

As an occasional purchaser of the *Light Railways* magazine at newsagents I was delighted to find, within a recent random purchase (LR278), an article by Jim Longworth on the Caldwell Vale/Purcell Engineering locos. I have for some time been considering construction of a model of the locomotive used by Moreton Mill at Nambour based on a drawing prepared by the late Jim Fainges but was having trouble finding accurate details or clear photos of this vehicle. The article certainly filled in some of the blanks for me, and as a bonus two additional detailed photos were provided in the News section. Could you please extend my thanks to Jim Longworth for the article but also could you ask if he has access to any other drawings from the Purcell Engineering catalogue, as the drawing included in the article is different in some respects from the vehicle in the photos elsewhere in the magazine.

Geoff Perkins
via email

Editor's Note: Jim advises that the loco at Moreton mill called *Vanguard*, had a number of changes over its life. As John Browning pointed out it LR279, the loco's original appearance is per the photo at the bottom of page 11, LR278. After being re-engined and 'converted' to an open-air 'Queensland cab' it looked per the top photo on page 11. Further modifications resulted in the loco on page 43, where the only recognisable Caldwell-Vale bits are the wheels, chassis and connecting rods. Readers wishing to study the inner workings of Felix Caldwell's friction wheel patent are referred to the patent application No.4958 of 1912 at http://pericles.ipaustralia.gov.au/ols/auspat/applicationDetails.do?applicationNo=1912004958

The Crookhaven Breakwater tramway (LR 278)

Authors and editors hate them, while some readers just love to spot and report them. In *Light Railways* 278, in my article on 'The Crookhaven Breakwater Tramway', the caption for the lower photograph on page 20 is in error. As readers may have observed, it is obvious that the photograph was taken from the shore end of the breakwater, not the seaward end. My sincere apologies to the Editor and readers, though I may have spotted the error before anyone else did!

Peter Crabb
via email

As mentioned in Jim Longworth's article in LR278, Moreton Mill's Caldwell-Vale locomotive Vanguard *was also used on excursion trains to Coolum Beach. Photo: Author's collection*

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Lacrosse Island Lighthouse

Please find attached an image (at right) of the tramway at the Lacrosse Island Lighthouse in WA, which may be of interest to *Light Railways* readers. It is taken from a book *Romance of Australian Lighthouses* by Valmai Phillips and published in 1977. It shows one of what must be Australia's most remote and least known tramways. The photo is credited to the Department of Shipping and Transport.

Information is hard to come by regarding the lighthouse and tramway. Lacrosse Island is situated at the entrance to Cambridge Gulf which leads to the port of Wyndham in WA. It lies between Cape Domett to the east and Cape Dussejour to the west. The lighthouse was constructed in 1961 and was operated by acetylene gas from then until 1984, after which it became solar powered with the tramway most likely then abandoned. The length and gauge of the tramway is unknown. The vehicle shown was probably the only rolling stock and most likely was propelled by manpower. From the above dates, the photo must date from the era 1961-1977.

Andrew Hennell
via email

Editor's Note: Thank you Andrew. I am advised that the Lacrosse Island line was actually winch-operated and connected a beach, where the lighthouse supply vessel would unload gas cylinders to power the lamp, to a small lighthouse at an elevation of about 110m. The line is about 440 metres in length and has the unusual gauge of 2 ft 6½ in. It was built in 1960-61, is still in existence but is out of use. More details will follow in the next issue from our lighthouse guru.

Ringwood Colliery mystery locomotive (LR130, 155 and 279)

The story commences with the advertised sale of the Ringwood Colliery plant in the *Bowral Free Press* on 20 June 1885 page 3 column 4 as below:

In the Supreme Court of New South Wales.
Sheriffs' Office, Bowral, June 2,1885.
THE FEDERAL BANK versus
RINGWOOD COAL MINING COMPANY.
ON Wednesday, the twenty-fourth day of June, 1885, at noon, unless the Writ of Fieria Facias herein be previously satisfied, the Sheriff will cause to be sold by Public Auction, under the Verandah of the Supreme Court, Sydney, all the Mining Plant of the above-named defendant company, consisting of: Two Mining Engines, a large quantity of Skips, Rails, Weighing Machines, Blacksmith's Tools, Wire Rope, Derrick, Telephones, quantity of Iron, etc.
TERMS CASH.
WILLIAM SIMS,
Sheriffs' Officer, Bowral.
THOMAS ROBERTSON.
Plaintiffs' Attorney, 85, Pitt-street, Sydney.

The sale which took place on 20 June was reported by the *Goulburn Evening Penny Post* as realising £1000[1], no doubt a bargain. Please note that there was no specific mention of a locomotive in the sale notice, however it may have been one of the two mining engines listed. The *Illawarra Mercury* continues the story in September, tenders being required to transport about 150 tons of machinery and rails etc. from Ringwood Colliery, near Bundanoon, to Russell Vale, near Wollongong.[2] As pointed out in LR 279 the railway to Illawarra not being opened until 1888 the plant was most likely transported by rail to Campbell town, then by teamster, the tourist route to Russell Vale, near Wollongong. The plant arrived at Russell Vale late in November, all 300 tons, including a "very superior locomotive" and large hauling engine. Two engines, as mentioned in the original sale advertisement, and please note the wording, a "very superior locomotive". The paper confirms that the whole of the locomotive from Ringwood Colliery has arrived on the ground at Russell Vale.

John Browning in LR 279 states that a clue to the real identity of the first Russell Vale/South Bulli locomotive number 1, reads as follows; a very telling description was of a locomotive with ''neither running plate nor splashers over the wheels" the description is referenced to *Transporting the Black Diamond* p 42. The reference in *Transporting the Black Diamond* relates to the description of South Bulli number 1 and read as follows: "As far as can be ascertained, this locomotive was built by John Fowler and Coy, of Leeds in 1883 but unfortunately the maker's number has escaped identification. It was regarded as a 'queer locomotive in many respects' with a certain amount of traction engine incorporated in its design. As built it had neither running plate nor splashers over the wheels". I do not believe a Neilson box tank would be described as queer, basic and uncomplicated, yes, incorporating some aspects of traction engine design, I think Neilson and Co. would have to be at the very least, upset.

The suggestion that the mystery locomotive was a Neilson box tank should be followed up. John Browning briefly covers the early history of the two Neilson locomotives 364 and 365 of 1857 in LR 279 and confirms that the serviceable locomotive was in use at Eskbank by December 1880. Jim Longworth in *Furnace, Fire and Forge* on page 220 relates that one locomotive was used to shunt the ironworks siding until 1889 when it was sold, and that there was the possibility that the boiler from the unserviceable locomotive was in use as a stationary boiler at the 16 inch mill from 1886. There is however a problem, Jim Longworth's reference for the serviceable locomotive's sale date of 1889 led to the *Lithgow Mercury* article From Old ''Mercury" Files, 10 February 1927 p4 c2 and reads as follows:

> At the iron foundries I was shown a steam engine, said to be the second imported to this colony. It is now spoken of as the "coffee-pot," and certainly looks very modest and antiquated, though still doing good work.

Also, of the remaining Neilson twin in service on the Emu Gravel Co.'s line which clearly shows a full length running and what appears to be a wheel splasher partly hidden behind the boy wearing the boater. For those interested in early Neilson box tank locos *Practical Model Railways* magazine, March 1984 has an eight page article with numerous illustration and photos, two illustrations on pages 35 and 40 being 0-4-0STs without splashers or running plates.

The foregoing reference was traced back to the *Cumberland Mercury*, 29 July 1893 p2 c1 and is signed 'Seven Hills, July 1893'. The article was written by an early day tripper and confirms that an antiquated locomotive was still in use at Eskbank in mid 1893.

John Oakes, in his book *Sydney's Forgotten Quarry Railways* on page 11, states that the first locomotive in use on the Emu and Prospect Gravel and Road Metal Company's Prospect Quarry line was a 0-4-0 locomotive of 1857 vintage that had been built by Robert Stephenson & Co of Newcastle on Tyne for the Coal and Copper Company, Newcastle.

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It had arrived at Toongabbie on 17 March 1902 and was named *Possum*. The right locomotive, wrong builder.

Possum was taken out of service circa 1913 and was forwarded to Clyde Engineering for repairs, upon examination repairing it was found to be uneconomical and it was scrapped at Clyde in December 1913.

In conclusion, there was a locomotive at Ringwood Colliery [a very superior locomotive] for a short period, which was purchased by, and transported to Russell Vale to become South Bulli number 1. What it was and where it terminated still remains a mystery, however the following is of interest. A letter to the Editor [abbreviated] in the *Illawarra Mercury* on 21 October 1884 from which the following extract is lifted. The writer describes construction and design of the Ringwood Colliery as of novel construction and barely passable:

> of the remainder of the work from the mine to the Government railway, about 1½ miles from the mine, as much can't be said, for search all NSW and you would not find such a wretched piece of work. There is a viaduct about half a mile in length, built with piles, caps, and braces, and so substantial was the construction that about 300 feet of it fell while the men were working at it.

As far as I am aware all of the South Bulli locomotives were of the 0-6-0T or ST type for traction and to spread the axle load, therefore it would be more likely that the Ringwood locomotive would have been an 0-6-0, not an 0-4-0ST given the described state of their infrastructure.

References

1. *Goulburn Evening Penny Post* July 4th 1885 p3 c4.
2. *Illawarra Mercury* Sept. 15th 1885 p2 c6.

Garry Allen
Fern Bay/Stockton, Newcastle
via email

Pole Cups – which way is up? (LR 278)

I was quite intrigued to read the article about pole cups in the April edition. Pole cups were fitted to classes 38, 36 and 35 steam locomotives of the NSW Railways. I could never understand why because these locomotives were express types and not really suitable for shunting. With regard to the Victorian Railways, none of the locomotives, the R, A^2, J, N and K class were fitted with pole cups. Thanks for an interesting magazine.

Graeme Castleton
via email

Locomotive *Torpedo* (LR 279 cover)

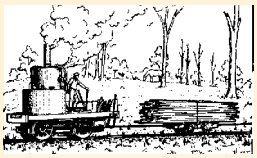
You kept that front cover quiet! The first thing I knew was when I opened the envelope of my mailed copy. It has taken me a little time to recover from the shock!

I see that it is a relatively old photograph in the history of Pete's Hobby Railway, having been taken in March 2018. I cannot say that I know the photographer concerned … luckily, the photo was taken from outside my front fence (evidenced by the Loftus railway station building and water tank in the background behind the first carriage).

You seem to have overcome your shortage of illustrations to accompany the Heritage and Tourist News – at least in the current June 2021 issue. However, I attach an image (below) of the PHR "storage shed" and showing the newly completed second access track – the curved No. 1 Road. I've posed the Ruston diesel and the Hunslet steam locomotive on the two tracks for photographic purposes. The photo was taken on 8 March 2021.

Hopefully, it will be possible to pose a steam locomotive on each track – however, progress on the restoration of the 1900-vintage Fowler has slowed considerably as the two involved in this work are now fully engaged by the big railway in assisting to move the current grain crop.

Peter Neve OAM
Station Master, Loftus – PHR
via email



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.

August 2021 members Zoom meeting
Date: Thurs 12 August at 8.00pm AEDT
Geoff Maynard will present on some early hikes along the tramways of the Upper Yarra Area using the Scouts 1936 Jamboree map - covering an area to the east of Powelltown and south of Warburton in Victoria.

October 2021 Members Zoom meeting
Date: Thursday 14 October at 8.00pm AEDT
This meeting will constitute the AGM for the LRRSA. Following the formalities (expected to only take approx. 30 minutes), Peter Knife will present on the Eyre Peninsula tramways, and some weird and wonderful items from the South Australian Railways' Port Lincoln Division.

BRISBANE: "Indonesian sugar mill tramways"
Ross Sadlier will present slides and a DVD on the topic of Indonesian sugar mills.
Location: BCC Library at Coopers Plains.
Date: Friday 20 August 2021 at 7.30 pm

SYDNEY: "The Mortlake gasworks railway"
Noted historian Mark Langdon is researching the 3ft gauge railway system once used at Mortlake gasworks, Sydney. AGL first purchased land in 1883 beside the Parramatta River and gas coal was carried by ship from Newcastle to its wharf. The railway possessed six narrow gauge steam locomotives to haul coke from the retorts. A telfer system was also used. The railway lasted until 1948. Mark will present a detailed overview of the history and operation of the gas works.
Location: Woodstock Community Centre, Church Street, Burwood. Free Council car park behind building (entry via Fitzroy Street) or close-by street parking. Only 10 minutes easy walk from Burwood railway station.
Date: Wednesday 25 August at 7:30pm
NOTE: Due to the Covid virus precautions the large meeting room at Woodstock (Penfold Room) will be used for safe spacing requirements.

MELBOURNE: "No meeting"
There will be no meetings in Melbourne until further notice.

ADELAIDE: "Military Road light railways"
There will be an Adelaide meeting on Thursday 5 August 2021 where, amongst other things, the above topics will be discussed. South Australian members will be advised by e-mail about a fortnight before, but the meeting will be on this date depending on any Covid rules at the time.
Location: 1 Kindergarten Drive, Hawthorndene
Date: Thursday 5 August 2021 at 7.30 pm

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Field Reports

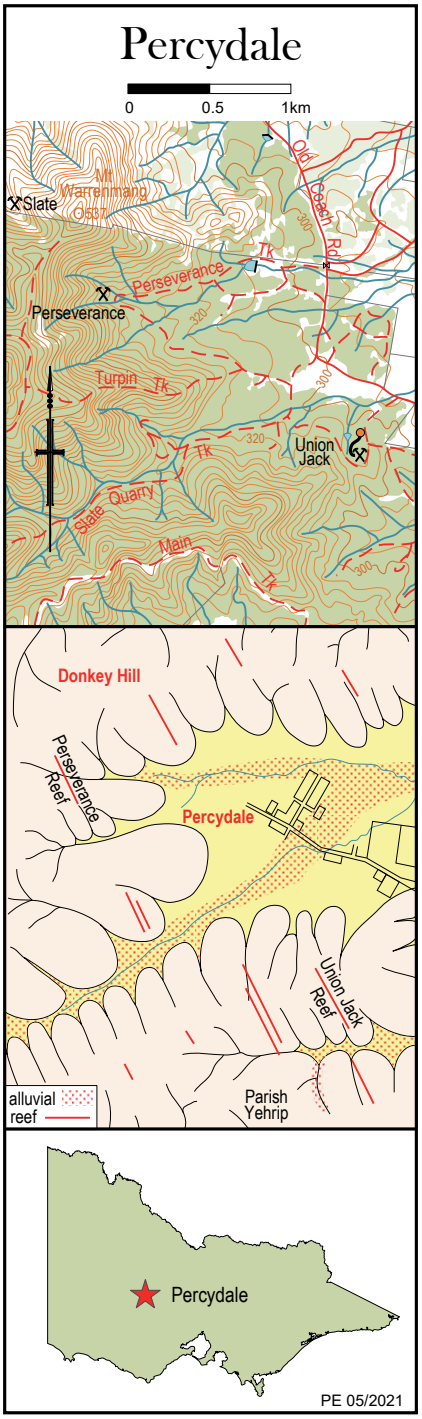
Please send any contributions, large or small, to fieldreports@lrrsa.org.au or to PO Box 21, Surrey Hills, Vic 3127.

Percydale tramways, Victoria
Gauge unknown

Percydale was once a small village approximately seven kilometres north-west of the township of Avoca, both settlements owing their origins to gold.[1] Percydale sits at the eastern flank of the rugged Pyrenees range. The village had a population of 900 in 1871 but, by the 1930s, this had reduced to around 30. West of Percydale were a number of extractive industries which relied on tramways for transport.

One of these was the Union Jack mine. Opened in the early 1870s,[2] it was worked intermittently as a partnership until 1880. The success of another local mine prompted renewed interest in the Union Jack and the acquisition of further capital from beyond the local area. The Union Jack Quartz Mining Company was registered in November 1880 to purchase the claim from Messrs Hall & Inglis and, by December, the main shaft was down 80 ft and the south shaft 35 ft with prospects improving.[3] In 1881 the company was reorganised as the Union Jack Mining Company, at which time the claim and mining plant were valued at £4075. Tenders were called for the installation of a battery of 12 heads shortly afterwards.[4] In September 1881 the reef was struck in both shafts and, by the end of November, crushing was in full swing. This must not have been very successful, as parts of the mine were let on tribute in July 1882 and, in February 1883, the mine lease and plant were put up for auction.[5] Excessive ingress of water is believed to have been part of the problem. There seems to have been no further work done at the mine until the lease passed into the hands of John F. Paten in April 1888,[6] but the mine appears to have languished thereafter for want of capital.

Tramway cutting, Union Jack mine. Photo: Colin Harvey



Around 1904 the mine was reopened and a new battery was installed with the addition of cyanide tanks to process ore and tailings from previous operations.[7] The features still on site are the cumulative remains of operations over 30 years. These consist of a large open cut high on the hill featuring two open shafts and three adits. Lower down on the hill is an open adit, and a tramway route leads from this down the western side of the hill for some 200 m. Most of the formation has been converted into a vehicular track, but one section of cutting remains intact. At the foot of the tramway is an excavation for the foundations of what were once ten heads of stamps along with some small concrete foundations. Below this and some 50 m away are a large tailings dump, three well-preserved galvanised-iron cyanide tanks and a smaller galvanised-iron drainage vat.[8]

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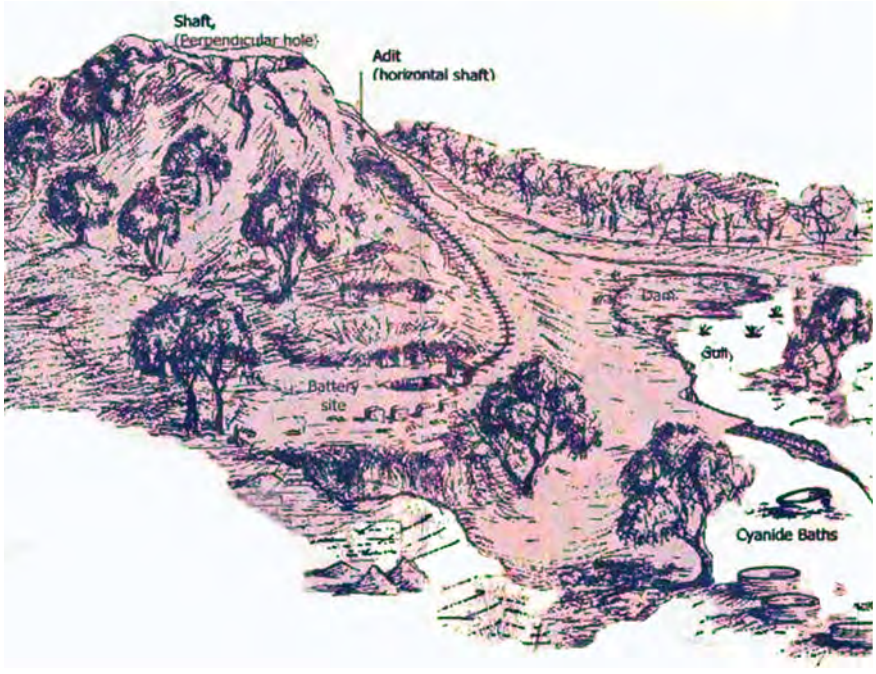

This area around Percydale would definitely repay further investigation. As well as the gold mines, there was a balanced incline nearly one kilometre long serving a steam-powered sawmill in the ranges (installed by Felix Bartrap in the mid-1860s);[9] at least three slate quarries, all with internal tramways and one (probably two) with lengthy inclined tramways installed in 1884 and 1888; and even a proposed slate-delivery tramway between Percydale and Avoca in 1886.[10] There is also an operational mine tramway at the Perseverance adit which appears to have some sort of mechanical motive power.[11]

Field report by Colin Harvey 05/2021, additional research by Peter Evans and Phil Rickard.

References

1. For an overview of mining in the area see Bradford, W.M. (1903). *The Pyrenees Gold-Fields*. Bulletin No.2 of the Geological Survey of Victoria, Robert S. Brain, Government Printer, Melbourne. See also Geological Survey of Victoria, (undated). *Parish of Yehrip 40 chains to 1 inch, geological map*. Department of Mines, Victoria.
2. *Geelong Advertiser*, Monday 22 August 1870, page 3 marks the start on mining at Percydale.
3. *Avoca Mail*, Friday 12 November 1880, pages 2 and 3; Tuesday 21 December 1880, page 2; Friday 31 December 1880, page 2; Friday 6 May 1881, page 2.
4. *Avoca Mail*, Friday 20 May 1881, page 3; Tuesday 24 May 1881, page 3; Tuesday 31 May 1881, page 3.
5. *Avoca Mail*, Tuesday 13 September 1881, page 2; Friday 25 November 1881, page 2; Friday 7 July 1882, page 3, Friday 9 February 1883, page 3.
6. *Avoca Mail*, Tuesday 17 Apr 1888, page 2.
7. Bannear, D. (1994). *Historic Mining sites in the Maryborough and Avoca Mining Divisions*. Department of Conservation & Natural Resources, Victoria, citation 94. For a contemporary overview of the cyanide process see Eissler, M (1895). *The Cyanide Process for the Extraction of Gold*. Crosby Lockwood & Son, Ludgate Hill, passim.
8. Site survey by Colin Harvey 20 May 2021.
9. *Avoca Mail*, Saturday 4 May 1867, page 3.
10. *Avoca Mail*, Tuesday 2 September 1884, page 2; Friday 27 February 1885, page 3; Friday 24 April 1885, page 2; Friday 27 August 1886, page 2; Tuesday 21 August 1888, page 2.
11. Personal observation by Colin Harvey, 20 May 2021.

Top: *Interpretive sketch for the Union Jack mine showing the tramway descending from the adit to the battery. https://www.goldfieldsguide.com.au/location-image/brochure/208/800/431-image.jpg*
Above: *Concrete foundations, Union Jack battery site. Photo: Colin Harvey*
Left: *Operational tramway at the Perseverance mine. Photo: Colin Harvey*

LRRSA Facebook Group

Have you joined the LRRSA Facebook page, titled *Light Railways of Australia*, yet?

Lots of online discussions and photos of light railway interest

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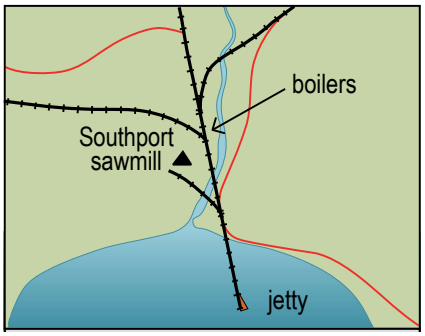
Southport Sawmill tramways, Tasmania
1372 mm gauge

The accompanying photographs are from Southport in the far south of Tasmania. They include the remains of the boiler of what is believed to have been a vertical-boilered locomotive, and that of a former Tasmanian Main Line Railway locomotive boiler converted for use as a log hauler. *Engaging the Giants* (pages 64 and 70) suggests that the latter is Dubs No.2187, ex TMLR No.17 (later renumbered 11), and later used by the TGR on the Bellerive to Sorrell railway where it was renumbered D+1.

Both boilers were used by Robert Hay's Southport mill to haul logs from the forest and then transport those logs to the mill and sawn timber to the jetty. Both boilers are close to the walking track leading from the vicinity of the Southport Hotel to the jetty and between that track and the river.

Tom Dearing 05/2021 via Facebook.



Above left: *Boiler believed to be from a former vertical-boilered locomotive.* ***Above right:*** *Locomotive boiler converted to log-hauler and formerly mounted on a wooden frame. One wheelset survives underneath the boiler confirming the gauge as 1372 mm (4 ft 6 in). Photographs supplied by Tom Dearing*

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Heritage & Tourist NEWS

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QUEENSLAND

MUNRO TRAMWAY, Ravensbourne

610 mm gauge

The Munro Tramway Historical Group website contains information which relates to a timber tramway and associated sawmill constructed and operated by the A&D Munro Company in the Ravensbourne district of South East Queensland. The tramway served A&D Munro's Palmtree sawmill, which was located on the headwaters of Perseverance Creek, both as a means of transporting logs into the mill and milled timber to the government line at Hampton. The tramway and mill operated from the late 1890s to 1936 and at the height of operations the tramway extended from Hampton to Bunkers Hill, a route length of approximately 26km.

In addition to recording details related to the tramway, locomotives and sawmill, this site also contains details related to the local history of the districts traversed by the tramway, the families associated with the mill operation and details of the Group's current activities.

www.munrotramway.wix.com/mthg

AUSTRALIAN SUGARCANE RAILWAY, Bundaberg

610 mm gauge

After a six year major restoration, Monday 7 June 2021 was the test day for the Orenstein and Koppel locomotive *Germany,* which was built in 1914; all went to plan. At this stage it should return to operations on 27 June 2021.

Australian Sugarcane Railway Facebook post 7 June 2021

DURUNDUR RAILWAY, Woodford

610 mm gauge

Further to the last report regarding the funding of the annex extension to the workshop, much thought and planning has been done so that if things change in the future, a track can easily be added for storage or display of locomotives. The grant will not cover the full cost and two significant donations have been made to cover the remainder.

A significant amount of work has already been put into cleaning out and removing the old BLC (bogie low-platform container) wagon body. At the time of writing work was well under way breaking up the concrete slab the BLC body sat on, relocating rollingstock and removing that section of track. As well as the obvious benefits for workshop activities, this will also result in a significant improvement to the appearance of this area and resulting passenger impression.

With the concentration on the demolition of the BLC, only routine inspections have been undertaken on the track. Additional stocks of main line sleepers have been obtained from the Isis Central Sugar Mill and future track days will concentrate on installing these where the sleeper renewals were identified in the independent track inspection.

Next year is the 50th anniversary of ANGRMS (at Woodford), which was officially incorporated on 27 September 1972.

Durundur Railway Bulletin 42: 368 May/June 2021

NAMBOUR TRAM, Nambour

610 mm gauge

Concept drawings for the new Nambour tram have been released. The tram, to be called the "Tram of Thought", is to be manufactured on the Sunshine Coast by Russell Anderson. Initial reaction ranged from glowing, to laughter, comparing it to a local sugar cane harvester. Many correspondents refuse to believe the concept is for real and think that it must be some kind of joke. Time will tell.

Narrow Gauge Enthusiasts Facebook page 15 May 2021

Byron Shire's Simplex locomotive peeking from its shed on 24 April 2021. Passing on the former NSWGR Murwillumbah line is the Byron Bay Railroad Co's beautifully restored 1949-built 600-class two-car rail motor set. The rail motor is solar powered, with panels on its roof, supplemented by solar panels on the BBRC depot roof at West Byron. (technical details at https://byronbaytrain.com.au/sustainability/) The out-of-use track parallel to the main line is the former jetty line, from the Byron Bay station yard to the long-gone 'new' jetty. Photo: Phil Rickard

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Former Tully Mill No 8 Shellharbour *(John Fowler B/N 21912 of 1937) is in charge of the "Wedding Express" train at Yallah station on 30 May 2021. Photo: Brad Johns*

NEW SOUTH WALES

ILLAWARRA LIGHT RAILWAY MUSEUM, Albion Park

610 mm gauge

The Museum at Albion Park has been busy with running days throughout May and June. This included on Mothers Day when large crowds were in attendance. Most locomotives were in action on all the working days.

The Museum will be celebrating its 50th anniversary next year and plans for special celebrations are in hand.

Brad Johns, ILRMS

PETE'S HOBBY RAILWAY, Junee

610 mm gauge

Progress Report 67 is headed, 'Is the impossible, possible?' and details how the railway turned a 5.5 metre wheel base bogie goods wagon on its 5 metre radius turntable. The answer is ingenious and not one your correspondent thought of before reading the report. To find out how, read the full report at http://www.peteshobbyrailway.club/

While you are on the site, you can read in Progress Report about the Weedicide Special on Monday 19 April 2021 which operated over the current full operating length of Pete's Hobby Railway.

Unlike in previous recent years, Junee has been blessed with frequent good rains, followed by periods of warm but not heatwave summer sun. This has resulted in a quick proliferation of weeds and other growths along parts of the PHR rail corridor requiring the operation of a Weedicide Train.

Pete's Hobby Railway Progress Reports 67 and 68 May/June 2021

THE ESKBANK LOCOMOTIVE DEPOT AND MUSEUM, Eskbank

1435 mm gauge

The Eskbank Locomotive Depot and Museum is a not for profit community based company and was registered with the Australian Securities and Investment Commission in early 2014. The organisation is charged with establishing a railway museum together with a wagon maintenance facility on the site of the original Eskbank Locomotive Depot in the eastern end of the Eskbank goods yard.

The combination of the proposed tourist train operations on the Lithgow State Mine branch line with the establishment of the Eskbank Locomotive Depot and Museum will provide Lithgow with a tourist attraction which will connect a number of significant heritage sites which include Blast Furnace Park, Lake Pillans and the Lithgow State Mine by rail.

Perhaps the most exciting project that The Eskbank Locomotive Depot and Museum is doing is the purchase of a Shay locomotive. The Museum has concluded final arrangements to purchase a Lima 70 ton three-truck Shay similar to those that operated on the Wolgan Valley Railway. The hunt to secure a Shay locomotive began almost five years ago and has finally concluded with the acquisition of one located in California. The locomotive, built in 1910, will become the centrepiece of an operational display dedicated to the Commonwealth Oil Corporation which built the massive oil shale works at Newnes and the 53 kilometre railway that connected it to the mainline at Newnes Junction. Further details will be released in coming weeks on how people can assist the company to restore what will become Australia's only standard gauge Shay locomotive.

Eskbank locomotive depot and museum Facebook page and website

BYRON SHIRE COUNCIL, Byron Bay

1435mm gauge

On 24 April 2021, a visit to Byron Bay found the Council's preserved Simplex 4wDM locomotive (Motor Rail 2129/1922) in its shed near the Kendall Street level crossing, to the west of town. The Simplex is still lovingly cared for by its long-time curator, Brian Parkes, who gladly opens the shed on Saturday mornings for interested visitors. If you wish to get a photo of the loco with its distinctive and highly polished Simplex works plate, contact Brian a few days prior and he will endeavour to affix the plates.

The 8-ton Simplex was purchased 99 years ago by the North Coast Steam Navigation Co Ltd for jetty shunting work at Byron Bay, originally between the station and the 'old' jetty and, from 1928, the 'new' jetty, about two kilometres north west of the station and reached via its own siding, parallel to the NSWGR's line to Murwillumbah. At the new jetty site, despite the large amount of erosion elsewhere along the bay, a pair of rusty rails still protrude a few feet from the sandhill, marking the land end of the 615m-long jetty. The fate of the loco is still uncertain; a recent plan to have it 'stuffed and mounted' near the new bus station adjacent to the former NSWGR railway station yard was (thankfully) aborted. For details of the Simplex's (locally known as *Green Frog*) history and various owners, see LR228 December 2012.

Phil Rickard, May 2021

Not for Resale - Free download from lrrsa.org.au

Burra *and* Kiama *both working together at Yallah station at the ILRMS Museum at Albion Park on 13 June 2021. Photo: Brad Johns*

ZIG ZAG RAILWAY

1067 mm gauge

The Zig Zag Railway conducted a series of load trials from 6 to 8 May 2021 using the recently fully overhauled AC16 218, now resplendent in what has been described as a Lackmans green. The loco has also acquired a new whistle manufactured in the USA, a DR&G 5 Chime.

This was the first time in more than nine years that a steam locomotive travelled the full length of the heritage Zig Zag Railway. The last time was on 7 December 2011.

Zig Zag Railway Chairman Ben Lawrence said there had been times when they had been so close to this moment, only for it to just slip out of reach. But this week they were able to return steam power as they put their newly restored engine through its paces.

It is hoped that passenger services will return to the Zig Zag Railway by the end of this year.

NSW Railways Past and Present Facebook Group via Dennis Ritson 10 May 2021; Radio 2LT | Move FM News 8 May 2021

CROOKWELL HERITAGE RAILWAY, Crookwell

1435 mm gauge

Plans to run a rail-bike rider scheme out of Crookwell reported in our last edition have hit a big snag; a cattle breeder has removed a large section of the railway. An investigation is underway into the unauthorised removal of a non-operational railway track by a cattle breeder at Crookwell in the NSW Southern Tablelands. The track, which was built between 1900 and 1902, and is part of the Goulburn-to-Crookwell heritage railway line, was intended to reopen as a tourist attraction. A group of local rail enthusiasts had applied for Federal Government and NSW Government grants to purchase pedal-powered rail bikes that would operate between Crookwell and McAlister on the old line. However, the removal of about 1.5 km of the track at Crookwell means the rail bikes could no longer reach McAlister.

About Regional on-line Hannah Sparks 1 June 2021

VICTORIA

WALHALLA GOLDFIELDS RAILWAY, Walhalla

762 mm gauge

As well as severe damage to infrastructure in the town, the WGR has also suffered considerable damage from the storm that hit large sections of Victoria on 9 June 2021. WGR staff are continuing to assess the amount of damage that has greatly affected the track, bridges and building infrastructure. There is significant flood borne debris and floating tree logs wedged against several bridges, with some undermining. At Thomson Station, the carriage and loco shed has been flooded by a spring behind the building, which has left a muddy mess inside. The workshops at Thomson have been flooded and are full of mud. Outside, there are quite a few areas where the access road has partially collapsed beside the Thomson River. It will be quite a while before the various sites can be properly inspected by engineers and a recovery plan prepared. There has also been damage to bridge foundations and abutments which require engineering inspection.

Bridge number one just outside Walhalla station has suffered severe undermining with the steel supports being exposed for the first time since the bridge was built late last century.

Donations have been pouring into the railway during the last week after appeals were made on social media. The railway is closed until further notice and full inspections of the line will be made as soon as possible to ascertain the full extent of the damage which will enable a clean-up plan to be made and implemented.

WGR Facebook posts in the week following the storm of 9 June 2021

DAYLESFORD SPA COUNTRY RAILWAY, Daylesford

1610 mm gauge

This is another heritage railway in Victoria that has suffered extensive damage from the storm. Reports and photographs from the railway indicate that more than 400 trees have come down across the track which will require heavy machinery to move. There are also many more trees that have come down near to the line that will have to be moved to secure the safety of the line. There was no damage to the stations at Daylesford or Bullarto but some volunteers feel that the track clearing may be too much for their volunteer workforce and may require government assistance. Donations to help with the clear up have been coming to the railway in the past week after appeals were made on social media.

The railway has been closed until further notice and inspections will be made soon to ascertain the full extent of the damage so that a clean-up plan can be made.

Daylesford Spa Country Railway Facebook posts in the week following the storm

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FOOTSCRAY WHARF BRANCH, Footscray
1610 mm gauge
One of the advantages of being in lockdown is that close inspections on foot of interesting sites can be completed at your leisure. A recent visit to the Footscray wharf redevelopment revealed that the old branch line that came off the main western line from Melbourne, just west of the Maribyrnong river crossing, has been incorporated into the redevelopment of the wharf area, rather than just being ripped out and forgotten. A walking and biking trail runs alongside the old track which is now in the process of being re-laid on a concrete base. To indicate that it was once laid on wooden sleepers, these have been laid in groups of three along the concrete base. Congratulations to those who planned this sensitive redevelopment.
Andrew Webster, site inspection 13 June 2021

KERRISDALE MOUNTAIN RAILWAY, Kerrisdale
610 mm gauge
Douglas, the 0-4-2 new build steam engine is up and running at Kerrisdale. Proprietor and builder Andrew Forbes describes the locomotive as 'enjoying himself' although the appellation could also apply to Andrew who is seen driving the locomotive on a recent video post on Facebook.
Facebook post 17 May 2021

Top: *The Krauss and a lone carriage operated the service at Redwater Creek on Sunday 6 June 2021. Photo: James Shugg.*
Above: *Thirty five years earlier, the same loco was captured by John Allum on a 1985 visit to the Ida Bay Railway, hauling that line's remaining stock of ore wagons, along with the visiting guard's van. The top half of the Krauss, b/n 5682 of 1906, had hauled limestone on the IBR in the 1930s as a 2-4-0T. The bottom half came from Krauss b/n 5800 of 1907 that had worked on the West Coast; the two halves were rebuilt into one loco 50 years ago. Photo: John Allum*

PUFFING BILLY RAILWAY, Belgrave
762 mm gauge
While the Puffing Billy Railway suffered some damage in the recent storms, it has not been nearly as severe as at Walhalla or Daylesford. Volunteer clean up days have been held and the railway will again be operational from 19 June. The last of a number sitting-on-sills trial runs will be held on Wednesday 23 June. After this trial, if it goes well, sitting on sills could be reintroduced for the school holidays.
Andrew Webster local knowledge

CARIBBEAN GARDENS, Scoresby
610 mm gauge
Caribbean Gardens is inviting expressions of interest for some obsolete items. Major items include two locomotives with 11 carriages each, approximately 3.2 km of railway track and a chairlift approximately 306 m and 32 double chairs, all in operational order.
Locomotive 1 has a four-cylinder diesel engine with torque converter, 11 carriages (4 wheels per carriage) each able to carry six passengers. Locomotive 2 is a Malcolm Moore locomotive with a four-speed gear box, 11 carriages (4 wheels per carriage) each able to carry six passengers. There is also approximately 3.2km of railway of 610 mm gauge and rail size of 45lb/yard and 60lb/yard, which is in good condition and comes with a quantity of new red gum sleepers.
www.caribbeangardens.com.au

TASMANIA

REDWATER CREEK RAILWAY, Sheffield
610 mm gauge
Redwater Creek's June running weekend was handled by the Krauss and a lone carriage, the former TGR first class carriage that ran on the North East Dundas Railway, on Sunday afternoon, 6 June.
James Shugg

WEE GEORGIE WOOD RAILWAY, Tullah
610 mm gauge
On the last running weekend of the 2020/21 season, *Wee Georgie Wood* hauled his newly constructed passenger carriage in revenue service for the first time. The body design takes cues from the former Lake Margaret carriage that has been the mainstay at Tullah for some decades now; the chassis is believed to have come from the North East Dundas Railway.
James Shugg

WEST COAST WILDERNESS RAILWAY, Strahan
1067 mm gauge
It appears that the WCWR have a lot of track work planned as a recent photograph reveals stacks of plastic sleepers in front of the station at Strahan, stacks of rail to the right of the station and more sleepers, and a huge mountain of ballast around the corner near the per way depot.
Light Railways of Australia Facebook Group
Chris Stratton 4/5/21

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TASMANIAN TRANSPORT MUSEUM, Glenorchy

1067 mm and 610 mm gauges

On 27 March the first moves were made to rearrange the rail exhibits in the roundhouse, with the ultimate aim being to get ZA6 under cover. The Climax locomotive was moved to the rear of road 6 with six-wheel carriage AB1 being placed in front. As most would know, there were glimpses of the Climax in steam at Simsville NSW in the 1937 feature film *Tall Timbers*. This film is available to view on YouTube.

Tasmanian Transport Museum Newsletter, Autumn 2021

IDA BAY RAILWAY, Lune River

610 mm gauge

The Tasmanian Parks and Wildlife Service (PWS), which manages the land on which the Ida Bay Railway operates, has called for public submissions on a proposed development within the Ida Bay State Reserve. The proponent, Darklabs, is proposing the installation of an international standard artwork called "Transformer" in the Reserve.

The purpose of the public artwork installation is to:

- Deliver and maintain an artwork of exceptional quality and of international significance,
- Attract an estimated 30,000 people a year to the district,
- Be a symbol of regeneration in the aftermath of the devastating fires of 2019 and the COVID-19 economic shutdown in 2020,
- Provide additional opportunities to showcase the natural and cultural heritage values in the Ida Bay State Reserve and the Tasmanian Wilderness World Heritage Area (TWWHA).

The proposed works include:

- Installation of the Transformer Artwork led by the international acclaimed artist Doug Aitken,
- Construction of a visitor welcome centre including café, toilets, ticket sales area, and interpretation of railway heritage items,
- Exclusive use of the adjacent dwelling known as the quarry manager's residence for residential purposes,
- Installation of a 450 metre walking track to the location of the artwork and linking the visitor zones,
- Creation of a new car and bus parking facilities.

Darklabs is engaged with the Ida Bay Railway Preservation Society (IBRPS) to ensure that the goals of both organisations can be achieved, and that development will not impede the potential for recommencement of the tourist railway on the site.

Tasmania Parks and Wildlife Service, Facebook post 9/6/21

Top: Wee Georgie Wood *with the new carriage trailing on 24 April 2021. Photo: James Shugg*
Above: *Later that day, the Nicola Romeo (b/n 770 of 1925) is about to shunt the Fowler (b/n 16203 of 1924) back into the shed. Photo: James Shugg*

The Ida Bay railmotor No. 7 is awaiting its next call of duty while insurance and accreditation issues are being sorted. Designed to seat 14 including the driver, the railmotor was restored in 2010 but has seen little work since then.

Ida Bay Railway Facebook post 29/5/21

A site inspection of Blaney's Limestone Quarry (mining lease 8461/M) on the Ida Bay Line, reveals numerous relics present on the site, including Sandfly Colliery Tipper wagons, Decauville Rail Sections and extant sections of rail. Access to the site is from the Mystery Creek Cave walking track, which follows the railway formation to the Quarry.

Post by Tom Dearing on *Light Railways of Australia* Facebook Group 25 May 2021

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SOUTH AUSTRALIA

COBDOGLA IRRIGATION AND STEAM MUSEUM, Cobdogla

610 mm gauge

Volunteers at the museum have worked on various projects, both during the period we were closed to the public, and since we were able to reopen. These include the completion of another carriage, the chassis of which was built about five years ago, some general maintenance of the locomotives and rolling stock and some trackwork.

Elsewhere in the museum, the Humphrey Pump building has been reclad and repairs made to the concrete floors. This allowed the public back into the building from December onwards. The committee room has been extended and a workshop added to the Fowler shed. Extensive upgrades and repairs have been made to the irrigation infrastructure around the grounds and sheds sorted out. The engines in the IC shed received maintenance, including the casting and machining of a new big end bearing for the 40 hp Blackstone and the installation of a Bagshaw pump driven by a Lister engine, and the installation of an electric pump to irrigate the trees in the irrigation channel while the Humphrey Pump is out of action.

The members have resolved to become more self-sufficient in engineering capability, and to this end have acquired a big lathe, a mill and a surface grinder for the main workshop. The shaper, which dates back to the early 1900s, is also being overhauled. One result from all this is that they are in the process of retubing a Ruston traction engine as a fund raising contract. The boiler for our own Aveling & Porter steam roller should be back from extensive repairs soon, enabling it to be reassembled.

There have been a couple of open days with numerous tours for machinery and car enthusiasts. There will be three more open days this year in June, July and October and Twilight trains will be run in October, December and January, subject to Covid restrictions in force at the times scheduled.

Denis Wasley

On 30 May 2021 the Morris Car Club of SA visited the Cobdogla Irrigation and Steam Museum and these two photos above show the train running with the two Motor Rail Simplex locomotives, 7369 and 9861 top and tailing the train. Both photos: Denis Wasley

MILANG RAILWAY MUSEUM, Milang

1610 and 610 mm gauges

For 30 years the Museum has been looking for a steam locomotive and at last it has one. It is a 1927 Fowler locomotive made in the UK. Its working life was at the Racecourse Sugar Mill near Mackay and it was then placed in a playground where it deteriorated over several decades. It was saved from scrapping by the Kerosene Creek Tramway in Sydney which stored it in a yard. They have now given it to the Museum on permanent loan and a very tricky delivery was completed on 5 May 2021. It is missing far too much to ever run again so the volunteers will be concentrating on a superlative cosmetic restoration.

Several readers took umbrage at this last suggestion, saying things such as, "it is definitely not missing too much to run again. This is how ours started and we are well on the way with its full restoration to running order now".

Volunteers are making good progress with the Fowler restoration. The smokebox door has been closed and clamped, the missing piston rods replaced, the boiler inspection port covered, sundry holes filled, rust removal and painting started.

John Browning comments on the appearance of the locomotive that the trailing wheel, which has miraculously survived, could be repositioned to a more realistic position.

Milang Station Newsletter June 21; Brad Peadon; Milang Railway Museum Facebook Page 24 May 2021; *Abandoned Railways of Australia* Facebook Group 25 May 2021

WESTERN AUSTRALIA

BENNETT BROOK RAILWAY, Whiteman Park

610 mm gauge

The Fowler 0-6-0DM *Rosalie* is still waiting for the tyres to be fitted on the wheels, but progress is being made painting and cleaning. The sandboxes in the cab have recently been refitted.

NG15 123 2-8-2 (ex South African Railways) has had its tube plates welded. Readers will be pleased to know that the new tubeplates for the boiler have been fully welded into the boiler barrel and approved by the third-party independent assessor. This means that insertion of the firetubes can commence shortly. Workers are aware that this process has taken considerably longer than they would have liked, but the work has been very thoroughly done. There are one or two areas that still require addressing, which is being done, the most important of which is to look at the crown-sheet girder stays at the rear of the firebox roof. This matter is under consideration and a couple of options are being evaluated.

Workers now hope that they can get the boiler back on the locomotive sometime in July, fully signed off, and hopefully with an increased working pressure. This timeframe will mean that the locomotive will not be operational for the coming 2021 steam season. Interestingly, when the locomotive is operating in 2022, crew rostering will be in proportion to the contribution members make in returning the locomotive to steam, other than for senior footplate crews of the railway.

The Bennett Brooklet – May/June 2021

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Just a normal day at Yarloop

Over the years, the late Weston Langford made a number of trips to Yarloop, some 110km south of Perth, on the South Western Railway of the WAGR.

Situated in the Jarrah belt, Yarloop (a contraction of "Yard Loop") was established in 1895, just a couple of years following the arrival of the railway. From Yarloop, the Millar brothers (later Millars' Timber & Trading Co Ltd) built a vast network of timber railways to tap the Jarrah forests to the east of the escarpment, a few miles from town.

In addition to the sawmill at Yarloop for processing the logs nearer to town, a number of mills were built far into the forest, all feeding sawn timber back to Yarloop for seasoning or despatch.

In the following photos, all taken on Thursday 26 September 1968, we see No.71, a 4-6-0 of the classic G-class family, shunting the sawmill, the stacking yards and the siding to Yarloop station. Millers' No.71 (Dübs 3495/1897) started life as WAGR G-class No.111 but was sold immediately to Smith & Timms for railway contracting and named *Menzies*. She spent her entire career in industrial use, being at Yarloop by November 1898. She never left Millars' service thereafter, spending most of the next 75 years either in the Jarrah forests to the east or at Yarloop itself.

No.71 was retired in 1973 and donated to the Hotham Valley Railway Society; she is now at its Pinjarra depot, some 36 km up the line to the north, awaiting restoration.

Readers wishing to learn more about these WA timber lines are referred to *Rails through the Bush - Timber and firewood tramways and railway contractors of Western Australia* (2nd Edition) by Adrian Gunzburg & Jeff Austin (Published 2008 by Rail Heritage WA). See our Online shop for details https://shop.lrrsa.org.au/

Notes prepared by Phil Rickard;

Photos: Weston Langford collection www.westonlangford.com/images/photo/109620, 109628 and 109630.

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