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LIGHT RAILWAYS

Australia's Magazine of Industrial & Narrow Gauge Railways



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Imperial to metric conversions:

1 inch (in)	25.40 millimetres
1 foot (ft)	0.30 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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Editorial

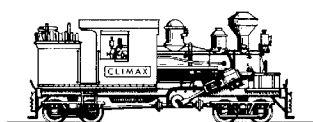
Photo captions are an integral part of the layout of this magazine. The aim of each caption is to describe what is included in each photograph and how it relates to the article it is contained within. Also, they aim to draw something else out of the pic that the viewer may not see, or paint a picture of what could be going on. The writing of each caption often involves a lot of research and takes time to construct, to tinker with, edit, change around, revise, research more, and revise again.

Captions can range from the very basic (*Krauss locomotive at Kiama*) to the quite descriptive where a story is contained within each caption. A good example of the latter is often included within the Looking Back feature in the magazine. In the last edition, Phil Rickard gave the background to a number of piers and their tramways. Included in the captions were interesting facts and observations of what was in the photo. The evocative comments about the Peters Ice Cream sign in the background and the memory of eating a "Kreem-be-Tween" particularly brought back many memories to the Editor!

I would be interested on any thoughts on this subject – send them to me at editor@lrrsa.org.au.

I trust that you enjoy this edition of *Light Railways* as it contains a wide variety of articles on many different and fascinating subjects. *Richard Warwick*

Front Cover: A load of freshly cut pulpwood awaits dispatch to the Maryvale paper mill in Gippsland, as G42 arrives at Beech Forest with the morning train from Colac on 8 March 1961. Photo: Peter Ralph courtesy of Nick Anchen



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

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

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An Angourie surprise

Further observations on the steam locomotives of the Clarence Heads river training works

by Jon Henry and John Browning

We were most impressed with Ian McNeil's excellent series on the Clarence breakwater works commencing in LR 245. Our contribution is intended to add some extra facts that have become available recently and to present our own observations.

The recent discovery of a surprising and very important photograph adds significantly to what is known about the steam locomotives employed on the Clarence Heads River Training Works. This encourages a re-assessment of the claims handed down by the early chroniclers and a further look at the newspaper evidence.

There are still significant gaps and uncertainties. It is not always clear even how many locomotives were used in some of the phases of construction. Further information is needed to complete the picture. We cite references not included in Ian's articles and refer to Ian's articles in LR 245, 248 and 255 for other facts. We hope our contribution will stimulate discussion and lead to more evidence coming to light.

For the benefit of readers who might not be familiar with the original series of articles, the following is a very brief summary of the periods of operation at the Clarence Heads when steam locomotives were (or could have) been used:

- The period from 1875 to 1886 saw quarried stone being hauled from the northern Iluka Bluff and Middle Bluff ocean-front quarries to construct river training walls on the northern (Iluka) side of the Clarence river. A portion of training wall at Iluka was later removed in the period 1894-1896 with the stone reused to construct another training wall on the northern side.
- The period from 1883 to 1889 saw quarried stone being hauled from South Head Quarry (Yamba) for the construction of the south training wall and breakwater, and the commencement of the construction of a railway south towards Angourie Quarry.
- The period from 1891 to 1899 saw the completion of the railway to the ocean-front Angourie Quarry and the haulage of quarried stone from that quarry to the Clarence to construct further training walls in the river.

The newly-discovered photograph

Ian McNeil recently obtained a copy of a photograph showing a large inside-cylindered saddle tank locomotive working at Angourie quarry. It came from a descendant of James Ellis, who was the quarry manager in the 1897-1899 period when the Public Works Department was working the quarry during the construction of the Goodwood Island training wall.



This is the photo that revealed the existence of the remarkable locomotive on the Clarence in the late 1890s. The Angourie quarry contains both loaded and empty stone trucks together with a pair of shunting horses. Photo: courtesy Jan Brown via Warnick Hoad and Ian McNeil

Historical details of the quarry development confirm that the photograph can be dated to this period. Ellis had been transferred from harbour works at South West Rocks (Macleay River) and in late 1899 moved to Woodford Island to develop the quarry there.¹ Perhaps he is the portly gentleman standing beside the locomotive in the photograph

The photograph shows the locomotive at the head of a short rake of stone trucks loaded with small stone for the training wall, and there is what appears to be a match truck to enable the locomotive to couple to the trucks, which have a lower buffer height than mainline rolling stock. The locomotive has downward buffer extensions at the front end. Ten empty stone trucks stand on an adjacent line, and two horses with a driver appear to be suitably equipped for in-quarry shunting operations.

The most extraordinary feature of the locomotive is that, although it appears to have been built as a long wheelbase 0-6-0ST (0-4-2ST seems conceivable but unlikely), the trailing axle has been removed and replaced by a pair of stone truck wheelsets, probably complete with their stone truck chassis. This appears likely to be a local modification. The reason for a shortening a rigid wheelbase would almost certainly be to allow the locomotive to negotiate tight track curvature without derailling, particularly at pointwork. This would most likely have been on sidings within the Angourie quarry or elsewhere because, from LR 255, we know that the main line from the quarry was planned to quite generous standards with a minimum curve radius of 600 feet.

Other features of the locomotive include the steam dome mounted over the firebox behind the saddle tank, an old-fashioned spectacle plate, the addition of a cab canopy roof, and possibly a bunker extension at the rear. The cab seems very generous in size. The handbrake features large wooden brake blocks acting on the remaining driving wheels. Aside from the apparent modifications, the locomotive appears to be quite elegant in design and in good condition externally.

We shall return to this locomotive later, after having revisited the others that are known to have worked on the Clarence River works.

The Iluka locomotives – from 1875

The locomotives that worked at Iluka on the northern side of the estuary were owned by the Public Works Department (PWD). A good summary of them was provided in LR 248. We now know that the first locomotive had arrived by August 1875.² Its performance was said to have been most unreliable, and a second one was sent to relieve it. The repairs reportedly under way in May 1877 were probably at the Iluka government workshops, which were well enough equipped to manufacture a part to repair the weighbridge used to measure the quantity of stone delivered to the works.³ There is good evidence that the second locomotive at Iluka was Manning Wardle 0-6-0ST 163, which arrived in March 1877. (Gifford Eardley said that the Manning Wardle locomotive came to Yamba in 1897 but provided no evidence.⁴)

A locomotive was transported from the Clarence to Sydney in March 1882 and must surely have been from the harbour works at Iluka because there is no evidence of any locomotive employed in any other capacity in the Clarence district at this time.⁵ It has been assumed that this was the first locomotive at Iluka. Because the government was transporting stone for use by the contractor at Iluka, a second more reliable engine, most likely the Manning Wardle, was needed for that task and it was used at Iluka until at least late 1883, and probably July 1886. It may have remained there for some time after that.

A locomotive was described as being ‘unused at the Clarence Heads’ in January 1891. It is unclear whether this was Manning Wardle 163 still at Iluka, or a locomotive on the Yamba side. Some sections of training wall at Iluka containing 72,000 tons of stone were removed in the period 1894–1896 and reused in another training wall. For this task, a small steam railway crane brought up from Sydney or Newcastle was used to lift the stone onto horse drawn railway trucks but there is no report of a locomotive. It was reported that the railway line from the quarry to Iluka was being pulled up in February 1896, with the rails to be sent to the Macleay, accompanied by 20 tip trucks.⁶

The South Head quarry locomotive(s), Yamba – 1883-1889

We think that there was an operational locomotive at Yamba from 1883 to 1889.

In May 1883, the *Platypus*, coming from Sydney, landed a locomotive for the Clarence Heads.⁷ As recounted in LR 245, a correspondent to the local newspaper in June 1883 claimed that the ‘antiquated’ locomotive had been ‘sent down to Sydney for a complete overhaul and when sent back and tried, refused to work.’⁸ This locomotive is likely to have been the original Iluka locomotive because there is no report of any long term mechanical problems with the Manning Wardle.

It appears that the informant who in 1883 denounced the alleged ills of the locomotive delivered to Yamba may have had an axe to grind or was somewhat ignorant of steam locomotive operation. The description given corresponds to priming, a commonplace irritation perhaps, but hardly a fatal defect. As it had been reported early in May that operations at Yamba were at a standstill because the locomotive had not arrived, it is reasonable to believe that it was needed to haul stone from South Head quarry for the southern training wall until that work ceased in 1886.

Work at Yamba resumed in 1888 and continued until the exhaustion of the stone in the South Head quarry the following year.⁹ Apart from work on the southern training wall, construction of 1½ miles of railway towards Angourie was undertaken, tasks that would likely have required the use of at least one locomotive.

There is no direct evidence of more than one locomotive being at Yamba for the South Head quarry works. It is possible that the one mentioned as being ‘unused at the Clarence Heads’ in January 1891 was situated at Yamba, but as far as we know it could equally have been at Iluka.

The Angourie quarry locomotives – 1891-1899

Railway work connected with the Angourie quarry occurred in at least three phases:

- Construction of the remainder of the railway from Yamba to the quarry, and of a railway to Freeburn Island, by contractor William Murray & Co in 1891–1892. There is no direct evidence of locomotives being used by William Murray & Co but it seems plausible that at least one could have been.
- Operations by contractor A Kerr & Co (otherwise known as Kerr & Wallace) to build the Freeburn Island training wall, 1893 to 1896. A Kerr and Co definitely used at least one locomotive, and probably two as in 1895 they employed two locomotive drivers. The contractors are said to have owned these locomotives in their own right.
- Operations by the Public Works Department to build the Goodwood Island training wall in 1897–1899. The Public Works Department seem likely to have taken over the locomotive(s) used by A Kerr & Co and may possibly have used others also.

The locomotive abandoned on the Angourie Road

We have tentatively identified the locomotive abandoned on the Angourie Road as the one built in Sydney by Parkinson and Monaghan in 1870.

In LR 255 (p.15), a photograph was published of a locomotive on the timber staging from which stone was tipped during the construction of the Freeburn Island training wall by A Kerr & Co in 1893-1896. Close examination of this photograph now leads to the conclusion that the locomotive shown is the same one that was later abandoned on the Angourie Road and is shown in photographs in LR 245 (p.15) and LR 248 (p.10). Identifying features common to the locomotives in these photographs are:¹⁰

- Canopy roof – the canopy over the cab is curved laterally and has valances front and rear with horizontal bottoms.
- Canopy supports – the canopy is supported on four stanchions. These are set in slightly from the sides of the locomotive. The front ones are fixed to the saddle tank with two rivets.
- Canopy bracing – the canopy is braced with diagonal supports attached to the front of the canopy and the top of the saddle tank.
- Saddle tank – the saddle tank is very square and has a horizontal flat top.
- Safety valve – the safety valve is mounted sideways and faces to the left side of the locomotive
- Brakes – the brake operating rods attach to the rear brake shoes with joints just below the shoes
- Number of wheels – the locomotives both have four wheels. These can be seen clearly in the photographs of the remains. In the photograph of the locomotive on the

Middle Wall, the number of wheels can be deduced from an analysis of the shadows

- Left hand bunker side sheet – in a photo showing a picnic party posing on the disused locomotive, an examination of the positions of the feet of the lady standing on the bunker suggests that the left hand bunker side sheet was lower than the rear sheet. This corresponds with the cut off seen in the rear sheet in the 1895 photograph on the Middle Wall.

Perhaps the light axle load of this locomotive made it the most suitable one for use on the temporary staging. Whether it had been purchased by A Kerr & Co or had been made available for the contractor's use by the PWD is not definitely known. In either case, there is no knowledge of it being used by the PWD after 1897. The earliest photo we have of it out of use dates from before the Great War, judging by the fashions worn by the picnic party arrayed upon it.

The Angourie Road locomotive does not bear any resemblance to the products of any known overseas builder and in appearance it looks somewhat basic in design and finish. Very few locally-built contractor's 0-4-0ST locomotives are known and the closest known examples would be the two 0-4-0ST locomotives built in Sydney by Vale & Lacy for South Bulli Colliery in 1867 and 1868. Judging by its appearance and proportions, the most likely candidate for this one appears to be the Parkinson & Monaghan locomotive built in 1870 for railway contractors Blunt & Williams. It had 9 x 17 inch cylinders and weighed 11 tons.¹¹

Cedric Thomas, writing under the pseudonym 'ALRHS' in 1947, stated that the "Parkinson & Monaghan" locomotive was one used on harbour works at Harrington on the Manning River,¹²



The charming group of picnickers obscure many details but this is the oldest photograph so far discovered of the locomotive abandoned by the Angourie road. The fashions suggest Edwardian times. The pipe on top of the saddle tank does not appear likely to be part of the locomotive.

Photo: courtesy Port of Yamba Historical Society



The abandoned locomotive at a later time. Not a lot remains and all vestiges of the cab have disappeared.

Photo: Authors' collection

but no evidence has been found to support this. The locomotive used at Harrington was later at Coff's Harbour.¹³ Navigation Department records indicate that it had a wheelbase of 4 ft 6 in and weighed 25 tons in operating condition, significantly greater than the quoted weight of the Parkinson & Monaghan when new.¹⁴

Vale & Lacy 15

We have been able to establish that Vale & Lacy 15 was purchased from the New South Wales Government Railways by Alexander Kerr and Edward Cronin on 9 February, 1893 and that there is no doubt that it was the locomotive that arrived on the Clarence shortly afterwards for work with the contractors.

As demonstrated in LR 255, New South Wales Government Railways N67 class 0-6-0T number 74 (Vale & Lacy 15) was used by the PWD at Angourie in the 1897-1899 period and was later at Port Kembla. However, its history from the time of its sale from railway service to 1897 has been contested through confusing and contradictory claims in a number of published sources, some of which other authors appear to have followed. Some of the claims are as follows:

- From an anonymous account in ARHS *Bulletin* 147:
No.74 was sold to Kerle and Kerle for Tweed-Lismore construction in 2/92: she was then acquired by Kerr and Wallace for work at Clarence Head. The engine was reboilered at Cockatoo Dock and was purchased by the P.W. Department and returned to Clarence Head. From here she went to the Harbours and Rivers Department at Yaamba (sic) in 1897; back to the P.W. Department, Port Kembla in 1906.¹⁵
No source is shown for any of this information.
- J H Forsyth's *Steam Locomotive Data*, ostensibly compiled from official government railway records, shows the locomotive as sold on 9 February 1893:
to Kerle & Kerle for Lismore to Tweed railway construction, later to Harbours & Rivers Branch of Public Works Department at Yamba 1897, to Port Kembla 1906.¹⁶

- In 'Byways of Steam' 18, Ian Dunn wrote:

It is also reported that Kerle and Kerle bought N74 from Kerr and Crowie, who had purchased it for £1800. Kerles apparently used it on their railway contract before its passing to breakwater construction work at Clarence Head (Iluka) under the auspices of Kerle and Wallace. By 1897 it was in the hands of the PWD across the Clarence at Yamba.¹⁷

No source is shown for any of this information.

- In LR 255, it is said that number 74:

was sold on 9th February 1892 to railway contractors Kerle and Kerle who were working on Contract No.2 for the construction of the Lismore to Tweed Railway on the NSW North Coast. . . When Kerle and Kerle began plate-laying its section in October 1892 it did not use V&L 74 for the task. . . They sold V&L 74 to Kerr & Wallace for use on the Clarence. The locomotive was dismantled and delivered to Darling Harbour for shipment in February 1893 and arrived at the Clarence next month.

The main source of this confusion has now been determined, and the truth established, by an examination of the New South Wales Government Railways Steam Locomotive Registers. It can be seen that the locomotive was sold to Kerr and Cronin in February of 1893 and was to be dismantled and delivered to Darling Harbour for shipment.

The writing in the Register has easily led to the misinterpretation of "Cronin" as "Crowie." Edward Cronin had been Alexander Kerr's business partner. They had carried out the contract for the construction of the Yass Tramway.¹⁸ Kerr & Cronin advertised for timber for the Clarence River breakwater works during December 1892 but their partnership was dissolved at the end of that month.¹⁹ A Kerr & Co (who had the Clarence contract) was later known as Kerr & Wallace.²⁰

The date 9 February 1892 in ARHS *Bulletin* 147, and followed in LR 255, looks like a copying or typographical error.

The possibilities for confusion between 'Kerle' and 'Kerr' are obvious. Gifford Eardley noted that number 74 was purchased

from the railways by 'Kerle & Kerle' or 'Kerr & Crowie'.²¹ In 'Byways of Steam' 18, ownership of N 67 Class number 74 is attributed to 'Kerle & Kerle', 'Kerr & Crowie', and 'Kerle & Wallace'. In fact, Kerle & Kerle had a different locomotive of the same class (NSWGR number 69) on the Lismore-Nashua railway construction which arrived in September 1892,²² the same month that Forsyth says they purchased it from NSWGR. There is no evidence of a second locomotive on this job. This is doubly problematic as Forsyth shows a third government locomotive (number 409) as also being sold to Kerle & Kerle in 1892, this time for the Nashua-Mullumbimby contract. However, a different contractor, Martin Danaher, was engaged on the Nahua-Mullumbimby contract. It would appear to be the case that Forsyth's information was not necessarily accurate when it came to Kerle & Kerle.

It appears to be beyond reasonable doubt that Vale & Lacy 15 was the 'large locomotive' that arrived on the Clarence 'for use by the contractor' in March 1893,²³ the month after it was purchased by Kerr and Cronin.

There is also dispute as to the date of the eventual departure of Vale & Lacy 15 from the Clarence. Most authors follow ARHS *Bulletin* 147 in saying that it went to Port Kembla in 1906, coinciding with a newspaper account of a locomotive being shipped south from the Clarence in August of that year.²⁴ However, the PWD records at Port Kembla evidently stated that it was transferred there in 1905.²⁵ If the 1905 date is correct, then it seems very probable that the locomotive was the one that reportedly arrived in Sydney from the Clarence in October 1902.²⁶

Manning Wardle 163

We think that the upper photograph on p.20 of LR 255 shows Manning Wardle 163 at the shoots on Freeburn Island in the Clarence River during the construction of the Goodwood Island Wall from 1897 to 1899.

The photograph shows a Manning Wardle locomotive, of the same class as 163, positioned at 'shoots', where stone was transferred to punts. A match truck is in evidence behind the locomotive. We believe that the locomotive is Manning Wardle 163 as the PWD was the only construction authority for river training works, the PWD had no other locomotive of this class with the smaller style of saddle tank, and no contractor engaged on river training works is known to have had such a locomotive.

The scene depicted in the photograph exactly fits the operations used in building the Goodwood Island Training Wall. There was a set of shoots on Freeburn Island in the 1897-1900 period. Distances in the photograph, scaled from the known dimensions of this class of Manning Wardle locomotive and corrected for perspective, match the known distances on Freeburn Island. It seems more than likely that the photograph shows Manning Wardle No 163 at the shoots on Freeburn Island.

It has been reported that Manning Wardle 163, previously used at Iluka, worked for the PWD on the Yamba side in the 1897-1899 period. There is no independent evidence of the locomotive's presence on the Clarence in this period, although Gifford Eardley stated that it was used at Yamba in 1897-1899.²⁷ If Eardley was correct, its arrival at Yamba would probably have been after 1886 when work on Moriarty's scheme at Iluka was terminated.

Eardley said that Manning Wardle 163 was the first locomotive in service on the Port Kembla Harbour Works. The first locomotive for the Port Kembla Harbour Works was at Cockatoo Island in April 1901²⁸ and it arrived in sections at Port Kembla in May 1901.²⁹ LR 248 includes a photograph

of Manning Wardle 163 at Port Kembla on 27 July 1901.³⁰ This confirms it as the first locomotive at the Port Kembla works so it cannot be the locomotive whose departure from the Clarence was noted in 1902.

The locomotive in the newly-discovered photograph

We believe that the mysterious locomotive in the newly-discovered photograph is the one that was later at Port Kembla and alleged by some to have been built by Hudswell Clarke. We are sure that it is not a Hudswell Clarke, and believe that it may be the first locomotive built by Vale & Lacy at its works at Druitt Street, Sydney.

There is no conclusive evidence about the origins, arrival or departure of this previously unknown locomotive on the Clarence. It is not readily identifiable as the product of any known overseas builder. We believe that the oral history referred to in LR 255 about a mysterious locomotive known as *Hercules* or *Ironbark* used by the PWD at Port Kembla may well refer to it.

The salient details of *Hercules* / *Ironbark*, apparently recorded by Gifford Eardley at Port Kembla in around 1928³¹ that correspond to the locomotive in the photograph are that it was an inside-cylindere engine; that additional wheels were added at the rear while at the Clarence; and that its large timber brake blocks led to it being known as *Ironbark*. Additional information in LR 255 is that its cab had been lengthened, and that its boiler was very old and gave a lot of trouble with leaking tubes.³² There is enough here to persuade us that *Hercules* / *Ironbark* is the locomotive that is shown in the photograph taken at Angourie quarry.

Details recorded by Eardley that do not correspond include that it was built by Hudswell Clarke, and that it had originally been an 0-4-0ST.³³

There is some confusion over when the locomotive came to the PWD. In LR 255 it is stated that it was obtained by Kerr & Wallace to handle the increased transport of stone from 1895. If this is the case, the modification of the wheel arrangement may very well have been done under their ownership. One of Eardley's informants at Port Kembla stated that the locomotive 'was a contractor's engine until 1897 and done a few years work and not much of that owing to leaky tubes.' Another Port Kembla informant stated that 'The people that owned her put the wheels under, they were not put on here. Myself I seen her on Clarence River and they were under then'.

Jack Southern noted that the locomotive had been acquired by the PWD from Newcastle engineers and agents JS Rodgers & Sons in about 1890.³⁴

Eardley was clear that the locomotive arrived at Port Kembla after both Manning Wardle 163 and Vale & Lacy 15, to work at the newly opened second quarry there, giving 1907 as the date of arrival.³⁵ This suggests that it was the last to depart the Clarence, and is therefore likely to be the one that left in August 1906. The apparent delay in its arrival at Port Kembla might perhaps be explained by a sojourn at Cockatoo Island for maintenance or modification.

The locomotive in the photograph has some additional discernible features that may help in its identification. It was a large machine with a long wheelbase, apparently more suitable for use on main line railways than quarry work. From surviving examples of the stone truck wheels used on the Clarence, the diameter of the stone truck wheels in the photograph is known to be approximately 36 inches, and from this we can say that the locomotive driving wheels were slightly larger than that. The operation of the braking mechanism is not very clear beyond the vertical hand brake shaft and it appears rather too crude to have been the original arrangement.

Given that there is no compelling reason to suspect that the locomotive was imported (and it certainly is not a Hudswell Clarke design) the question of identification has focussed on locally-built engines.

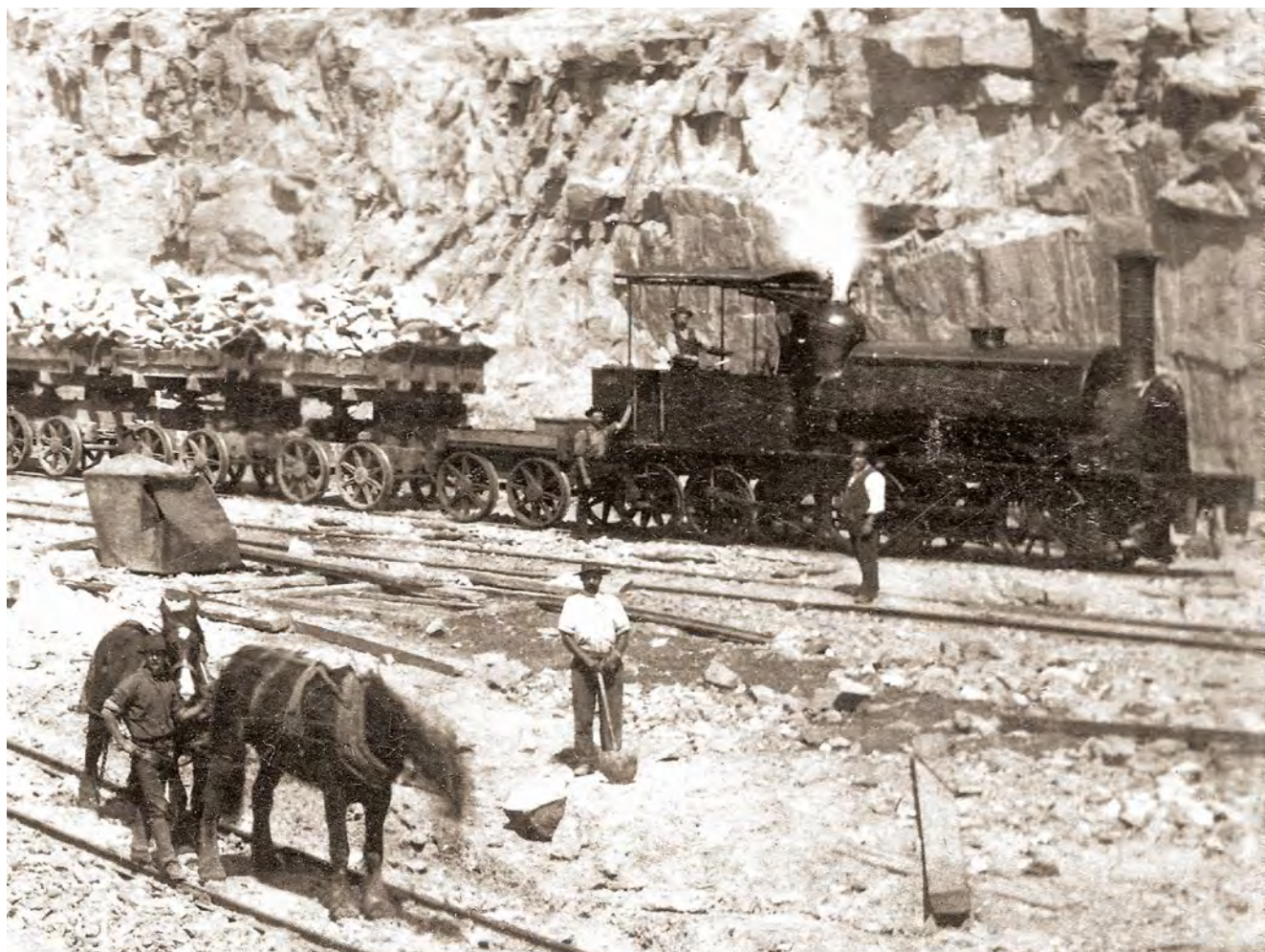
The only known locally-built six-wheeled contractor's locomotives that are otherwise unaccounted for are three manufactured by Vale & Lacy in 1866, 1867 and 1871. As far as is known, there is no confirmed photograph available of any of them. The 1871 example (Vale & Lacy 9) can almost certainly be eliminated because it was a lightweight design weighing only 14 tons.³⁶ The Angourie locomotive appears to be significantly larger than that. The 1867 locomotive (Vale & Lacy 3), built for contractor John Goddard, appears to have been too large to be the one in the photograph. It had 16 x 24 inch cylinders (another account says 16 x 20), 45 inch driving wheels, and weighed 31.55 tons (another account states 34 tons).³⁷

This leaves the 1866 locomotive (Vale & Lacy 1). It was built for contractors Larkin & Wakeford. It was a substantial six-wheeled affair, weighing 26 tons. It had 15 x 22 inch cylinders and 39 inch driving wheels, and was a tank locomotive. There were 'powerful breaks' on four of the six wheels.³⁸ The second, third, and fourth locomotives built by Vale & Lacy are known to have had saddle tanks. This information suggests that the tank on Vale & Lacy 1 was a saddle tank. Vale & Lacy 1 was described as "six-wheeled coupled" when offered for sale in 1872.³⁹ It was the first conventional locomotive built in NSW and, while engaged on railway construction duties, it was known as *Native Bear*.⁴⁰

The information above, and particularly our knowledge of the wheel diameter of the stone trucks, indicates that the locomotive in the photograph may tentatively be identified as Vale & Lacy 1, built as a 26 ton locomotive with 39 inch driving wheels.

Larkin & Wakeford had ordered Vale & Lacy 1 for their tracklaying contracts on the Western line between Penrith and Blackheath. Following the opening through to Blackheath in May 1868, it was transferred for use on Larkin & Wakeford's tracklaying contracts between Singleton and Muswellbrook on the Northern line.⁴¹ By 1870, it was being used by Amos & Co on construction contracts between Muswellbrook and Scone further north.⁴² It was offered for sale in April 1872.⁴³ In 1878, the *Native Bear* was being used by William Wakeford on the Murrurundi-Tamworth section. It seems to have suffered extensive damage in April 1878, when it was said that "the stomach of the bear was literally burned out and destroyed" and there was doubt about whether repairs could be effected.⁴⁴ Wakeford offered two locomotives for sale in April 1881, and after that the trail becomes cold.⁴⁵ It may well have found work on other railway construction projects before arriving on the Clarence.

The claim that Vale & Lacy 1 was on the Clarence has been a persistent one. This claim has traditionally been associated with the locomotive abandoned on the Angourie Road. The latter cannot have been Vale & Lacy 1 because it originally had six wheels and was much larger. If there is any truth in the claim, then it is presumably referring to the locomotive in the photograph.



An examination of this extract of the larger photograph demonstrates that the locomotive incorporated a number of interesting details that mark it out as most unusual. The photo is posed with the loco crew and assorted other personnel in attendance.

Photo: courtesy Jan Brown via Warnwick Hoad and Ian McNeil

Locomotive summary

LOCOMOTIVE	NOTES
0-4-OST Locomotive abandoned on the Angourie Road	Tentatively identified as Parkinson & Monaghan's locomotive of 1870. Owned by PWD by 1874 and probably the first locomotive at Iluka 1875. Most likely the locomotive that was sent away to Sydney for repairs in 1882 and returned to Yamba in 1883 for the southern training wall construction. Used by A. Kerr & Co 1893-1896 for the Freeburn Island training wall construction. Abandoned after 1900; remains sent away for scrap by PWD 1938.
0-6-OST Manning Wardle 163	Purchased by PWD from Waratah Coal Co and sent to Iluka 1877. Used at Iluka probably until 1886, possibly remaining there until about 1896. Used by PWD 1897-1899 at Yamba for the Goodwood Island training wall construction. At Cockatoo Island by 1901 and thence to Port Kembla.
0-6-OT NSWGR 74 (Vale & Lacy 15)	Used by A. Kerr & Co 1893-1896 for the Freeburn Island training wall construction. Used by PWD 1897-1899 for the Goodwood Island training wall construction. Removed to Sydney in 1902 or 1906; to Port Kembla 1905 or 1906.
0-4-4ST Locomotive in the newly-discovered photograph	Tentatively identified as Vale & Lacy 1 of 1866 (probably built as 0-6-OST). Possibly used by A. Kerr & Co 1893-1896 for the Freeburn Island training wall construction. Used by PWD 1897-1899 for the Goodwood Island training wall construction. Removed to Sydney in 1902 or 1906; to Port Kembla 1907.

Acknowledgements

Thanks are due to Ian McNeil, Richard Horne, Bruce Macdonald, Ron Madden, and Stuart Hibberd for assistance during the preparation of this article.

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A 2014 view of the Camden Haven River entrance taken from the lookout on top of North Brother Mountain. The town of Laurieton is seen in the foreground with North Haven township in the left background. Construction of river training walls during the early 1900s straightened the entrance channel, which previously had meandered through Gogley's Lagoon (seen in the right background) on its way to the sea.

Photo: Camden Haven Historical Society

A quarry tramway tragedy at the Camden Haven River

by Ian McNeil

Foreword

While researching the Trove newspaper archives for information on NSW breakwater construction railways, this short article from the 21 February 1901 issue of the *Sydney Morning Herald* caught my eye:

The inquest on William Dawson, who was injured at Camden Haven breakwater, occupied three days and concluded last night. The verdict of the jury was as follows: 'We find that the deceased, William Dawson, died in the Manning River District Hospital on Tuesday, February 12, from injuries received at Camden Haven harbour works on February 11, while in the execution of his duty, and we also find that the said injuries were caused through the deceased, William Dawson, being struck by the broken parts of runaway trucks, resulting from the breaking of a steel wire rope to which the said trucks were attached, in lowering them from the quarry in connection with the harbour works. We further find that the steel wire rope was not in a fit state for use, and proper care was not exercised.'¹

Curious, I decided to look further to find out more about the unfortunate William Dawson, the harbor works that he was employed on, and the circumstances surrounding his death. Thanks in no small part to some detailed coverage of the inquest into his death given by the local *Manning River Times* newspaper^{2,3}, the following story has been pieced together.

William Dawson's Story

William Dawson was an ordinary working man whose name rarely appeared in written records until his fatal accident at Laurieton Quarry in 1901. Consequently, piecing together the story of his early life had to lean heavily on family history sources such as census returns, immigration lists, and birth, death and marriage records.

William hailed from Scotland and came to Australia when he was 19 years old. He was born on 25 May 1867 in the small fishing village of St. Cyrus in Kincardineshire, on the north-eastern coast of Scotland.⁴ He was the second-eldest of five children – four boys and a girl – born to David and Elizabeth (nee Fiddes) Dawson. His father was an agricultural labourer who moved his family around the local district to wherever farm work was available. The Dawsons were Roman Catholics, a small and sometimes persecuted religious minority in staunchly Protestant Scotland. Available records suggest that life was a struggle for the itinerant farm-labouring family. Each of the children left home to seek employment elsewhere soon after finishing their mandatory schooling at 13 years of age.

It is not known what William did after leaving school in 1881, but five years later he left his family and Scotland behind and emigrated to Australia. On 8 September 1886 he set sail from Plymouth, England, aboard the 1,198-ton barque *Selkirkshire* under the assisted emigration scheme. Three months later, on 18 December 1886, the *Selkirkshire* arrived at the port of Maryborough in Queensland and discharged some 161 English, 30 Scottish and 52 Irish immigrants to their new country.⁵ William was classed as a free immigrant, meaning that the Queensland Government had paid for his passage to Australia.

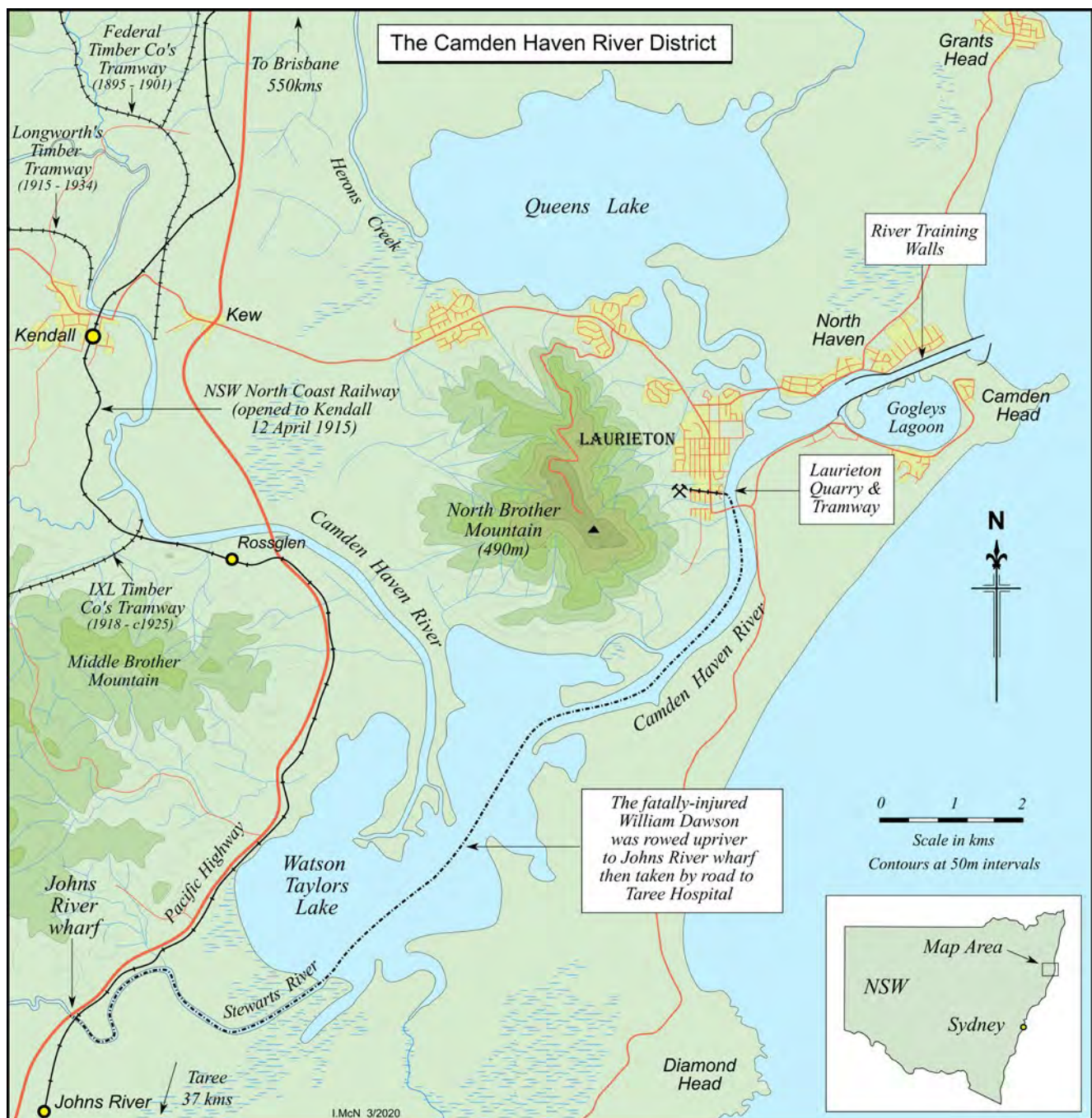
To be eligible for free passage, he would have needed to show that he was unable to afford the fare, to have contributed the sum of £1 towards his passage, and to have given an undertaking that he intended to reside permanently in Queensland. But as we will see, William did not honour this last obligation for very long.

William's record is again silent for the next four years but it seems that during this time he made his way south from Maryborough and found employment in Brisbane as a labourer. There, on 27 December 1890, he married 22-year old Annie Burke in the Brisbane suburb of Enoggera. His new bride was also a free immigrant who had arrived in Brisbane four years earlier on board the steamer *Dacca* on 24 July 1886. Annie also came from a Roman Catholic family. She was born in the town of Selby in Yorkshire, the daughter of Patrick Burke, an Irish cattle dealer and his wife Joanna. At the time of their

marriage she was employed as a domestic servant in the suburb of Toowong.

William and his new bride took up residence in the Stanley Bridge Estate (now the Brisbane suburb of Norman Park) just south of the Brisbane River. A year later their first daughter Elsie was born there, on 28 December 1891.

In 1892 the NSW Public Works Department (PWD) began work to improve navigation at the mouth of the Tweed River, just south of the Queensland border. A riverside quarry was opened at Cave Point, near present day Fingal Head, to supply granite rock for the construction of river training walls. William moved his family to Cave Point and took employment as a day labourer at the quarry. His second daughter Evelyn was born there on 10 December 1895. Living conditions were very basic for Annie and her children. There was no town or village nearby. Workmen and their families lived in tents and humpies near the quarry.



The Camden Haven River and its tributaries circle around Laurieton and the dominant North Brother Mountain that towers over the town. These waterways played an important role after William Dawson was severely injured on the Laurieton Quarry incline tramway. He was taken upriver by boat to the tiny village of Johns River during the first part of the mercy dash to get him to the Manning River District Hospital in Taree.

Construction work on the Tweed River training walls came to a halt in July 1897 after some five miles of walls had been completed. The installed plant could not supply the heavier stones needed to extend the walls at the river entrance. All the workmen, including William Dawson were laid off. The stoppage lasted nearly three years with work not resuming until March 1900.

Fortunately for William, the PWD began work a few months after the stoppage on a new project to construct training walls at the mouth of the Camden Haven River, some 450 kilometres south of the Tweed River. Three experienced quarrymen, William Porter, Griffith Edwards and John Smith were sent from the Tweed to Laurieton to make preparations to open a quarry to supply granite rock for training wall construction. William Dawson followed them and gained employment as a tip man at the quarry. He brought his family down and moved them into a house close to the wharf where he loaded quarried stone from tramway trucks into river punts. Laurieton was an established town and living conditions would have been considerably better for the Dawson family than at Cave Point.

But just three years later, at 34 years of age, William was dead. He had been mortally injured on 11 February 1901 when he tried to turn a rake of runaway trucks on Laurieton Quarry's inclined tramway into a safety siding. He was rushed to the Manning River District Hospital in Taree where the local surgeons tried in vain to save his life by amputating his badly-crushed legs. He was buried two days later at the local Woola Woola Cemetery in Taree. His pregnant wife Annie was left a widow, and his two daughters, Elsie 9 and Evelyn 5, were left without a father.

The NSW State Government accepted responsibility for the accident and awarded Annie £400 compensation for the death of her husband. £50 was paid three months after the inquest, but Annie had to wait for Parliament to approve

the £350 balance, which had been included in the Revenue Estimates submitted for the current year. After this Annie and her daughters faded into obscurity, no records having been found of their subsequent lives.

Regrettably, no trace of William's grave has been found in Taree's old Woola Woola cemetery. Cemetery records were managed by local churches until the 1960s. There are many 'unknown' graves marked on their old cemetery maps and it appears that William is buried in one of them. The simple wooden cross that originally adorned the grave of this ordinary working man has long since rotted away.

The Camden Haven River

William Dawson suffered his fatal accident at Laurieton, a small township near the entrance of the Camden Haven River. The Camden Haven is one of the smaller navigable rivers on the NSW Mid North Coast, being only 90 kilometres long. It rises in the foothills of the Comboyne Plateau and flows into the sea at Camden Head, some three kilometres downriver from Laurieton.

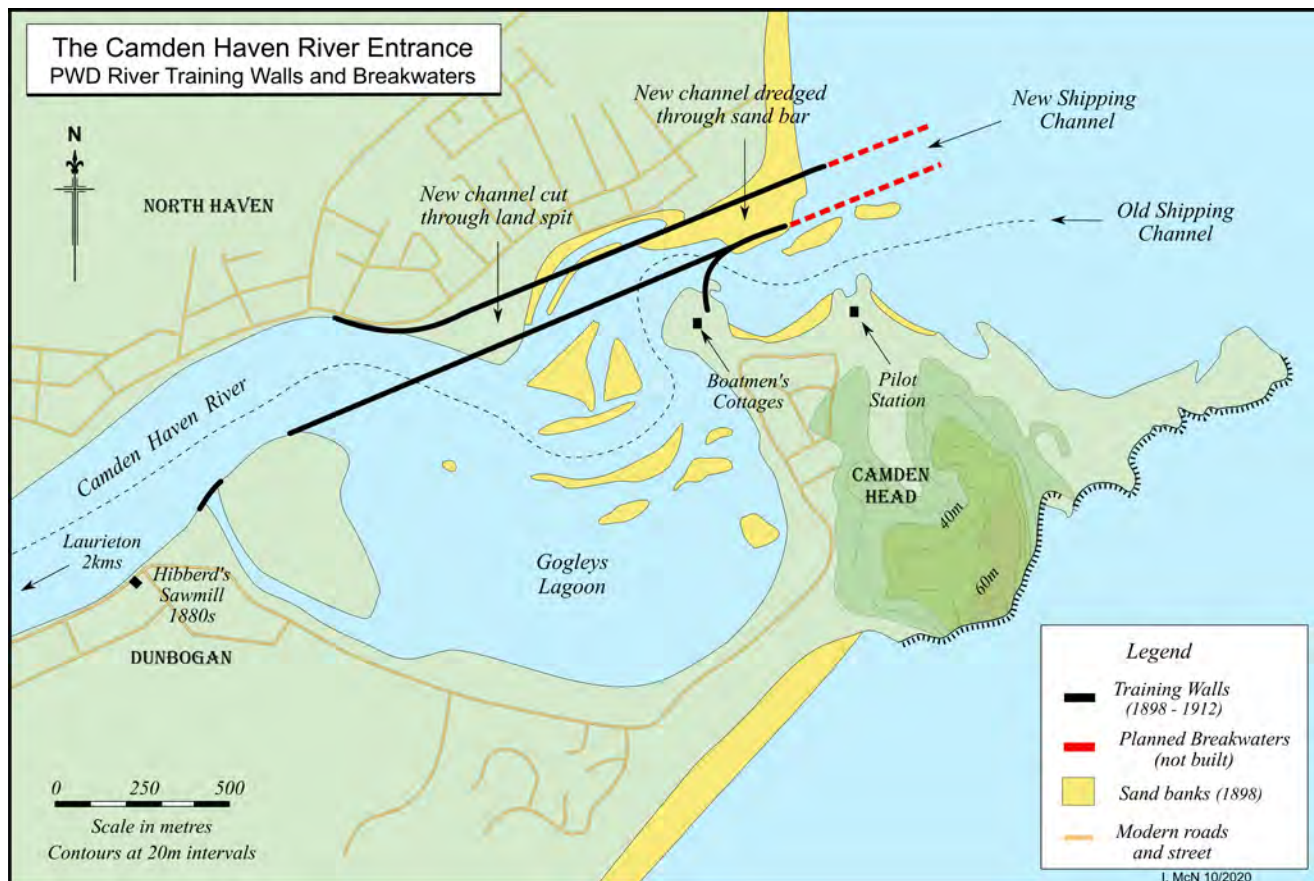
The river system is notable for the way in which it virtually encircles the 490-metre high North Brother Mountain, an extinct volcano, that towers above Laurieton. The river has an extensive estuarine floodplain that contains two large shallow lakes, each with a surface area of over ten square kilometres. Queen Lake to the north is fed by Herons Creek one of the river's two main tributaries. Watson Taylor's Lake to the south is fed by the second tributary, Stewarts River, as well as by the Camden Haven River itself.

European settlers were attracted to the Camden Haven district by the wealth of its hardwood timber forests, which contained large stands of blackbutt, tallowwood, blue gum and turpentine eucalypts. Timber cutters ranged the estuarine forests in the early years. Bullock teams hauled felled logs to the banks of the Camden Haven River and its navigable



The rich timber resources of the Camden Haven River attracted sawmillers and settlers to the district. John Rodger was one of the first and he built his mill on the riverbank in the shadow of North Brother Mountain just south of Laurieton. In this c1885 photo, several shallow-draft ketches and schooners wait their turn to load sawn timber from the mill. The future quarry wharf, at the foot of the incline tramway, will be built 100 metres downriver (off to the right) in 1898.

Photo: Camden Haven Historical Society



Early shipping had to negotiate shifting, shallow channels through the Gogley's Lagoon sandbanks to enter the Camden Haven River. Between 1898 and 1912 the PWD constructed stone training walls and short breakwaters to straighten and deepen the entrance channel. The breakwaters did not solve the problem of a shallow offshore bar. Shipping was still delayed, often for weeks at a time, until one of the PWD's big ocean-going bar dredges could be spared to dredge a channel across the bar.

tributaries. Steam punts and droghers plied the waterways to bring these logs to four large sawmills which were established on the lower reaches of the river during the 1890s.

There was no rail link to the district until the NSW North Coast Railway reached nearby Kendall in 1915, so all the mills' sawn and hewn timber products were shipped out by sea. This trade was greatly hampered by the unprotected nature of the shallow river entrance. Its tortuous and sandbank-laden channels were navigable only by the lightest class of sailing vessels and steamers. The river was sometimes closed to shipping for weeks at a time when the entrance bar shoaled.

Not surprisingly the district's settlers and sawmillers began petitioning the NSW Government to effect improvements at the river entrance for shipping from an early date.

The Camden Haven River Entrance Improvement Scheme

In response to this agitation, the PWD began work in 1897 on a modest scheme of harbour improvements at the mouth of the Camden Haven River. Two parallel river training walls, 400 ft apart, were planned in order to straighten the main river channel. The walls were to extend another 2,000 ft into the sea to form breakwaters. The aim was to confine the river's flow into a single straight channel and to use the scouring effect of river currents and tidal flows to maintain a navigable depth of water inside it.

Granite stone for the training walls was sourced from a new quarry opened up at Laurieton, some one and a half miles upriver. It was transported to the construction site in wooden punts that were towed downriver by a chartered steam tug. The walls were constructed by the simple expedient of labourers

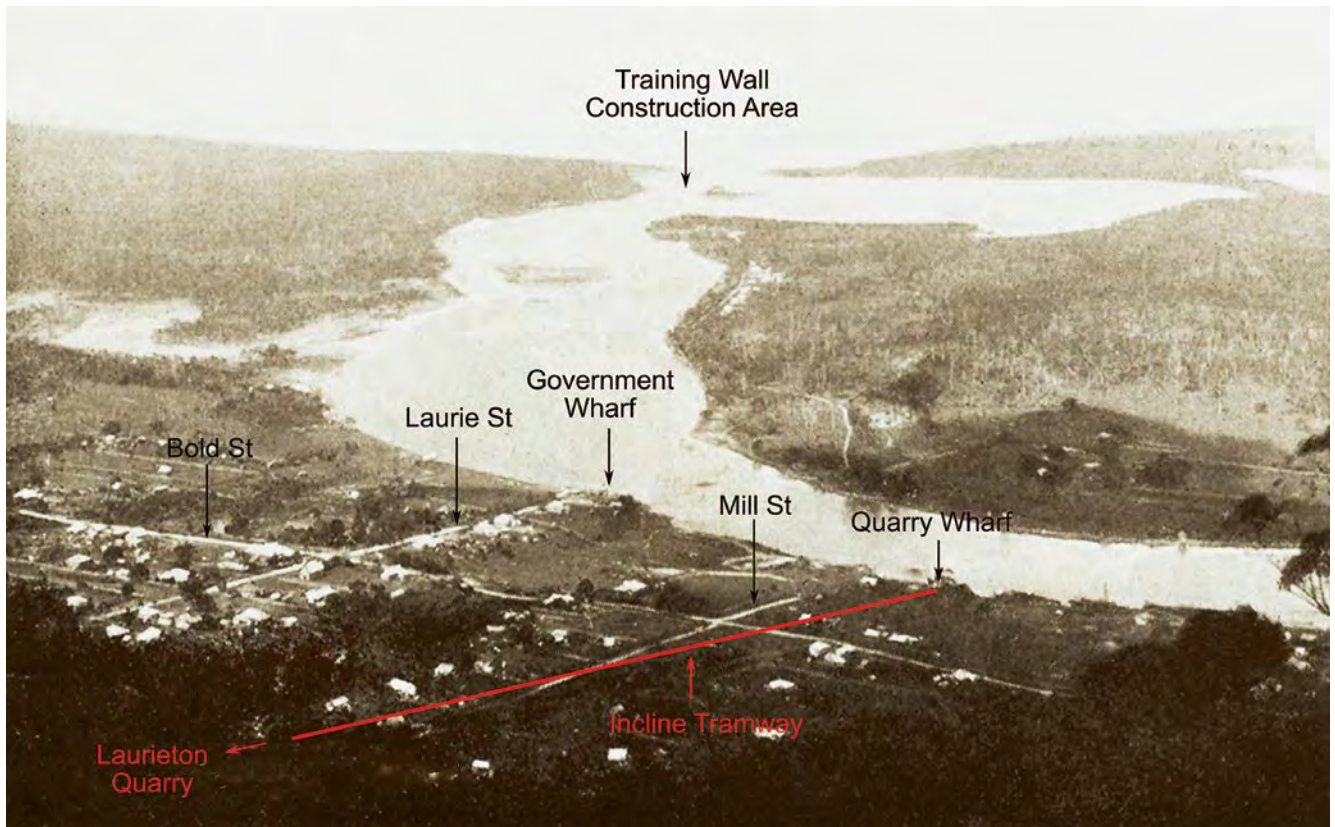
dropping quarried stones overboard onto the shallow bed of the Camden Haven River.

Wall construction started at the river end, opposite present-day North Haven, and extended seawards. A large part of the early work involved excavating a new channel through extensive sandbanks and a protruding tongue of land on the north side of the river. The PWD's combination suction and grab dredge *Delta* laboured for over 18 months to complete this task.

The north training wall eventually became the new riverbank as the voids behind it were filled with dredged sand. The south training wall was built across the wide mouth of a large shallow estuarine lake known as Gogleys Lagoon.

After William Dawson's fatal accident in 1901, training wall construction was subjected to lengthy suspensions of work due to a recurring shortage of funds and came to a complete halt in March 1903. Some 130,000 tons of stone had been used to extend both walls about 4,000 ft towards the river mouth. Neither of the breakwaters had been started. The unprotected seaward ends of the training walls, being constructed with small sized stones, were badly damaged by winter storms during the next two years.

A revised scheme costing £43,650 to complete the work was referred by Parliament to the Public Works Committee in 1903. The Committee rejected it, stating that the small amount of trade generated by the Camden Haven district did not warrant such a large expense. However, it did recommend spending £4,000 to repair the southern training wall and to construct a short 350 ft breakwater to protect its outer end. This breakwater was constructed with heavier stones to withstand storm waves. A crane-wharf mounting a 10-ton steam crane was erected beside the southern wall.

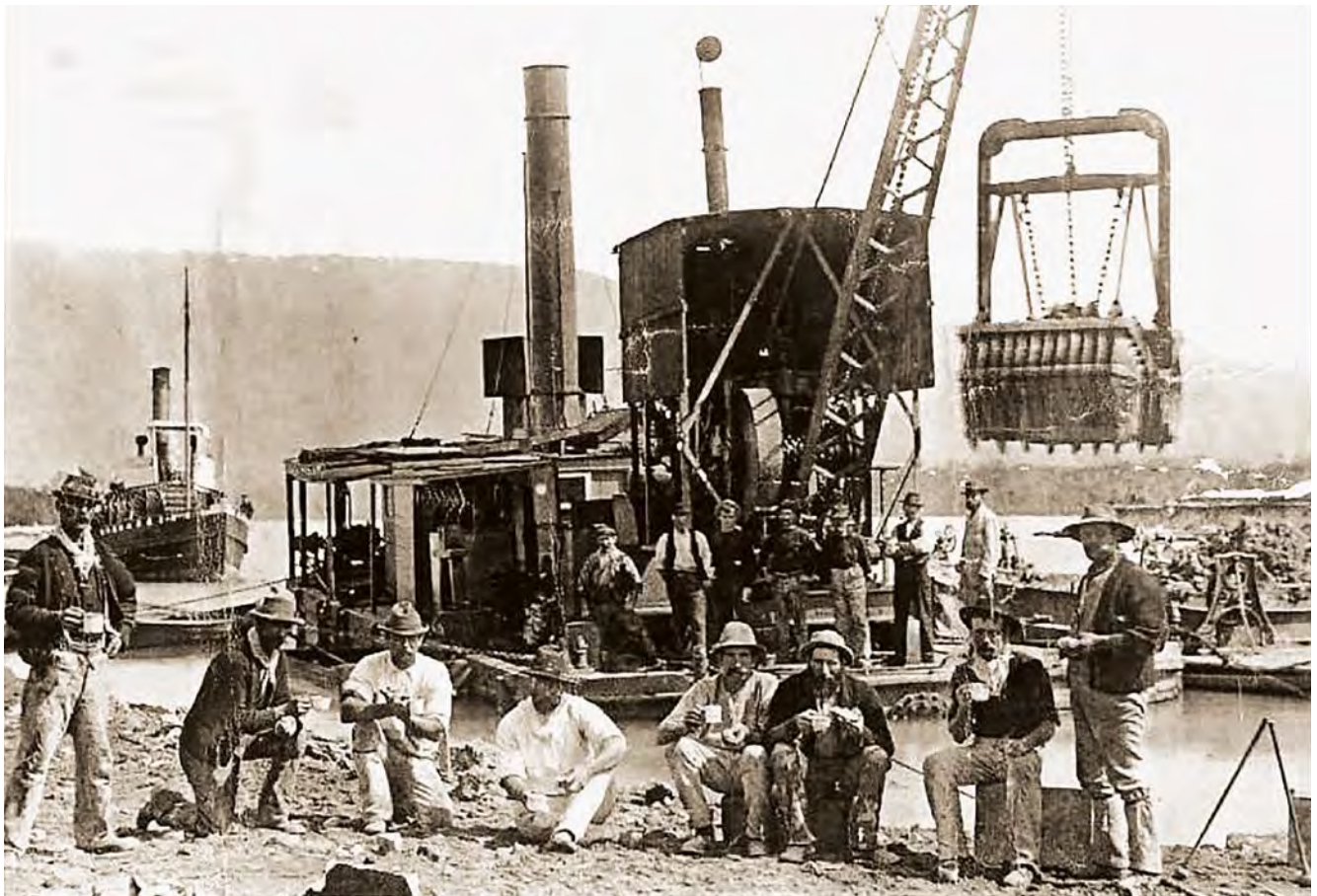


Above: A pre-1898 view of Laurieton and the Camden Haven River before the construction of training walls at the river mouth. The future inclined tramway (shown in red) ran from Laurieton Quarry to a stone-loading wharf on the riverbank. A steam tug towed stone punts 3 km downriver from the wharf to the construction site.

Photo: Camden Haven Historical Society

Below: The PWD stationed the Delta, one of its small combination sand pump and grab dredges, on the Camden Haven River to assist with the construction of training walls at the river mouth. The steam tug hauled the dredge's two mud punts to dispose of spoil and also moved the dredge from site to site.

Photo: Camden Haven River Historical Society



Stones weighing up to 5 tons each were punted down from Laurieton quarry, lifted onto tramway trucks, and hauled out to the tip face by a horse. This task was carried out between October 1906 and February 1907.⁶

This still left the river entrance in an unsatisfactory condition. Lacking a protective northern breakwater, large quantities of tide-borne sand from beaches north of the river were continually swept into the main channel. Shipping continued to be delayed due to shoals and shallow water. In response to repeated complaints from shippers and sawmillers, principal assistant engineer Ernest de Burgh admitted there was little the PWD could do until the northern wall was lengthened.⁷

Three years later, in February 1909, the NSW Government approved the sum of £4,000 to extend the northern training wall by 1,500 ft to remedy the situation. Work got underway in July 1910. The steam crane on the southern wall was relocated to a new crane wharf erected at the start of the 1,500 ft extension. Heavy stones up to 12 tons in weight were sent down river from Laurieton Quarry for the job. They were craned onto tramway trucks which were horse-hauled over a light line of rails on top of the wall to the advancing tip-head.⁸

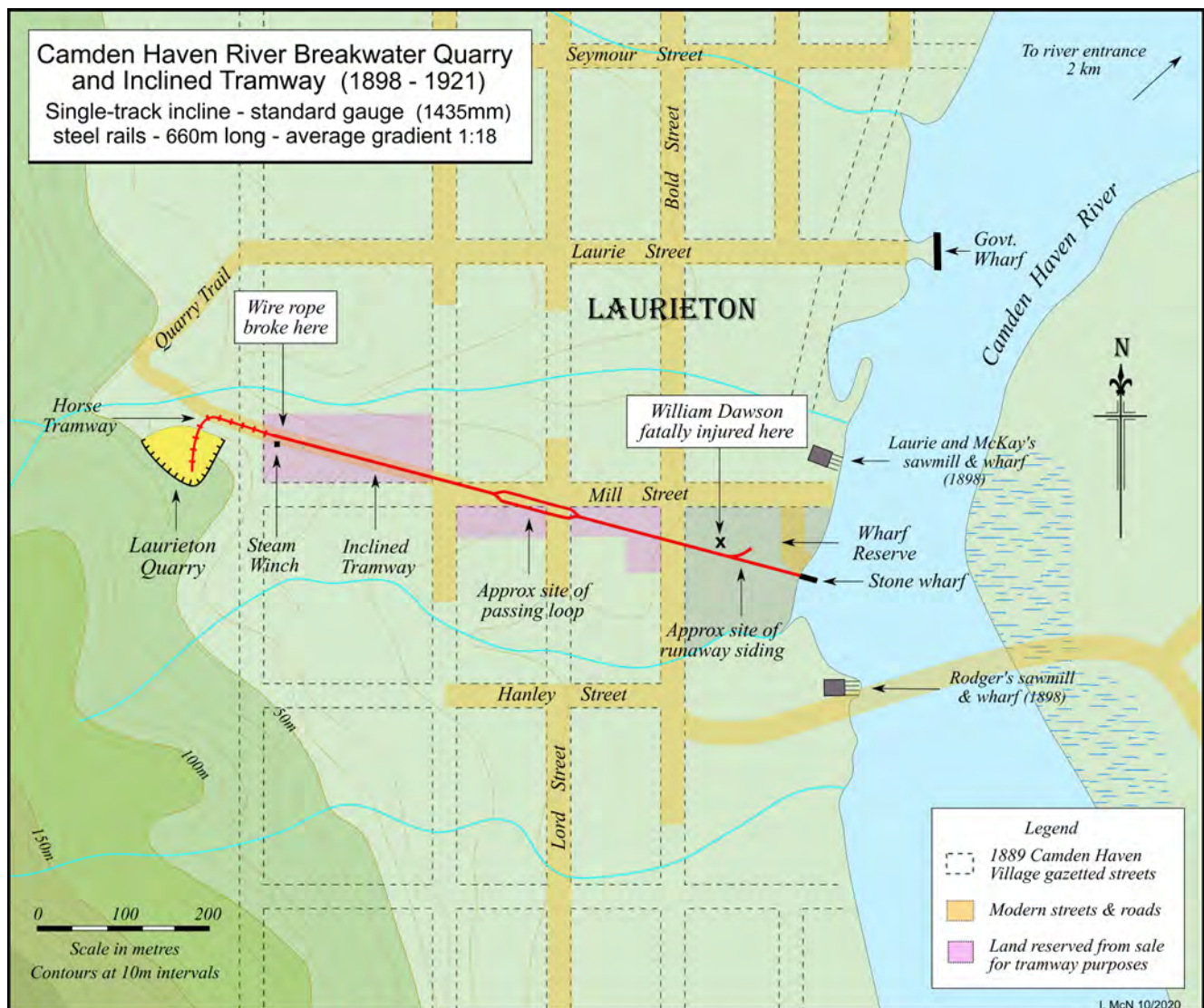
The extended walls improved conditions inside the river entrance but had little effect on the offshore bar. Periodic visits by one or other of the big ocean-going bar dredges, *Antleon*,

Tethys or *Latona*, were needed when the bar shallowed under adverse conditions.

Laurieton Quarry

In October 1897 the PWD began opening up the new quarry in Laurieton which was to supply stone to construct the river training walls. It was situated half-a-mile east of the Camden Haven River, right at the foot of the 1600 ft-high North Brother Mountain that towers over Laurieton. The mountain is a 300-million-year-old extinct volcano composed of microgranites – hard, medium-grained, intrusive igneous rocks – which were well suited for training wall and breakwater construction purposes.

The quarry was located in the mouth of a small mountain gully near the head of the present-day Mill Street. A working face was driven into the steep hillside on the south side of the gully. A donkey boiler was placed on the hillside above the quarry face. It powered the steam drills used to bore vertical holes behind the face for dynamite charges. Granite is a very hard rock and drill bits did not remain sharp for long. The quarry blacksmith was kept busy repeatedly sharpening drill bits, there being no tungsten-tipped drills in those days. The quarry was quite small by modern standards. Today the floor measures some 300 ft long by 200 ft wide, but the sheer granite walls on two sides are nearly 100 ft high.



The incline tramway crossed gazetted streets and reserved land between Laurieton Quarry and the stone-loading wharf on the riverbank. Earthworks were minimal and the line was able to follow the lay of the land on an even 1:18 grade down to the riverbank.

A local newspaper correspondent described the scene at the quarry in early 1901, three years after operations began:

The work at the quarry has quite changed the aspect of the North Brother Mountain. Where three years ago was a gradual slope is now a cliff eighty feet deep, a sheer face of precipitous rock, at the foot of which a small army of workmen are busy loading trucks with the stone detached by blasting. It is taken to the breakwater by punts, towed by a small tug called the "Possum," and at times, owing to the strong winds, narrow passage, and confined current, it taxes the skill of the master, Captain Horn, to avoid accident.⁹

Quarry operations were dependent on training wall construction and were subjected to the same work stoppages when funding dried up. The first phase of quarry operations lasted five years, from March 1898 to March 1903. During this time, the quarry produced 130,000 tons of stone in sizes small enough for men to handle manually when loading quarry trucks and then throwing overboard from punts to construct the walls. The work was hard and labour-intensive. Any large stones blasted out from the quarry face had to be hand-spalled – broken up into small pieces by quarrymen using hammers and wedges.

Loaded quarry trucks were marshalled into rakes of four and lowered by steam winch down an incline tramway to the quarry wharf half-a-mile away. Their contents were tipped down chutes into waiting punts, which were towed two at a time by steam tug down to the river mouth.

The quarry was re-opened in April 1906 when breakwater construction started. Changes were made because larger and heavier stones were required. A 10-ton capacity steam crane was installed in the quarry to load tramway trucks, replacing manual loading. Another crane was installed down at the wharf to lift stones into the punts.

By the time breakwater construction finished in June 1912, the quarry had produced another 137,000 tons of granite stone. By then the PWD reported that the quarry was nearly worked out.

The final phase of quarry operations took place more than fifty years later, between 1968 and 1972. Laurieton Quarry was reopened to supply stone to construct the prominent breakwater walls that project into the sea today. These were constructed as part of the NSW Public Works fishing ports program to provide boat harbours, wharves, entrance works and other facilities for several of the State's small coastal rivers. This time however, instead of tramways and punts, lorries were used to transport the stone by road to the river mouth.

Laurieton Quarry's Inclined Tramway

The PWD constructed an inclined tramway to transport stone from the quarry to the riverbank. A line was surveyed through the southern portion of the gazetted village of Camden Haven (present-day Laurieton). Three blocks of land within the village – a total of 6½ acres – were reserved from sale in February 1898 to allow for tramway construction. The remainder of the route crossed gazetted streets and Wharf Reserve 2228 at Hanley Point.

The inclined tramway was 2,160 feet long and ran in a straight line down a steady 1:18 grade to a stone-loading wharf on the west bank of the river. Earthworks were minimal as the line followed the lay of the land down a gentle slope to the river. The wharf was a small structure built from quarried stone. It crossed the low-tide mudflats bordering the river and projected a short distance into deeper water.

The tramway was a standard-gauge, single-tracked line. A two-drum steam winch situated at the top of the incline was used to lower a rake of four loaded trucks down the incline



The North Training Wall was extended a short distance upriver when the ocean breakwaters were constructed between 1968 and 1972. Laurieton Quarry was re-opened to supply stone but this time road trucks were used to haul and dump stone. The south breakwater at the river entrance can be seen in the distance.

Photo: Camden Haven River Historical Society



The Camden Haven River entrance with North Haven township seen on the right and Gogleys Lagoon on the left. Laurieton is in the background, under the shadow of North Brother Mountain. The PWD constructed training walls to straighten the river channel between 1898 and 1912. The prominent breakwaters were added during the 1968-1972 period.
Photo: Newcastle Herald

to the wharf while simultaneously pulling four empty trucks back up to the top. Presumably there was a passing loop at the mid-way point to allow loaded and empty rakes to pass each other.

Normal practice was for four loaded trucks to be horse-drawn one at a time out of the quarry to level track at the top of the incline. The four trucks were coupled together to form a rake and the winch rope was hooked onto the rear wagon. A horse was hitched to the rake to give it a pull to get it moving onto the transition grade ahead of the incline. Once the trucks were moving under their own steam, the horse was unhitched, and the winch driver took up the strain on the haulage rope and lowered the trucks the rest of the way down to the wharf.

Down at the wharf, loaded trucks were detached from the winch cable and another horse was employed to move them to the chutes where their contents were tipped into waiting punts. A shallow-draught steamer, under contract to the PWD, towed two loaded punts at a time down to the training wall construction sites and returned with two empty ones.

A breakaway siding was located near the bottom of the incline. It seems to have been ineffective as a safety device meant to protect the wharf from runaway trucks. There were three recorded runaway events and two resulted in rakes of loaded trucks speeding down the line and smashing into trucks on the wharf. The first occurred in May 1898, just weeks after operations began. A rake of four loaded trucks broke away and sped down the line “at a terrific rate” to smash into empty trucks at the wharf.¹⁰ The second incident, in February 1901, also involved four loaded trucks breaking away and speeding down the line; this one cost William Dawson his life when the trucks derailed before reaching the breakaway siding.

The third runaway occurred on 18 December 1902, less than 12 months after William’s death. Four loaded trucks were drawn out of the quarry and placed in position at the top of the incline. There was an unspecified mishap and the trucks took off down the hill. The haulage rope could not take the strain and snapped. The trucks careered down the incline and collided with four empty trucks standing on the wharf, propelling them into the river. This time, fortunately, no-one was hurt.¹¹

The inclined tramway continued in use until wall construction and maintenance work finished in mid-1912. It was re-laid with heavier rails – believed to be 60 lb/yd – in 1905.¹² It also may have been re-laid as a double-track incline at this time – if anecdotes related by employees’ descendants are correct.

The tramway’s last recorded use occurred in July 1913 and was rather unusual. The nearby Belmore Hall, a 60 ft x 25 ft wooden building owned by Longworth’s Limited, was placed on large square girders and skidded down the tramway, onto the wharf and loaded onto the steam punt *Laurieton*. It was taken upriver to Kendall and offloaded to serve as a goods shed for steamer cargo.¹³

The end for the tramway came in November 1921 when the rails were pulled up and sold to Longworth’s Limited for the extension of its Kendall to Comboyne timber tramway.¹⁴

The Quarry Tramway Accident

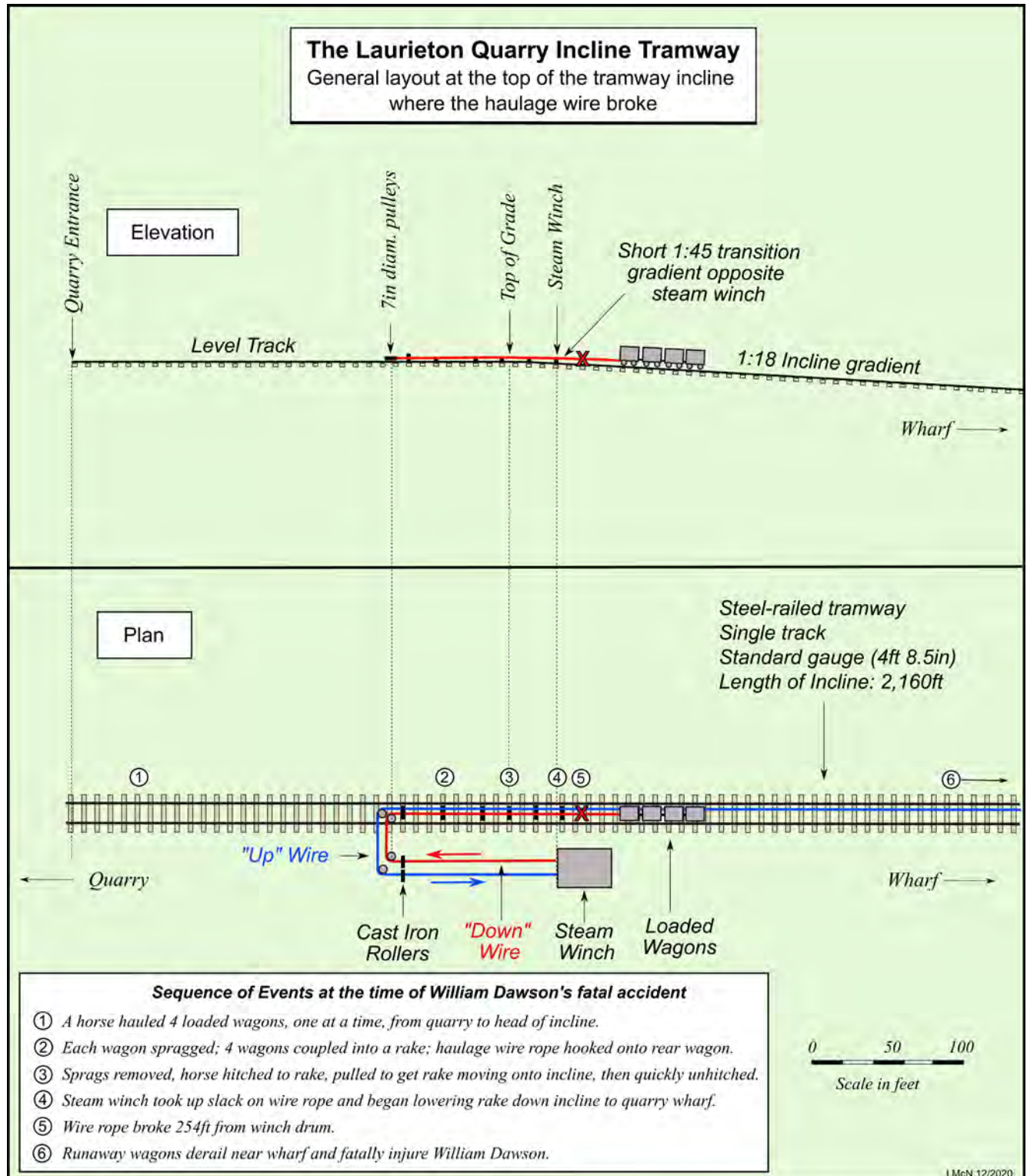
Monday 11 February 1901 began as an ordinary working day at Laurieton Quarry – the first day of the working week. During the morning hours workmen broke up large blocks of stone that had been blasted from the quarry face and filled tramway trucks with small sized stone. After the lunch break preparations got underway to begin lowering loaded trucks down the inclined tramway.

The steam winch lowered the first rake of loaded trucks down to the wharf without incident, but disaster struck when the second rake was started downhill. It had only travelled about 60 feet when the haulage rope snapped and the trucks began accelerating down the 1:18 incline. Winch driver Alex Munro immediately sounded the danger signal, nine blasts of the steam whistle in quick succession.

Down at the wharf, tip-man William Dawson and points-man Griffith Edwards were working inside a punt.

When they heard the engine whistles, they knew immediately what was wrong. Alex Munro had warned them during the lunch hour to be on the alert for the danger signal. He told them that he expected to have to blow it any day because the haulage rope was in a dangerous condition.

Griffith Edwards shouted out to William Dawson, "Look out Bill, they're coming!" Both men scrambled out of the punt. William got out first as he was closest to the punt's manhole. Griffith was hard on his heels and asked if William



The steam winch was situated just below the top of the incline tramway. This required the two haulage ropes to make tight turns round small pulley wheels in order to couple and uncouple with trucks on level track at the top of the incline. These tight turns caused individual wires to snap which slowly weakened both ropes. On the day of the accident a rake of loaded trucks weighing 14 tons started down the incline. The weakened down rope couldn't take the strain and snapped.

could see the trucks. William saw the rake of trucks speeding down the line towards them and called out to Griffith, "Yes, they're coming. For God's sake get yourself and your horse out of the way as soon as you can!"

While Griffith was getting his horse off the wharf and away from the rails, William ran up the line towards the points to turn the runaway trucks into the breakaway siding. He reached the points ahead of the trucks and leaned his weight on the lever to change the points.

But before the trucks reached William, they had to pass another set of points (possibly the points at the lower end of the crossing loop?). One of the leading wheels apparently struck the end of a protruding fish-plate and jumped up onto the top of the rail. It travelled for some three yards before coming off and derailing the first truck. That truck capsized and broke up; the other trucks followed it and shared the same fate. One of the cast steel wheels fractured and a large piece struck William Dawson's leg and broke it. The points lever whipped back onto William's other leg and broke that in two places.

A shocked Griffith Edwards and William Belton, a local fisherman, were first on the scene. William Dawson, who was still conscious, said to them, "Oh, my legs are broken. Don't touch me! That *** man (the foreman) was told about that wire this morning." Other workmates rushed to his aid and he was carried gently to the verandah of his house, less than 100 yards away, where his distraught wife who had seen the runaway trucks speeding past her house had fainted from shock.

William told his workmates that he had tried to get to the points to turn the trucks on to the breakaway road. If he had not tried to do his duty, and turn them off, he said the foreman (Arthur Doughty) would have got on to him, and he would probably have got the sack. He said to Griffith, "You know how things have been going with me and Doughty lately."

Dr Dick, a local insurance doctor, was sent for and was soon on the scene. He bandaged William's badly injured legs and made him as comfortable as possible. A telegram was sent to alert Dr Gormley at the Manning River District Hospital, Taree, and preparations were made to get William there.

The small coastal steamer *Kincumber* was anchored just offshore, waiting to cross the bar into the river. Captain George de Fraine, the ship's owner, offered to take the sufferer by sea down the coast to the mouth of the Manning River and then upriver to Taree – if they could get William out to the ship. Unfortunately, the bar had shoaled recently and was too shallow for shipping to enter or leave the river. Neither could the resident steam tug *Possum* get William out to the *Kincumber*.

Instead, four young men – William Gibbins, John Southwell, Joseph Southwell and Peter Twomey – rowed William, his wife and his workmate Griffith Edwards in a small boat up the Camden Haven River. They crossed the wide expanse of Watson Taylor Lake and went up Stewarts River to the Taree road bridge at the small village of Johns River. They were subsequently awarded seven shillings each by the NSW Government in recognition for their efforts, which they spontaneously donated to William's widow.

A horse-drawn wagonette was waiting for William at Johns River and took him the remaining 22 miles by road to the Manning River District hospital at Taree. He was admitted at 2am on Tuesday morning after an eleven-hour journey from Laurieton. Dr John William Gormley, the resident Government Medical Officer, had been out of town when the telegram arrived. He got back at 7am and immediately examined William. He concluded that both his legs were so badly crushed that his only option was to amputate; the right

leg at mid-thigh and the left leg just below the knee. William was still conscious at this stage and when told of the diagnosis at once told Dr Gormley that he placed himself in his hands.

William was taken to the operating theatre and placed under an anaesthetic. His last words to his wife before he went under were, "I did my duty, and the Government is responsible." Dr Gormley performed the dual amputations with the assistance of two colleagues, Dr Kelly and Dr Curtayne. Dr Gormley told the subsequent inquest that the patient recovered very well from the anaesthetic, though suffering very much from shock. Up to six o'clock there seemed some hope of him living. Then he began to sink. He collapsed about half-past six, and died about seven. The funeral took place the following day and he was buried in the local Woolla Cemetery in Taree.

The Coroner's Inquest at Taree

On Wednesday 13 February 1901, the day after William's death, the Taree District Coroner, Mr Thomas Burnham Boyce JP, commenced an inquest at Mrs McMahon's Steam Packet Hotel in Taree. Police Sargeant Patrick Hogan was in charge of the case and he empanelled a jury of twelve local townsmen.

On the first day of the inquest, the jury went to the hospital to view William's body. Dr Gormley gave evidence as to the extent of William's frightful injuries, the operation to amputate his legs and his subsequent death. Then Annie Dawson gave her version of the events during the afternoon of the accident. She said her husband told her the haulage rope was unsafe as he left home to return to work after lunch; she heard the emergency whistle signal from the quarry; she saw the runaway trucks rush past; she fainted from shock and when she came to, she saw her badly-injured husband being carried to her house. She travelled with him to hospital and his last words to her before he went under the anaesthetic were "I did my duty."

The Coroner then adjourned the inquest until the following Monday (18 February 1901) to obtain the attendance of the necessary witnesses from Laurieton. When the inquest was reconvened, the evidence given and questions asked during the next two days were focussed on the steel wire rope that snapped and caused the fatal accident – how was it used, what condition was it in and who was responsible for it.

Horse-driver Samuel Newell and the winch-driver's assistant, Malcolm Eggins, described what happened at the top of the incline. Newell said his duties were to draw loaded trucks out of the quarry and take empty ones back in. While he was preparing the second rake of four loaded trucks for the incline, Eggins made ready to attach the hook at the end of the haulage rope onto the rear wagon. Newell noticed that half the strands of the wire rope appeared to be broken. Arthur Doughty, the foreman, came back from the quarry as he was standing there so he said to him, "The rope is broke." Doughty asked which one and Newell told him "That big wire rope." Doughty said nothing and walked on back to his office. Eggins then said to Newell, "Go on," so Newell started the trucks down the incline and unhitched his horse. The trucks had only gone about 60 feet when the rope parted. Newell shouted out to Eggins to sprag them but he had gone ahead to turn the points and the trucks rushed past him.

Albert Edward Flavelle, the PWD assistant engineer at the Camden Haven Improvement Works supplied technical details of the haulage ropes at Laurieton. He said there were two ropes in use on the tramway incline; one to lower rakes of four loaded trucks weighing 14 tons down to the jetty, the other to haul rakes of empty trucks up to the quarry.

Each was 2,300 ft long and had a breaking strain of 22 tons when new. Each rope consisted of six strands of 24 wires each with a piece of hemp in the centre of each strand. The rope had broken 254 ft from the drum at the engine and it was 2¼ years old. The previous November a worn section had been cut off one end and a new piece was spliced on. He had then requisitioned a replacement rope but the PWD did not keep spare ropes in stock so tenders had to be called for a new one. At the time of the accident the replacement rope was waiting on board the steamer *Kincumber*, which was anchored offshore. It could not cross into the river because the bar had become too shallow.

Steam-winch driver Alexander Munro gave evidence as to the rope's condition. He had been directed to splice a new section into the rope the previous November, and had needed to tuck the ends of the splice back into the rope on several occasions since. The last occasion was the day before the accident. He told the inquest that the rope had to pass around two 7-inch pulley sheaves and wind onto a 12-inch diameter winch drum. It was not flexible enough for such small sheaves which accounted for the wires of the rope breaking so much. He knew from his experience with ropes that the one in use would not last long, and had previously informed foreman Arthur Doughty that it had frayed for a considerable length and was not fit to be trusted. On the day of the accident Doughty told him to get up steam and lower the trucks down the line. He, Munro, warned Dawson and Edwards during the dinner hour to keep a sharp lookout for the breakaway signal as he expected to have to sound it any day. They commenced working the trucks on Monday afternoon and it was when the second rake was being lowered that the rope broke. The trucks had only gone about 60 feet and were just abreast of the engine house when the rope broke.

The question of who was responsible for checking the condition of the rope was not satisfactorily answered. Both Albert Flavelle, the resident engineer, and Arthur Doughty, the works foreman said that it was Alexander Munro's responsibility. Munro stated that at no time during his employment had he been told that he was responsible for the rope – his duties were to look after the engine, fire the boiler, and keep it in repair.

Arthur Doughty said that his own duties were to see that the men used the appliances to the best advantage, to obtain the greatest output of stone, and to see that the appliances were kept in proper order. He did not consider it his duty to look after the rope unless his attention was directed to it. He admitted that he knew the rope was in a frayed condition with a number of wires broken but considered there was not a great deal of wear and tear on it and that it was in a fit condition to be used on the tramline. He had not examined the rope for about a month before. He thought that Eggins' comment to him that the rope was broke referred to the ends of the splice fraying out again. He denied telling Eggins and Newell to say nothing about the rope after the accident.

The Coroner was in no doubt as to who was responsible for the bad state of the rope. In summing up for the jury, he said; Personally, he was strongly of opinion that the foreman, Arthur Doughty, was the responsible person, and that he should have examined the rope when Munro sent two messages to him; and also just before the accident, when Newell told him the rope was broken, as the trucks were then stationary, according to the evidence of Munro, Newell, and Eggins. The trucks could then have been prevented from being lowered by a word from the foreman, and there appeared to him to have been great carelessness and negligence in this not being done. He quoted portions of the evidence — chiefly from that given by Mr. Flavelle— to show

this it was Mr. Doughty's duty to see that all the appliances were kept in proper order, and that he had hardly ever examined the rope, and had not reported its condition to his superior officer. He read out the law relating to cases of manslaughter, through the performance of lawful acts in a careless and negligent manner, from Lord Jervis' 'Office and Duties of Coroners,' and then asked the jury to consider their verdict.¹⁵

The jury agreed with the Coroner and found that Arthur Doughty had committed a grave error in allowing the trucks to proceed after his attention had been called to the unsafe condition of the rope, he being the responsible person. Their verdict included the following recommendations:

We are strongly of opinion that the Government should direct the resident engineers to exercise more supervision over the entire works of this description — as such serious matters, involving scientific skill, require more care in their supervision, so as to prevent incompetent persons being placed in positions where engineering skill is required; and that in works of this description the various officers should be emphatically informed of their several duties. ... We consider that the lever at the breakaway point is too close to the line to be worked with safety, and that it should be removed to a greater distance.¹⁶

The Coroner bluntly asked if the jury, by its verdict, desired to have the foreman of works punished, but they replied that they did not. Arthur Doughty could therefore consider himself very lucky to avoid criminal charges. But after having been accused of carelessness, negligence and incompetence at the inquest, it was unlikely that he would have continued in the employ of the PWD.

The Modern Scene

Very little remains of the incline tramway that transported over a quarter of a million tons of granite rock to construct the Camden Haven River training walls. The straight and evenly-graded Quarry Trail, at the head of Mill Street, follows the path of the top of the incline and the connecting horse tramway to the quarry. In the riverside park below, a double row of stately trees marks the lower end of the incline where it crossed the old Wharf Reserve. The stone-loading wharf disappeared years ago when the riverbank was reclaimed for the Fishermen's Co-operative and fishing trawler wharfage.

The permanent mementos include the quarry with its striking vertical granite walls, and the river training walls near the mouth of the river. Although these walls have been reinforced and repaired several times since first constructed, the small-sized stones laboriously hand-thrown from punts can be seen at low-tide at the base of the walls in several places.

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The double row of stately trees behind the parked cars marks the route of the incline tramway across the old Wharf Reserve. The original riverbank lay behind the cars. The area in front, where the old Quarry Wharf was situated, has been reclaimed and today is occupied by Laurieton Seafoods and wharfage for Camden Haven River fishing trawlers.
Photo: Ian McNeil

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Isis Sugar Mill rail update

by John Hoyle



Isis Central Sugar Mill's new railway to Duingal, south of Wallaville, is seeing its first commercial traffic during the 2021 cane harvesting season. On Tuesday, 27 July, the mill's No.5, 84 wagons and brake wagon No.5 traverse the line in heavily timbered country adjacent to Loeskows Road on their way to the new truck dump yard at Duingal. No. 5 was formerly Queensland Rail's 1969-built Walkers DH35, rebuilt and gauge-converted by Isis Mill's workshops in 1998. Construction is continuing north of the Duingal yard towards the southern side of the Burnett River but no work has commenced on the proposed line to near the McLennan Drive bridge over the Burnett River, on the opposite side of the river to Wallaville. Photo: John Hoyle

Childers-based Isis Central Sugar Mill's (ICSM) investment in rail infrastructure has created considerable interest in that it is being carried out at a time when the world sugar industry has been experiencing low prices. In the Australian context this has resulted in some farmers, especially in the Bundaberg region where the Isis mill is located, to move to alternative higher-value crops such as macadamias and avocados. Lower rainfall in recent years has also reduced sugar cane growth and the lowering of the Paradise Dam wall on the Burnett River following concerns over the wall's stability has created water supply uncertainty for some cane growers (and other farmers) in the Bundaberg region. While world sugar prices have increased in recent months farmers continue to exit the industry – not good news for sugar mills which need volume to be economical. It is this quest for higher volumes that led ICSM to make a significant investment in the construction of a 39-kilometre railway from Cordalba to Duingal, south of Wallaville, despite uncertainties surrounding the industry. The railway is designed to reduce transport costs by eliminating truck hauls along the Bruce Highway to the mill and enable ICSM to capture more cane from farms that may have sold their cane to competitor Bundaberg Sugar in the past. A former sugar industry insider told *Railway Digest* that excluding capital costs rail transport of cane offers significant savings compared with road haulage costs.

The railway's construction commenced in November 2019 with the hope that it might be completed for that year's cane harvest which normally commences in June. That target proved to be very ambitious despite the use of contractors assisting ICSM staff as a significant amount of earthworks and bridge construction were required. It was not until May this year the line was essentially completed to a new truck dump (transfer) yard at Duingal, adjacent to McLennan Drive (the

former Bruce Highway). This yard comprises a loop and five dead-end sidings which are designed to accommodate the transfer of rail wagons "piggy-backed" on trucks to the siding by aligning tracks on the truck with rails at the end of the siding. The transfer yard is also designed to receive cane directly from bins that accompany harvesters. Their contents are tipped directly into wagons in the sidings.

At the start of August rail construction was continuing north of the Duingal truck dump yard with track laid for around one kilometre north of the yard and formation work is continuing north towards the southern bank of the Burnett River. No work has commenced on the branch that was to junction north of the Duingal yard and terminate just short of the McLennan Drive bridge over the Burnett River to Wallaville and the proposed short spur at Marule to load cane from the Booyal area has not been built (see map opposite).

During the Duingal line construction two developments occurred that have had an impact on the Isis Mill's fortunes. In late 2020 Bundaberg Sugar announced it was closing the Bingera mill because of declining volumes and centralising all mill operations at the Millaquin mill, located on the south side of the Burnett River at the eastern edge of Bundaberg. As the Bingera mill is on the north side of the river Bundaberg Sugar has had to implement a rail/road/ rail operation with former Bingera cane railed to sidings near the former Fairymead mill where rail wagons are "piggybacked" to Millaquin mill and then placed on rails to access the unloader. This is obviously not an entirely satisfactory arrangement and Bundaberg Sugar has been calling on government assistance to provide a "portable" bridge across the river during the cane season. The increased costs incurred by Bundaberg Sugar may help ICSM acquire cane from the former Bingera area using the Duingal line's lower transport costs.

Around the same time as the Bingera mill closure announcement MSF Sugar, owners of the Maryborough mill, announced its closure. Maryborough mill relied entirely on road transport for its cane supply so MSF Sugar entered in to an agreement with ICSM to enable its cane supply to be diverted to the latter's mill. A transloader (road to rail transfer) has been constructed on the Doolbi line adjacent to Goodwood Road on the southern outskirts of Childers. Trucks arriving at the transloader drive up on to a platform where their cane is tipped in to bins which in turn drop cane in to rail wagons below. Cane from the remaining cane farms in the Nambour area is also trucked to the transloader.

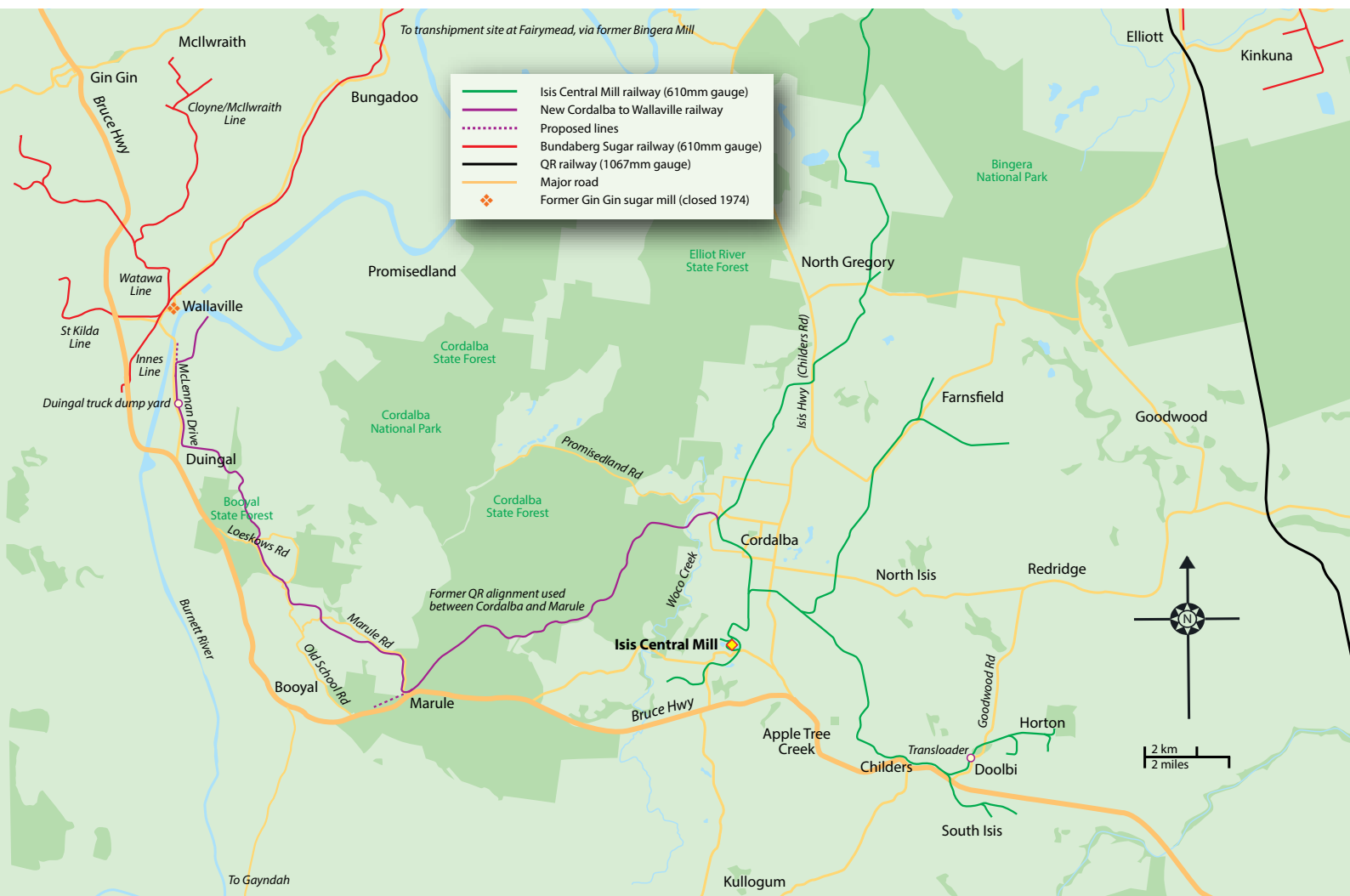
It has been a financial challenge for ICSM to build around 38 kilometres of new railway and the transloader and its associated track work, although the Commonwealth Government made a \$5 million contribution. Resources have been stretched against a background of tight timeframes to complete the two projects and problems have been experienced with the operation of the transloader resulting in truck queues and some of the track on the new railway has had to be rectified. Although the two mill closures should lead to increased volumes, the existing locomotive fleet of nine units is currently handling traffic on offer. The six converted ex-QR DH locomotives (Nos. 1 to 6) perform most of the work although the two EM Baldwin units (Nos. 10 and 11) have been more effectively utilised and the two-wagon ballast train, once powered by the EMB units, is now hauled by the mill's smallest locomotive, No. 9 (Clyde 0-6-0DH B/N 75-812 of 1975).

The ICSM is currently a farmer-owned establishment and

it has previously attempted to obtain outside investment with the mill's board entering in to negotiations in 2019 for the Pakistan-based Almoiz Group to buy a controlling share in ICSM and invest \$35 million into the mill. However, the deal did not proceed. ICSM owns the track and bridges on the former Queensland Rail (QR) Mungar – Monto line between Mungar and Gayndah and has plans to develop cane growing at Gayndah subject to successful trials.

At the Mungar end the mill has proposed a loading point for cane from the Maryborough district. However the project would require the construction of around 54 kilometres of new track to link the Duingal line at Marule with the Monto line near Degilbo, six kilometres west of Biggenden and regauging and resleepering of the former QR track. ICSM also has ambitions to extend the proposed branch from the Duingal line across the Burnett River to Wallaville (site of the former Gin Gin mill closed in 1974) to better tap in to cane from the former Bingera mill's territory.

ICSM's 2019/20 Annual Report reported a net loss of \$9.8 million and indicated that extended drought conditions, competition for farmland from alternate land uses including trees and small crops, uncertainty over the future of irrigation water, low sugar prices, the need to replace a cooling tower at the mill and the failure to obtain outside investment combined to produce challenging conditions and a further loss was expected in the 2020/21 year. It therefore remains to be seen if these ambitious rail expansion plans reach fruition but those following the fortunes of cane railways will be watching with interest.





Above: Isis Central Sugar Mill's new railway to Duingal, south of Wallaville, is seeing its first commercial traffic during the 2021 cane harvesting season. On Tuesday, 27 July, the mill's No. 5, 84 empty cane bins and brake wagon No. 5 have arrived at the six-track truck dump yard at Duingal where the train has been split with the locomotive and one half of the train standing on the far left track while the rest of the train occupies track number 4. Rakes of loaded bins occupy tracks 2, 5 and 6, while No. 5's brake wagon is on the main line. No. 5 will shortly make up a train of loaded bins and take it to the crossing loop, behind the photographer, where the loco will change ends and haul the loaded train to the mill. The yard allows both transshipping of "piggy backed" rail wagons from trucks to rail and direct loading from harvester bins in to wagons.

Below: On the same day as the view above No. 5 is shunting half of its train of empty bins into the truck dump yard at Duingal. The other portion is still on the main line to the right. Photos: John Hoyle





Above: Following the closure of the Maryborough sugar mill last year cane from the Maryborough and Nambour areas is now trucked to a transloader on the outskirts of Childers (on the Doolbi line) where cane is transferred from trucks to storage bins and then loaded in to rail wagons for the journey to the Isis Central mill. In this Monday, 26 July view EM Baldwin No. 11 and its brake wagon have detached from their rake of empty wagons. The brake wagon will be placed on the rear of the train while the locomotive will proceed to the other end of the wagon set. In the right background an empty truck is moving towards the camera. The transloader is located at the far end of the yard. It has experienced some commissioning issues.

Below: In this Monday, 26 July view EM Baldwin No. 11 and its brake wagon are arriving at the transloader yard with a rake of empty wagons that will be shunted to the transloader. A queue of trucks can be seen in the right background. Photos: John Hoyle





Looking towards the mine terminus of the overhead wire electric railway, with Cabbage Tree Hill in the background. The Duke of Edinburgh Hotel is on the left, beyond the horse-drawn wagon. A siding diverges off to the right into the locomotive shed and a siding off to the left has empty V skips stored on it. Note that the empty skips are stored on a siding rising up as it goes. This was because the siding was originally laid in from which to dump the removed material from excavating the adit in to the shaft deep underground. There is a branch going off to the right into Weld St. The photo shows that the tramway crossed over Weld St on the level at a kinked level crossing. Unusually, the tramway points were actuated from harp switch stands, of which three are visible. Such tended to be an American style. Intriguingly there was what looks like a trolley and its tethering cable tied onto the first overhead wire post on the left, next to the tall power pole. If so, I wonder why?

Photo: Beaconsfield Mine & Heritage Centre collection

The Tasmania Gold Mine OHW electric tramway

by Jim Longworth

Gold at Beaconsfield

First known as Brandy Creek after the colour of the water in a nearby creek, Beaconsfield was named after the British Prime Minister, Benjamin Disraeli, Earl of Beaconsfield.

James Gardner found the first gold in the district in a nearby lime pit in 1847 and although subsequent prospecting in the 1850s and 1860s also produced small amounts of gold the finds raised little interest. The Dally brothers worked a small alluvial field along Brandy Creek, north of Cabbage Tree Hill from 1869 to 1871 with little success. Chinese diggers also briefly worked this small field. The discovery of the cap of the Tasmania reef higher up on the range by the Dally brothers in 1877, resulted in the Brandy Creek gold rush, with 700 diggers quickly descending on the field. These initial alluvial diggings, located in the centre of the present township of Beaconsfield, were soon exhausted. The Dally brothers sold their claim on the Tasmania reef in October 1877 to W D Grubb and W Hart for £5,000 and a ten per cent share of the newly formed Tasmania Gold Mining and Quartz Crushing Company. This company soon established itself as the main player on the field.

The Tasmania Gold Mine

The Tasmania Gold Mine began as an open cut into the top of Cabbage Tree Hill. It was soon realised that the gold-bearing reef went deep and mines around them were already being flooded out by groundwater, so they decided to operate through an adit tunnelled into the side of the hill. This would enable them to drop the auriferous stone into the adit tunnel from above, whilst underground called 'stopping', and the groundwater would simply drain out under gravity.

Leases for a battery site, on Middle Arm Creek, where there was an abundant supply of water all year round, and for a tramway route from the mine to the battery were obtained for a term of 21 years, with the right of renewal. By early-July 1878, the tunnel was in about 400 ft, and was of a sufficient width for horse haulage along a tramway from thence, No 1 tunnel, to the battery, which was about 1¼ miles away. The battery was expected to be completed and crushing was to be commenced within a fortnight. A contract had been entered into for sinking the shaft another 100 ft. A water supply dam and water race to the battery had been completed.¹ The tramline from the mouth of that adit is now called West St, Beaconsfield, which is why West St is the only street in Beaconsfield that comes off the highway at an acute angle. All the other streets were planned and are on a rectangular grid.

Mine management soon realised that mining needed to get at the gold reef at a lower level than the then existing one, and began excavating a No 2 adit during October 1879. The tunnel was to be 1100 ft long. The old tunnel, No 1, was

already over 800 ft long and had another 600 ft to run before reaching the mine's boundary. It commanded 170 ft of backs, and the new tunnel would command another 80 ft, giving 250 ft in all. The then present tunnel before reaching the western boundary of the company's land would then extend the great distance of 2800 ft, or over half a mile.

A branch tramway was laid in off the line of the original tramway from the No 2 adit. The stone, after leaving the mouth of the shaft, was tipped into passes, and delivered as required into tramway trucks in a tunnel below.

Battery

By the end of July 1878, obtaining a portable engine had been decided upon, because bricks for a stationary one could not be obtained. The Battery Manager reported that a 16 hp portable engine driving a 10 head battery and appliances had been erected, together with a steam pump and lift. The battery house was being erected and was about two thirds completed. Soon an additional 10 head battery was added to the first, being put into operation in February 1879 and ran day and night.

With increased mining activity, demand for crushing increased beyond the capacity of the existing batteries serving the field. Thus the Tasmania Mine allowed the Florence Nightingale Mine a week's crushing with five stampers after one of its own crushings. Instead of the big

mines amalgamating to form a single company to crush their combined outputs, the Tasmania Mine purchased the 20 head battery from the New Native Youth Company, and arranged with the Golden Gate and Florence Nightingale companies to crush for them, thus saving those companies from having to make calls on their shareholders for capital funds to erect their own individual batteries.

The new battery was to be erected near the then present 20 head battery. A large engine to drive the whole lot was to be placed at the southern end. The new 20 heads would be employed crushing stone from the Florence Nightingale and Golden Gate when required, and when not required the Tasmanian Mine would most likely keep them going.

At the battery, the quartz was tipped into three hoppers, each of which was placed immediately over a Gates' rock-breaker. From these hoppers the quartz was automatically fed by a portable tray to the rock-breakers. These trays, forming the bottom of the hopper, were perforated so that only stone that required breaking went through to the crushers, whilst the fines went directly to a large storage hopper extending the whole length of the battery. From this large storage hopper the stone was allowed to fall through doors into automatic feeders, through which it was fed into the battery. There it was crushed through fairly fine screens, the pulp then passing over amalgamated copper plates, thence over blankets to the concentrating plant, which was built on the Luhrig system.²



Looking at the battery works from the rear after mining had finished, showing the two stamper battery buildings, date not known.

Photo: Beaconsfield Mine & Heritage Centre collection



Undated view of the Beaconsfield battery and reduction works as set out in the attached detail plan, looking from the top left hand corner.

Photo: Beaconsfield Mine & Heritage Centre collection

Tramway

A result of doubling the number of stamps at the battery was an increase in auriferous stone traffic to be carried by the tramway. Thus during mid-1879 the tramway was 'iron plated', ie, relaid with iron rails, to cope with the increased traffic. Due

to the poor condition of the permanent-way and rolling stock, in August 1895, it was decided to relay the permanent-way to suit Bochum trucks. Then only a locomotive would need to be purchased to equip the company with every facility to economically handle the auriferous stone.

The Tasmania Mine No.2 Tunnel, later called the Douglas Street Tunnel, later became the route of the overhead wire electric tramway out of the mine for auriferous stone which was heading off to the battery.

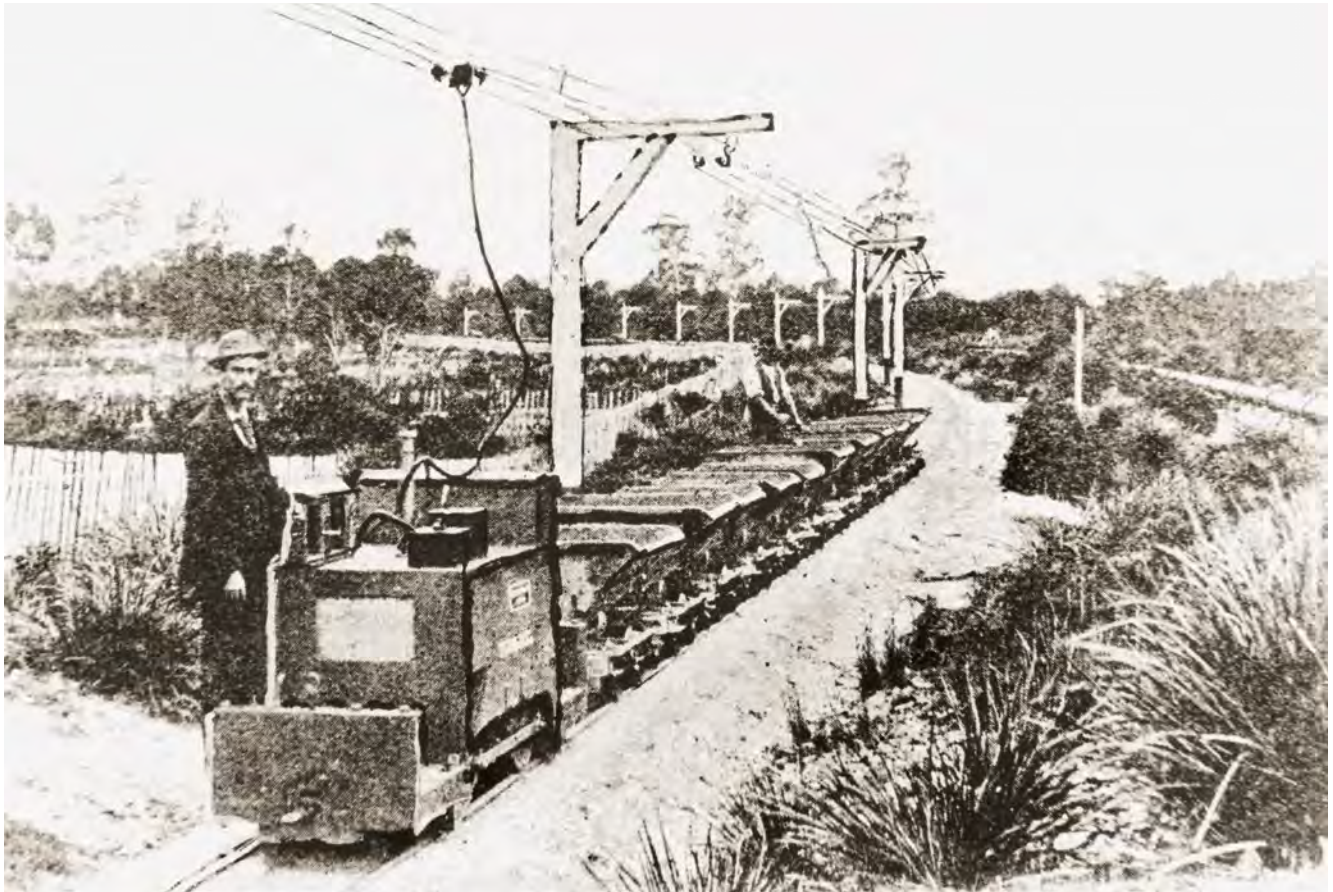
Image: The Graphic, 17 February 1883, <https://www.gettyimages.com.au/detail/news-photo/the-mining-district-of-beaconsfield-near-launceston-news-photo/1053507706>, accessed 30/4/2019





Above: Undated view of the route of the overhead wire electric railway marked by the bright white painted support posts. Photo: Beaconsfield Mine & Heritage Centre collection. **Left:** Piece of rail recovered from the site of the gold mine battery, so quite possibly from the tramway. The rail measures $1\frac{3}{4}$ in high x 1 in wide across the head x 2in wide across the bottom flange which would equate to roughly 12-14 lb/yd. The black and white squares measure 10 mm x 10 mm each. Photo: Beaconsfield Mine & Heritage Centre collection. **Below:** Robert Hudson Ltd V skip and V skip frame on display at the Beaconsfield Mine & Heritage Centre. Photo: Beaconsfield Mine & Heritage Centre collection.





Overhead wire electric locomotive and tram, probably running empty, which if so, the train would be heading back from the battery to the mine.

Photo: Beaconsfield Mine & Heritage Centre collection

Tramway Locomotive

The tender of Messrs Siemens Bros and Co was accepted during August 1896 for 'power to drive the trucks to the battery', which would replace the horses that were then being used. Early the next year, a 2 ft gauge, 4-wheel electric motorised overhead wire locomotive was imported by the Siemens Brothers Company for the Tasmanian Gold Mining and Quartz Crushing Company. It was to transport the gold-bearing quartz from the mine to the battery. The locomotive arrived on Saturday 27 March. On Monday it was put together, and on Tuesday a very successful trial was made on the tram line.



Close up of the overhead wire electric locomotive, described as an 'Electric Motor', and sometimes erroneously in newspapers as an 'electric motor car'. Note the pyramidal timber braces stabilising the OHW support posts. The letters 'TGM&QCC' stood for the Tasmanian Gold Mining and Quartz Crushing Company.

Photo: Beaconsfield Mine & Heritage Centre collection

The little locomotive was built by Siemens-Schuckertwerke GmbH in 1896, B/No 42, and was ordered per Siemens Bros & Co, London. It used twin wires with a 'troller' riding along on top of them, towed by a flexible cable fixed to the top of the locomotive. The locomotive worked on 300V and had an 8.5kw motor.³

Charlie Nott was reputedly a driver.⁴

Worked on Tribute and Closure

By late-1914 the European war was having adverse impacts on Tasmanian mining. Due to working losses, diminished ore reserves, and difficulty in raising fresh capital for future work, the Tasmania Mine was relinquished by its owners.

In response, the miners met and proposed that they, assisted by government, take over working of the mine. The tramway to the battery was an integral component of both proposals. Proposal 2 was to rent to the government at £50 per week the use of the Babcock boilers, steam lines, winding engines, pumping engines, capstan engines, crusher engine, including the buildings in which they stood, ore bins and adit, fitting shop (less one lathe and one screwing machine), smithy, electric light station, all tools in use on the line, all second-hand piping not immediately required at the battery, tramway to Beauty Point,⁵ and all rolling stock, subject to the condition that this company's goods be carried on that tramway at the same price as they had in the past charged themselves. The water-races and dams supplying water to the mine to be included, except that the company were to be supplied free of cost from those dams with boiler feed and makeup water, all mining rights to be included in the rental. This was subject to the government being responsible that the machinery would be handed over to the company on the termination of the 3 year agreement in as good order as they received it, or shall be purchased by them at prices to be



The electrical collector running along the overhead wires, and flexible lead, supplying electric power to the locomotive possibly looked something like the above. Photo: Wolfgang collection

mutually arranged. The company would run the tramway to the battery, and would charge only the actual cost price of running with proper allowance for maintenance.⁶ Within the month, the government had agreed, as did the company Board of Directors, for the company to rent the mine to government – proposal 2.

While the tributers gave up their efforts a few months later in mid-November 1914, the reduction works continued to be operated for several years. Thus the tramway to the battery and its electric locomotive could still have been useful. A number of people inspected the machinery at the Tasmania Mine during December 1914, and it was understood that a firm had bought the electric plant.⁷ Whether this included the battery and its tram was not said.

A decade later: “machinery, building materials, etc” were to be sold off and removed specifically from the old battery site and to be relocated to the Federation Tin N/L machinery site at South Heemskirk during late-1924. Details of a clearance sale at the battery in mid-1927 mentioned ‘light tram rails’; but nothing about the locomotive, so it had likely been disposed of by then. The sale included:

“SECOND-HAND TIMBER AND BUILDING MATERIALS, BEAconsfield; on SATURDAY, 11th JUNE, AT 2 pm, at the Tasmania Gold Mine’s old battery site. Lots will consist of hardwood, oregon, and kauri pine; roof trusses (oregon and hardwood, up to 30 ft. span), two buildings, with corrugated iron roofs and walls, size about 42 ft. x 33 ft. and 39 ft. x 26 ft. respectively, with sashes and doors, sound heavy hardwood, up to 10 x 10 square, lengths up to 40ft.; other sizes comprise 12 x 12,

12 x 10, 17 x 12, and down to 5 x 2 and 4 x 2. Number of light tram rails, 1 roasting furnace, about 20 ft. long built of half-inch plate and 3-inch angle iron.”⁸

Acknowledgments

The considerable help of Nigel Burch, Richard Horne, Julianne Richards of the Beaconsfield Mine & Heritage Centre, and Tony Weston is appreciated.

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2. Tasmania, Report to the Secretary of Mines, 1899–1900.
3. *Launceston Examiner*, 21 August 1896; *Tasmanian News*, 31 March 1897; *Light Railways*, January 1987; January 1988. ‘Imported by’ does not necessarily imply ‘made by’. However, during mid-1895 the Siemens Brothers Co Ltd was engaged to install electric lighting throughout the works, offices, and residence, so both companies had commercial experience in working with the other on electrical matters.
4. Smith, C, 1978, *Town with a History: Beaconsfield Tasmania*, Grubb Shaft Museum.
5. Longworth, J, ‘Revisiting Wyett’s Tramway, Beaconsfield’, *Light Railways* 269, October 2019
6. *Examiner*, 15 May 1914.
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The winch driver's view, looking s-s-e from the top of the incline as the loaded trolley comes into view and nears the last cable roller between the rails. Turtle Bay is the nearest of the two bays. In the far distance is the coast line on the eastern side of Cambridge Gulf. Dated 1963, the re-growth of grasses in the three years since the line was built is apparent as is the scrubby tree cover and rocky nature of the ground. The MV Cape Don is out of picture, to the right, off Turtle Bay.

Photo: National Archives of Australia A1200, L45684

Lacrosse Island lighthouse tramway Cambridge Gulf, Kimberley, WA

by Phil Rickard

In *Light Railways* No.198, December 2007, I included a list of 57 then-known Australian lighthouse tramways, Lacrosse Island being one of them. Since then, I have collected a few random notes on this remote island and its lighthouse but it took Andrew Hennell's letter in the last issue for the Editor to prompt me to put pen to paper!

Lacrosse Island, of 6½ sq km, sits astride the entrance to Cambridge Gulf, from Joseph Bonaparte Gulf and the Timor Sea at the very northern parts of Western Australia. It was sighted 220 years ago, on 16 August 1801 by Captain Nicolas Baudin, and named after Jean-Baptiste Raymond, Baron de Lacrosse, a French admiral.¹ It seems that it was one of the last (if not the last) Australian lighthouse to receive a tramway, sixty years ago, in 1961.

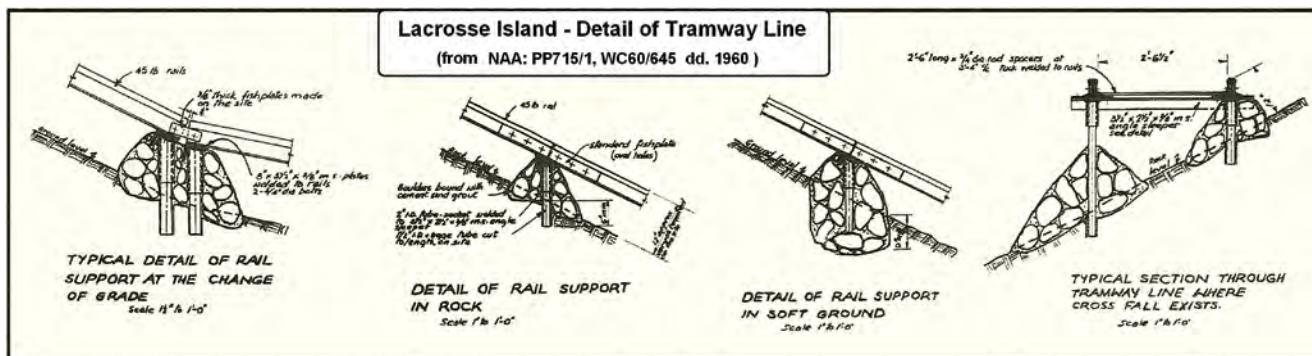
Historically, the island was uninhabited, though Aborigines were known to visit it to hunt turtles. Europeans also took an interest in the said turtles, culminating in several turtle 'kills' in the 1920s. In 1886, the captain of a vessel navigating the Cambridge Gulf to reach Wyndham suggested a lighthouse on the island would make the passage from the sea into the gulf safer² but it took another 75 years for that wish to be fulfilled.

Similarly, in 1912, upon the Commonwealth assuming control of most colonial lighthouses, it was recommended that a manned light be built on Lacrosse – again that came to nought.

Documents at the National Archives of Australia indicate that around 1959 the Commonwealth Lighthouse Service was finally authorised to place a light upon a high point at the north-western end of the island, about 110 m in elevation, atop West Bluff, a rugged sandstone outcrop (14.7381°S, 128.2970°E). Though the island is situated roughly equidistant from the mainland either side, only the western channel has the depth of water required for shipping, hence the light at that end of the island. The timing of this construction may well be connected with the expanding beef export trade from Wyndham, about 85 km to the south, on the West Arm of the Cambridge Gulf.

Soon afterwards, construction started on a winch-powered tramline of 2 ft 6½ in gauge. It was built from below the proposed lighthouse, near a sandy beach on Turtle Bay where the lighthouse supply vessel's ex-Army amphibious DUKW could land. The route roughly followed a thinly-wooded but very rugged ridge, in a straight line to the site where it terminated in the winch shed. An acetylene-powered light was installed, atop a short cylindrical tower, adjacent to the shed. It first displayed in 1961, the light being visible from around 20 km distant.

The tramway is about 450 metres long³ and traverses very steep terrain with substantial cross slope in places. Much of it is supported on metal piles of various lengths, concreted into the ground. Supports are placed 10 ft apart, some 146 pairs being required and so placed that any change of gradient occurred at a support. Gradients vary, the steepest being 1 in 2, the average



In 2005, a visitor noted that the tramway was long out of use; today its track can still be seen on the various satellite imaging web sites – the rails are still in situ, being welded to the cross sleepers and supports every ten feet so it would require a lot of effort to remove them. A solitary photo located on the web, dated 2019,⁶ shows that the original light tower (minus the lantern) has been reused for the installation of a racon (the word is an acronym of Radar Beacon), a type of radar transponder often used in maritime navigation. The winch shed and rails on the hardstand just outside the door have been removed (tripping hazard?), though it appears that the winch remains. We look forward to a detailed field report from some intrepid traveller!

As an aside, in his letter Andrew mentioned the remoteness of Lacrosse Island. Thinking about this I would suggest that Lacrosse Island vies with Eucla jetty, Willis Island meteorological station,

Strangways Ranges mica mine and Browse Island guano field as one of our most remote tramways. Can readers suggest any, more remote, tramways?

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3. The average of three aerial and satellite mapping websites (Navionics, Bing and Google)!
4. LR Nos. 112, 137, 198; *Industrial Railway Record* No.16, 18; James Bond film *You Only Live Twice*; *Mono-Rail - The history of the industrial monorails made by Road Machines Ltd.* David Voice 2011. Most of the monorail, originally about 360m in length, is still there, but out of use.
5. Lighthouses on the Western Australian coast and off-shore islands, Nov 1995 Dept of Maritime Archaeology, W.A. Maritime Museum, Perth
6. <https://www.facebook.com/lighthouseships/>



The trolley at the top. Four heavy cylinders of acetylene gas and other supplies need to be unloaded. Four men were usually required to manhandle each cylinder into the light tower. The 45 lb/yd rail is in ten-foot sections between vertical supports, with two steel tie rods in each section of track. The heavy 6-hole fishplates seem rather excessive for the task. Photo: National Archives of Australia A1200, L45685



Field Reports

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

Dunkley's/Wallace's tramway near Zeehan, Tasmania Gauge unknown

A passenger on Wee Georgie Wood's last run for the season, on Anzac Day, showed me a photo they had been sent of what appeared to be an extremely well preserved timber tramway. All they were told was that it was in the vicinity of Frazers Hut. I knew that there was a Frazers Creek near the old mining town of Dundas, about 8 km west of Zeehan as the crow flies, so the tramway was likely to be near there. In order to discover more, I contacted the bush walker who had taken the photo, but also posted their photo on the Light Railways Facebook page.

That post generated some immediate interest (including a request to submit the photo for publication in *Light Railways* magazine). An early suggestion from Robert Morley was one of Dunkley's tramways, probably serving a sawmill near Confidence Saddle; the Dunkley family over two generations had built and operated various steel and wooden-railed tramways on the West Coast between the 1880s and the 1930s. Further investigation in Lou Rae's 1983 book *A History of Railways and Tramways on Tasmania's West Coast* (pages 81-83) showed a horse-drawn tram heading south from the North East Dundas Tramway at Confidence Saddle towards Carbine Hill, which he called Dunkley's Confidence Saddle Tram.

Things started to fall into place when I received an email from Meg Arvier, the keen bush walker and historian who had taken the original photo. She provided a further picture of a finger signpost planted just metres from the tramway remains, labelling them 'Wallace's Tram'. The sign also pointed to the Carbine Track, indicating that the location was in the same vicinity as the previously mentioned Dunkley's tramway.

Wallace's tramway is not referenced under that name in the West Coast railway literature I have seen, but Robert Morley knew of a prospector called Bravo Wallace and suggested that Dunkley's and Wallace's tram were probably the same line. A little digging later, I came across a 1925 geological survey of the Dundas Mineral Field, which, on page 84, describes 'Wallace's Prospect', a vein of jamesonite containing lead, antimony and silver. This was located 'about 20 chains [400 metres] south of the terminus of the wooden-railed



Left: Section of semi-intact wooden railed tramway near the southern terminus of the line.

Right: Signpost near the southern terminus of the tramway identifying the line as 'Wallace's Tramway'. Photographs by Meg Arvier via James Shugg



tramway leading from Confidence Saddle'. The report recommended mining the jamesonite: if that eventuated, it is conceivable that the timber tram was repurposed to carry ore from Wallace's Prospect, although it was used for timber until the mid-1930s. Even if that mine was never established, the Morley hypothesis that Dunkley's timber tram is now also known as Wallace's seems correct.

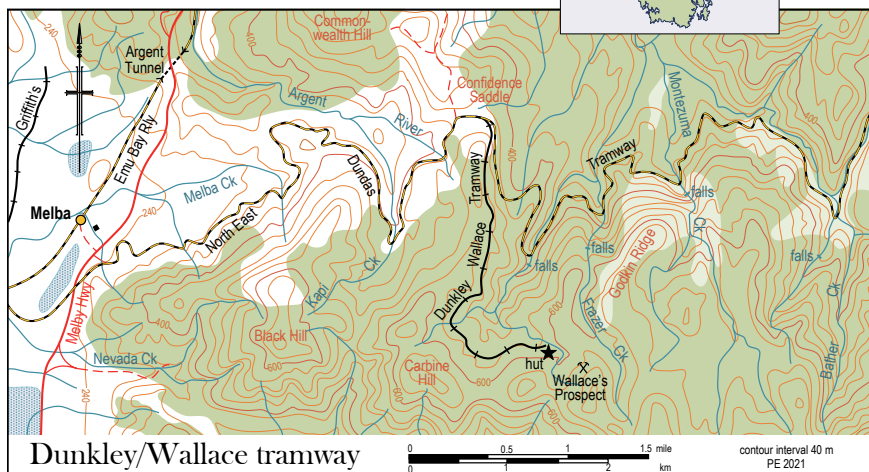
That conclusion is supported by a map on page 198 of *Tarkine Trails*, a publication aimed at the bushwalking and conservation community, which shows a dotted line in the vicinity of this tram line, labelled Wallace's tram. This only came to my notice, again thanks to Meg Arvier, as I was submitting this piece. It may well be that railway historians and conservationists simply know the same tram by different names!

To date, I have only armchair-researched this fascinating remnant of Tasmania's railway history. There is certainly more to be discovered. I would like to know if its apparent longevity is due to its construction from old growth hardwood by Dunkley more than 100 years ago, or was it relaid more

recently by someone else? Certainly, the relative rarity of bushfire in this temperate rainforest has helped preserve it for now. Given the tram's proximity to the more well-known NEDT formation, a visit to the area is highly recommended for keen explorers of railway archaeology – combined, of course, with a ride on Wee Georgie Wood at Tullah, a fine example of living railway history on the West Coast. James Shugg 06/2021

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Industrial Railway NEWS

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

QUEENSLAND

MSF SUGAR LTD, Mulgrave Mill

(see LR 279 p.32)

610 mm gauge

On 9 July, EM Baldwin 0-6-0DH 11 *Maitland* (4413.2 8.72 of 1972) was seen outside the loco shed, complete with final drive back in place. Clyde 0-6-0DH 18 *Barron* (64-379 of 1964) was

the feeder loco based at the Redlynch depot on 14 July. Clyde 0-6-0DH 13 *Hambledon* (64-316 of 1964) has final drive problems and has been relegated to navy duties. On 15 July, it was seen with the herbicide spraying wagon near Deeral. MSF Sugar has been charged for allegedly breaching an electrical safety duty over the death of a worker when a crane contacted with power lines while working on the construction of a road dump siding in the Little Mulgrave area on 28 July 2019. A stolen car collided with a cane train at the Loridan Drive level crossing in Brinsmead on 31 July. Gregorio Bortolussi 7/21; Tony Bennett 7/21; Mick Brown 7/21; ABC Far North 8/21; *Cairns Post* 11/8/2021; myPolice Far North 11/8/2021

MSF SUGAR LTD, South Johnstone Mill

(see LR 280 p.30)

610 mm gauge

The cannibalisation of Com-Eng 0-6-0DM 28 (AA1544 of 1960) has continued. By 20 July, it was sitting on shop bogies outside the loco shed and with wheelsets removed.

Robert Nadin 7/21

TULLY SUGAR LTD

(see LR 277 p.32)

610 mm gauge

EM Baldwin 0-4-0DH 1 (6/1082.3 2.65 of 1965) was seen newly repainted at the mill late in July. The name *Charlotte* has been applied in running script across the back of the cab. An unusual working seen on 30 July was a train of fulls headed by Com-Eng 0-6-0DH multi-unit locos

14 (AK2663 of 1963) and 10 (AD1341 of 1960) with failed Walkers B-B DH 3 (643 of 1970) cut in around 25 units back. The frame of Walkers B-B DH (586 of 1968) had been abrasive blasted and painted by 3 August.

Stephen Bowden 7/21; Dale Thomas 7/21; Steven Jesser 8/21

WILMAR SUGAR (HERBERT) PTY LTD, Herbert River Mills

(see LR 280 p.30)

610 mm gauge

Macknade Mill started the crushing season with 4 x EM Baldwin B-B DH locos rostered for cane hauling duties with these being *Darwin* (6171.1 9.75 of 1975), *Wallaman* (6400.3 4.76 of 1976), *Selkirk* (6750.1 8.76 of 1976) and 20 (7070.4 4.77 of 1977). Clyde 0-6-0DH locos 12 (65-434 of 1965) and 16 (DHI-1 of 1954) are on reserve but have seen frequent use owing to overtime shifts and filling in when one of the Baldwins needs a service. EM Baldwin 0-6-0DH 14 (6/2490.1 7.68 of 1968) and Clyde 6 wheeled brake wagon BV5 (CQ3477-1 of 1976) were on sugar until overnight of 7 and 8 July when they were transferred to Victoria Mill. Their place on sugar was taken by EM Baldwin 0-6-0DH *Hobart* (4413.1 7.72 of 1972). Early in the crushing season, Macknade worked Victoria Mill's Hamleigh area for a few days only. Forays by Macknade based locos into Victoria Mill's Gairloch, Danger Camp and Nyanza areas have been intermittent since the crushing started. 14 and other Victoria based locos have been working these areas otherwise.



Sitting at South Johnstone Mill on a wet 1 July during the crushing are from right to left, Clyde 0-6-0DH 12 (55-60 of 1955), EM Baldwin B-B DH 24 (5477.1 8.74 of 1974), Com-Eng 0-6-0DH multi-unit locos 6 (C2234 of 1959) and 7 (AD1239 of 1960) and Clyde 0-6-0DH multi-unit locos 2 (55-56 of 1955) and 3 (56-90 of 1956).

Photo: Jason Sou



Top: Mulgrave Mill's Clyde 0-6-0DH 16 Kamma (56-96 of 1956) in the Green Hill area on 1 August. Photo: Doug Witteveen **Centre:** South Johnstone Mill's Com-Eng 0-6-0DH multi-unit locos 38 (AH4695 of 1965) and 39 (AH4688 of 1965) wait near the Ramleh catchpoints while the tilt train passes through on 18 July. Photo: Jason Sou **Above:** Macknade Mill's EM Baldwin B-B DH Wallaman (6400.3 4.76 of 1976) crosses the QR at the Bemerside South catchpoints on the Hawkins Creek line on 31 July. Photo: Luke Horniblow

Transfer of cane from Victoria to Macknade has been done by both Victoria and Macknade locos although the former have rarely worked all the way to Macknade with loads left or interchanged at loops along the way. The 4 Mile area is being worked mainly by Macknade locos. Victoria Mill's EM Baldwin B-B DH *Rynne* (5423.1 9.74 of 1974) and EM Baldwin 6 wheeled brake wagon 2 (7065.5 6.77 of 1977) started the season on cane and eventually found their way back onto the sugar train. Prior to that, a variety of locos including Walkers B-B DH locos *Clem* *H McComiskie* (605 of 1969) and *Cairns* (669 of 1971) as well as Clyde 0-6-0DH *Perth* (69-682 of 1969) were used on the sugar train.

Following an incident on 15 August, the *Rynne* was pulled out of service and replaced by EM Baldwin B-B DH *Townsville II* (6400.2 4.76 of 1976) on sugar. EM Baldwin 6-wheeled brake wagon 8 (7065.1 6.77 of 1977) has been in the Victoria Mill loco shed from at least 17 February to 21 August receiving a slow rebuild including the placement of a steel plate on the deck for extra weight. Clyde 0-6-0DH 11 (65-383 of 1965) had appeared at Victoria Mill from storage at Pioneer Mill by 19 June and will probably be cannibalised. Newly rebuilt Walkers B-B DH locos *Jourama* (709 of 1973) and *Cairns* (669 of 1971) were seen in use on the Stone River line on 21 June and 31 July respectively. The two new sugar boxes were seen being fitted to two of the new frames at the Victoria Mill sugar hopper on 15 August.

Editor 2/21, 6/21, 7/21, 8/21; Luke Horniblow 6/21, 7/21

WILMAR SUGAR (INVICTA) PTY LTD, Invicta Mill, Giru

(see LR 280 p.30)

610 mm gauge

Invicta started the crushing season without any of its Com-Eng 0-6-0DH locos on roster. *Haughton* (AH3878 of 1964) and *Northcote* (AH4091 of 1965) were unavailable and the *Barratta* (AH4098 of 1965) had gone to Kalamia Mill. In use, in their place, were Clyde 0-6-0DH locos *Ingham* (64-382 of 1964) and *Kalamia* (67-569 of 1967). In commemoration of the mill's centenary, Com-Eng 0-4-0DH *Invicta* (CA1040 of 1960) has been repainted and plinthed outside the mill.

Plasser tamping machines KMX-06-16 (133 of 1978), KMX-08 (415 of 1995) and KMX-12T (255 of 1982) were seen lined up together in the mill yard on 12 June. The KMX-06-16 was missing its tamping head and the KMX-08 is on loan from Plane Creek Mill. Walkers B-B DH *Kilrie* (604 of 1969) was seen working with a brake wagon in mid August. Walkers B-B DH *Clare* (655 of 1970) was seen working with Invicta Mill 6 wheeled brake wagon *Clare* (built using frame of Com-Eng C1015 in 1985) on 19 July. Cane from South Inkerman is being road hauled to Airdale Loop on the Kalamia Mill network for crushing by this mill and Pioneer Mill. The Kalamia picked up a load at the loop on 1 July.

North Queensland Register 20/7/2021; Shane Yore 6/21; Jamali Labelak 7/21; Brian Bouchardt 8/21; Luke Horniblow 6/21, 7/21; Kieran Koppen 6/21, 8/21

WILMAR SUGAR PTY LTD,

Pioneer Mill, Brandon

(see LR 280 p.32)

1067 mm gauge

Stored 610 mm gauge Clyde 0-6-0DH 11 (65-383 of 1965) had gone to Victoria Mill by 19 June. Cane from South Inkerman is being road hauled to Airdale Loop on the Kalamia Mill network for crushing by this mill and Invicta Mill.

Editor 6/21; Jamali Labelak 7/21; Brian Bouchardt 8/21

WILMAR SUGAR (KALAMIA) PTY LTD,

Kalamia Mill

(see LR 278 p.30)

610 mm gauge

Former Invicta Mill Com-Eng 0-6-0DH *Barratta* (AH4098 of 1965) was seen at work in mid July and is the only RSU remote control loco in the Kalamia roster. Com-Eng 0-6-0DH *Chiverton* (C1030 of 1958) has been relegated to navy duties and its couplers have been rotated to suit the Invicta Mill ballast hoppers. 1067 mm gauge Walkers B-B DH 5803 (682 of 1972), which is used to shunt molasses tankers for loading at the mill is referred to as *Mt Isa*. Cane from the South Inkerman area is being road hauled by elevating tipper semi-trailers to this mill's Airdale Loop for crushing at Pioneer and Invicta Mills.

Shane Yore 6/21, 8/21; Mayson Bengoa 7/21; Luke Horniblow 7/21; Richard Skooterman 7/21; Jamali Labelak 7/21; Brian Bouchardt 8/21

WILMAR SUGAR PTY LTD,

Inkerman Mill, Home Hill

(see LR 280 p.32)

610 mm gauge

Cane from the South Inkerman area is being road hauled by elevating tipper semi-trailers to Airdale Loop on the Kalamia Mill network for crushing at Pioneer and Invicta Mills.

Canegrowers Burdekin Limited 7/21; Jamali Labelak 7/21; Brian Bouchardt 8/21

MACKAY SUGAR LTD, Mackay mills

(see LR 280 p.33)

610 mm gauge

Plasser KMX-12T tamping machine TTAMP7 (246 of 1982) was seen newly repainted on 13 August. Clyde 0-6-0DH 13 Devereux (67-568 of 1967) was on the ballast train at Langdon Junction on 17 August.

Kevin Bryant 8/21

WILMAR SUGAR (PLANE CREEK) PTY LTD,

Plane Creek Mill, Sarina

(see LR 279 p.33)

610 mm gauge

An RSU remote control loco driver was trapped between his loco and some bins at a siding near the end of Palms Road, Carmila on 3 July. He suffered crush injuries to his upper body and was flown by helicopter to hospital in a serious but stable condition. The Plasser KMX-08 tamping machine (415 of 1995) was still on loan to Invicta Mill on 12 June.

The Courier Mail 3/7/2021; RACQ CQ Rescue 7/21; Luke Horniblow 6/21



Top: Invicta Mill's Clyde 0-6-0DH Ingham (64-382 of 1964) heading out with empties across the Haughton River bridge on 19 July. Photo: Luke Horniblow **Centre:** Clyde 0-6-0DH locos Ingham (64-382 of 1964) and Kalamia (67-569 of 1967) resting between duties at Invicta Mill on 14 July. Photo: Jamali Labelak **Above:** Invicta Mill's Clyde 0-6-0DH Ingham (64-382 of 1964) waits before heading out of the McLain Road branch on 8 June. Photo: Luke Horniblow



Marian Mill's Walkers B-B DH Calen (692 of 1972) at Badgers Hill, Mia Mia on 26 June. Photo: Tom Badger

BUNDABERG SUGAR LTD, Millaquin Mill

(see LR 280 p.33)

610 mm gauge

As well as roll on, roll off cane bins, multi-lift semi-trailers are being used to transport former Bingera Mill cane to Millaquin Mill. Com-Eng 0-6-0DH *Burnett* (AH2967 of 1963) was seen locked up in the fenced compound at the Wallaville depot late in June. Notably, it has Willison couplers in place of the dumbbell couplers previously used on ex Bingera Mill rolling stock. EM Baldwin B-B DH *Givelda* (5800.2 6.75 of 1975) was seen at Wallaville on 4 August and also fitted with Willison couplers. It is believed that around five hundred ex Bingera bins were fitted with Willison couplers before the crushing started with the rest to be done over time.

Brian Bouchardt 6/21; Garry Plant 6/21; Luke Horniblow 8/21; Jan Kretschmer 8/21; Mitch Zunker 8/21

ISIS CENTRAL SUGAR MILL CO LTD

(see LR 280 p.33)

610 mm gauge

Clyde 0-6-0DH 9 (75-812 of 1975) went to Wallaville for ballasting duties on 19 July.

The Plasser KMX-12T tamping machine was tamping at the Childers transloader on 19 June. The first loaded bins from the new transloader at the south end of Childers were pulled out by Walkers B-B DH 1 (602 of 1969) on or by 27 June. Walkers B-B DH 4 (656 of 1970) and Hexham Engineering bogie brake wagon 4 (HE 684 of 1987) were seen servicing the transloader on 23 July. Although built for cane being road hauled from the Maryborough area, initial trials were done with cane from the local area. Since then, trouble has been experienced with cane spillage owing to the bins on the road transport being larger than the rail bins they tip into. Time spent waiting at the transloader by the B double semi-trailers has also been excessive and by 12 August, an unloading pad was being

constructed at the mill which appeared to be for direct unloading of Maryborough cane onto the ground and then loading into cane bins. The first rake of bins went out on the new Wallaville line on 27 June. The six line road dump siding was observed to be well and truly in use on 25 July. Construction work to further extend the line was proceeding through June and July. Students from the Isis District State High School were given a lesson in rail safety at a cane train awareness talk in Childers on 29 July. Walkers B-B DH 5 (617 of 1969) was in attendance.

Garry Plant 6/21; Ben Glossop 7/21, 8/21; Robert Pappalardo 6/21; Hayden Hill 6/21; Bob Walker 7/21; Brian Bouchardt 7/21; Ian Davies 7/21; Luke Horniblow 6/21, 8/21; Lyle Smith 7/21; Shirley Crouch 8/21; Jarrod Reibel 8/21; Bundaberg Now 29/7/2021; myPolice Bundaberg 30/7/2021

DOWNER EDI, Maryborough

(see LR 280 p.34)

1067 mm gauge

Walkers B-B DH (641 of 1970) was seen shunting on 8 and 23 July. Originally Emu Bay Railway 1104 and carrying that railway's livery, it is still not sporting an identity. When a train is run to Maryborough West, this loco and Walkers B-B DH DH73 *Hugh Boge* (718 of 1974) are used together tail to tail to avoid working a loco with the long end leading. Also on the roster here is a hi-rail shunting tractor, which appears to be based on a Ford 445 industrial tractor.

Glenn Stapleton 7/21; Ian Davies 7/21; Carl Millington 8/21

PROGRESS RAIL SERVICES, Redbank

(see LR 260 p.24)

1067 mm gauge

As well as the previously reported Clyde Co-Co DE 1720 (66-502 of 1966), Clyde Co-Co DE 1745 (67-559 of 1967) is a shunting loco here with both being seen on site on 14 August.

Facebook – Anthony's Train Blog 8/21

NEW SOUTH WALES

BLUESCOPE STEEL LTD,

Port Kembla Steelworks

(see LR 280 p.34)

1435 mm gauge

Watco has been awarded the contract for internal rail transport here.

Marc Tartaro 5/21

SOUTH MAITLAND RAILWAYS PTY LTD,

East Greta Junction

(see LR 278 p.31)

1435 mm gauge

The delivery of a new Swietelsky Rail ballast cleaner by road transport to Kurri Kurri required a foray by shunting loco Orenstein & Koppel 4wDH 32 (26263 of 1963) on 25 March to bring it back to the SMR yard.

South Maitland Railways 3/21

OVERSEAS

FIJI SUGAR CORPORATION

(see LR 280 p.34)

610 mm gauge

Labasa Mill started crushing on 16 June and a photo in the *Fiji Sun* shows 3-tonne chopped cane bins waiting to be unloaded at the tip. Repairs to the washout affected line to Wainikoro have been effected and it was expected to be in use from mid-August. Rarawai Mill started crushing on 15 July, however prior to that, some cane was being road hauled from as far away as Tavua and Rakiraki to Lautoka Mill for crushing. Lautoka Mill started crushing on 30 June and receives road hauled cane from as far away as Sigatoka. At least one cane cutting gang in the Cuvu sector is still using rail transport. Canegrowers in the Sigatoka area want the rail line upgraded so they can go back to using it for transport of their cane to the mill. Road transport costs are proving to be prohibitive. A photo of a Rarawai Mill Clyde HG-3R 0-6-0DH loco on a train of full cane bins at Lautoka on 15 July has appeared in the *Fiji Sun*. It is not known if the Ba River bridge at Rarawai has been repaired or if this loco has been transferred to Lautoka Mill using road transport. A study of the photo suggests that it is Rarawai Mill 9 (64-378 of 1964). In the 2020 crushing season, fifty-two mechanical cane harvesters were used in the Western Division and thirty-seven in the Northern Division. Harvesting groups have acquired another fifty mechanical harvesters for the 2021 crushing season. The FSC CEO has stated that there is an urgent need to construct a modern efficient sugar mill to crush all of Viti Levu's cane and replace Lautoka and Rarawai mills, which have aged infrastructure and use old technology. *Fiji Sun* 17/6/2021, 9/7/2021, 16/7/2021; *The Fiji Times* 19/6/2021, 8/7/2021, 15/7/2021, 19/7/2021, 24/7/2021, 9/8/2021, 12/8/2021

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.



LETTERS

Blue Mountains tramways

I have generated a Power Point presentation about forgotten technologies, illustrating how problems of over rope tramways and point switching were overcome in the 19th century.

The PowerPoint is available through the Blue Mountains Historical Society website here: <https://bluemountainshistory.com/forgotten-technology-series/>

This may be of interest to your readers.

Philip Hammon,
Katoomba
via email

Ringwood Colliery (LR 130, 155, 279 and 280)

I did not discover the accompanying photo, below (Marie Hodgson, Bundanoon History Group collection) when researching Ringwood and Erith collieries nearly 30 years ago. However, it suggests that the tramway between the pit top works and the siding on the Great Southern Railway was of narrow gauge. Thus, the question remains: What was the locomotive doing at Ringwood?

Jim Longworth
via email

Ringwood Colliery mystery locomotive (LR130, 155, 279 & 280)

A number of points need to be made in relation to statements made in Garry Allen's letter on this subject in LR 280. I shall endeavour to do so succinctly and avoid any needless speculation.

Both the 1857-built Neilson locomotives that had come from the Newcastle Coal & Copper Co were in service at the Eskbank Ironworks at Lithgow in December 1880, as I demonstrated in LR 279. I agree that there is strong evidence that one of the Neilson locomotives was still in use at Eskbank in July 1893.

I very much doubt that the timber viaduct at Ringwood Colliery had anything to do with locomotive working. Tenders for construction at the colliery in 1883 included "about 1¼ miles of colliery tramway" and "about 35 chains of railway siding of government gauge".¹ If the colliery tramway had been a standard gauge line, the distinction need not have been made. The likely purpose of the colliery tramway would be to bring loaded narrow gauge skips from the mine to screens and loading bins situated at the inward end of the colliery siding. This supposition is strengthened when we learn that in November 1884, alterations to the screens and the siding were being made to increase the rate at which coal could be delivered into railway trucks.² The likely method of working is to be found in a description penned when the mine was revived as Collins' Colliery in 1896.

"At the shaft a 20 h.p. engine and boiler with drum attached brings the coal in cages a distance of some three hundred feet to the surface. The skips are here coupled up and hauled by means of a steel-wire rope a mile and a-half to the screens, passing over three bridges with a total length of half-a-mile, some of the sets of timber being 50 ft. high . . . it is only reasonable to suppose the proprietor . . . has something tangible to work upon in the shape of a large seam of good coal in close proximity to the railway, to which it is connected by a siding some quarter of a mile from the screens."³

It might be questioned why a locomotive would be needed if the coal screens were connected to the main government line by a siding of this length. The answer is that the alternative would be having the siding shunted by government railway engines, which would be costly and the cause of delays, or to use horses.

The discussion of an alleged Neilson locomotive photographed in use at the Emu & Prospect Gravel & Road Metal Co Ltd's line at Toongabbie is an unfortunate red herring that could perpetuate further misconceptions about this machine. The letter writer dismisses a previous claim that the locomotive came from the Coal and Copper Company and was built by Stephenson with the judgement "right locomotive, wrong builder." This compounds the error because in fact the claim was incorrect on both counts. The locomotive was not a Neilson but a rebuild of one of the two 1856-built Fairbairn 0-4-0WT locomotives supplied to the Australian Agricultural Company in Newcastle. My letter in LR 271 set out the compelling evidence for this, together with what is known about the subsequent history of the Fairbairn locomotives.

References

1. *The Sydney Morning Herald*, 10 September 1883 p.2. <http://nla.gov.au/nla.news-article13544168>
2. *Boural Free Press and Berrima District Intelligencer*, 29 November 1884 page 3 <http://nla.gov.au/nla.news-article112407304>
3. *Goulburn Herald*, 11 November 1896 page 3 <http://nla.gov.au/nla.news-article101105787>

John Browning
Annerley, Queensland



Lakes Creek Meatworks tramway, Rockhampton, LR214 (August 2010)

In his interesting article on the Lakes Creek Meatworks, John Browning mentioned that the exact date of inception of the internal tramways was not known. Recently, searching on another subject in Queensland using the invaluable resources of Trove, I came across an item in the *Rockhampton Bulletin and Central Queensland Advertiser* of 15 December 1870 describing the construction at Lakes Creek of a meat works for the Central Queensland Meat Preserving Company, a London based enterprise. It mentions that a tramway will be built connecting the works with the wharf on the Fitzroy River for despatch of the tinned meat. A month later the same paper¹ also advises that the slaughter yards, situated on the eastern side of Lakes Creek, will be connected with the works across the creek by another short tramway. The land upon which the works were being constructed had been leased from Sir Charles Nicholson (who was also one of the English directors).

By early March 1871 the paper advises that the construction of the bridge and tramway had been let to Geddes and Muir and should be "well forward" by month's end.² In early May our reporter finds the "very substantial bridge and tramway, 320 ft long, across the creek" is complete. Then follows a description of the tramway's use for shifting up to six carcasses at time using a specially-built truck, across the bridge to the Carcass House / Cooling Room, where carcasses remained whilst cooling, preparatory to boning, cooking and tinning. The truck was manually propelled, the tramway had wooden rails of ironbark. Three 15 hp boilers supply the works.³

In September 1871, the newly-arrived Queensland governor, the Marquess of Normanby, George Phipps, just six weeks in the colony, visited the plant for its inauguration and was impressed by what he saw. His party, about 120 ladies and gentlemen, wandered over the works, sat down to a sumptuous cold luncheon (including beef and other company products!). The reporter states that



A wonderful engraving by Samuel Calvert for the Illustrated Australian News 1 February 1872 showing the Central Queensland Meat Preserving Co's works, with the tramway bridge across Lakes Creek connecting the slaughter yard with the carcass house. Image courtesy State Library of Victoria ref LAN01/02/72/32

photographs were taken, including one of the governor, on the tramway bridge.⁴ (Where is that today?) After the visitors had left, the workers and their wives sat down to their own banquet which extended well into the night.

Unfortunately, the joy only lasted a couple of years. By May 1874, the Central Queensland Meat-Preserving Company was in the process of being wound up in London. Local feeling was that the London end of the operation was extravagant.⁵ Others blamed the high price of cattle locally, and the workers' wage rate! It was mid-1876 before the works were sold, to Whitehead & Co Limited, who at the time were lessees of the Laurel Bank meat preserving and boiling down works, upstream of Rockhampton. Formal takeover was in January 1877, and the Lake's Creek works became the property of Whitehead & Co, who commenced another large programme of alterations:

Lake's Creek is growing rapidly into a populous suburb [downstream of Rockhampton city, on the Fitzroy River], chiefly through the prospective

resuscitation of the meat preserving industry. The alterations now in progress on the old works are very extensive, and employ a considerable number of hands . . . Nearly every part of the old premises is being either altered or remodelled, and there are considerable additions, including a new slaughter-house for sheep, improved cooking machinery, appliances for the manipulation of tallow and the preparation of manure, with sheds for storage . . . There are to be two Cornish boilers of 25-horse power each, and one of them, with a couple of digesters, we believe is being manufactured in Maryborough. The old slaughter yards will be used for bullocks, but new receiving and slaughter pens for sheep are in preparation in one of the sheds . . . The labour-saving appliances include about a mile and a-half of tramway, the rails for which have been ordered from England. This railway will run through all the sheds and down to the wharf, and "trucking" will be the only means of transit employed, horses and carts, and even wheelbarrows, being discarded within the works.⁶

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The rails must have arrived soon after as, by early May, the company was advertising: 'Wanted, for a few days, two experienced plate layers, at Lake's Creek Meat Preserving Works'.⁷ Actual operations at the works commenced on 17 May 1877, so rail laying must have been one of the last things done prior to re-opening. At the re-modelled works, the carcasses were still carried to the works, from the slaughter house, by the tramway over Lakes Creek. That all the tramways prophesied in the previous quote came to pass is confirmed by the following report in May:

The place is reticulated with tramways; a double line, fed by numerous branches, running from the main buildings to the wharf, where the various articles of manufacture are shipped. The tramways render the use of drays unnecessary . . .⁸

Five-and-a-half years later, the *Brisbane Courier* of 5 December 1882, carried a detailed description of the works by its 'Special' reporter. The buildings alone, now owned by the Central Queensland Meat Export Co Limited (from 11 July 1881), stretched about 400 feet along the Fitzroy river and around 120 feet in depth back from the river. By 1882 freezing machinery and chambers were nearly finished so that frozen meat could be exported to Britain. From the roofed slaughter yard the carcass was taken on trucks along a tramway and into the chilling rooms to cool and harden, it being easier to cut the meat in that state. Following cutting, the hind quarters (they being the only portion to be exported in a frozen state) were taken to the freezing chambers. The other parts were prepared for tinning or pickling.

At some point between 1877 and 1882, the boilers had been changed or added to, as 'Special' tells us that there are two boilers each of 40 horse-power made by David Munro & Co:

All over the establishment there is a perfect network of tramways, and everywhere one sees appliances for economising labour. So complete are the arrangements for loading and unloading ships at the company's wharf, that 400 cases can be placed in a ship in an hour and from 15 to 20 tons of coal unloaded in the same time.

The company was processing between 50 and 55 head of cattle per day, but could if required process up to seventy. About 200 hands were employed. One interesting aspect is that in 1877 it was processing sheep and cattle, but the 1882 description makes no mention of the former. Maybe the drought was affecting sheep numbers.

Unfortunately, a major fire occurred on 13 September 1883, destroying much of the works, only the boilers and engines being saved together with some of the refrigerating equipment. Undeterred, rebuilding again took place so that by 22 December that year *The Capricornian* could report that the everything was almost complete and: "The only other improvements that need mention is that a perfect network of tramways has been laid down."⁹ As the reporter in 1882 said the works already had a perfect system of tramways, it begs the question: Can a perfect tramway be improved upon? One important addition was the provision of reticulated water to all parts of the establishment.

Despite (because of?) of this work and

expense, by April 1886 the Central Queensland Meat Export Company Ltd was in liquidation and the Lakes Creek works was on the market yet again. The company was bailed out by a group of Melbourne businessmen with Central Queensland grazing interests. They re-opened the works in March 1887, trading under the existing name, a situation that continued into the narrative of John Browning's earlier article.¹⁰ The early date of 1871 for the first tramway means that internal tramways were used on the Lakes Creek site for at least 110 years.

References

1. *Rockhampton Bulletin and Central Queensland Advertiser* 14 Jan 1871
2. *ibid.* Saturday 11 March 1871, 6 May 1871
3. *Northern Argus*, Rockhampton, 12 Aug 1871
4. *ibid.* Saturday 23 September 1871
5. *Rockhampton Bulletin* Sat 18 July 1874
6. *The Capricornian*, Rockhampton 3 March 1877
7. *The Daily Northern Argus*, Rockhampton 2 May 1877
8. *Rockhampton Bulletin*, Monday 28 May 1877
9. *The Capricornian*, Rockhampton 22 Dec 1883
10. *Morning Bulletin*, Rockhampton 19 Mch 1887

Phil Rickard,
Ringwood, Vic

Pole Cups - which way is up? (LR 278)

Further to Graeme Castleton's comments in LR 280, pole cups can be seen on the NSWGR 38, 57, 58 and 60 class steam and 79 class diesel-electric locomotives. You will find these things on most, if not all, locomotives that have a cast steel frame that was made in the USA. It was just standard American practise to include them!

David Jehan
via email

D+ locomotive boiler at Southport, Tasmania

The D+ locomotive boiler beside the road at Southport can be identified as formerly belonging to D+2. The front of the smokebox was, with the help of the property owner, removed in the late 1970s for eventual exhibition at the Tasmanian Transport Museum. The Dübs builder's number is clearly stamped in a couple of locations. Another ex TMLR locomotive boiler powered a mill between the Ida Bay Railway and the road a short distance up the hill beyond the level crossing on the way up to the quarry. This was cut up by persons unknown, in I would guess about the early 1990s, with a few bits being left beside the road for a considerable time. I would speculate that, having made up a last load of scrap, the little remaining was not worth coming back to collect. Among this junk was the smokebox front minus door. It is identical to that off D+2 so, although it lacks any builder's stamp (those on D+2 being confined to the door), there can be no doubt that it came from D+1. This is also in the custody of the Transport Museum as I considered it my civic duty not to leave such rubbish fouling the cress beside a public road.

David Beck
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.

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.

December 2021 members Zoom meeting

Date: Thurs 9 December at 8.00pm AEDT

Floyd Bromley will present "A hike along the Yan Yean tramway alignment". The Yan Yean tramway was built in 1858 to facilitate the construction of Melbourne's first major water supply scheme.

BRISBANE: "Narrow gauge railways used in World War 1"

Bob Gough will give a presentation and discussion on some of the narrow gauge railways used in World War 1. Details of the meeting will also be posted on the *Light Railways of Australia* Facebook Group closer to the time of the meeting.

Location: BCC Library at Coopers Plains.

Date: Friday 15 October 2021 at 8.00 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 27 October 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 21 October 2021 where, amongst other things, the broad gauge light railways used in the construction of the Semaphore - Grange section of the Military Road 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 21 October 2021 at 7.30 pm



Heritage & Tourist NEWS

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

QUEENSLAND

TINBEERWAH MOUNTAIN RAILWAY, Tinbeerwah

610 mm gauge

After a long absence of in-service use, Russell Savage has recently put back into operation, Wingrove and Rogers battery electric locomotive number 2216 of 1942. Century Batteries in Brisbane provided a new battery at the 48 volt DC requirement. Russell believes that 2216 and the one at Milang are the only two complete and operating examples in Australia from the Smithfield Magazine in South Australia. He uses the loco for yard shunting and sawmill duties, including movement of the former Smithfield wagons including the one with serial number WRE46015.

Russell Savage via email, 7 July 2021

This railway previously appeared in *Light Railways* 213, June 2010, in which Russell Savage explained that the railway was established in 1980 to gain access to the northern region of Mount Tinbeerwah. In 1990 this was achieved and in 2005 another branch over a significant watercourse was added (reported in LR 173, p.27). There was further progress with the Red Hill Bush Depot Saw Mill becoming operational in February 2010. This is primarily used for sleeper cutting logs acquired from the property. In total, 185 metres of track, five turnouts and a new triangle were installed as part of this complex. In May 2009 the TMR became the thirty-fifth railway in Queensland to be accredited under the Rail Safety Legislation and the only private system. Total trackage is 2.2 kilometres and a variety of purpose built and acquired rolling stock is used.

QUEENSLAND PIONEER STEAM RAILWAY, Ipswich

1067 mm gauge

The locomotive *Kilrie* has had a leaking tube, and the QPSR workshops recently removed all of the 69 fire tubes from the boiler. Some replacements are now in hand.

David Rollins



The Wingrove and Rogers battery electric locomotive (Builders number 2216 of 1942) in use at the Tinbeerwah Mountain Railway in July 2021. The locomotive is used for yard shunting and saw mill duties including movement of the former Smithfield wagons around the site. All photos: Russell Savage

AUSTRALIAN SUGAR CANE RAILWAY, Bundaberg

610 mm gauge

On Sunday 25 July 2021 a major milestone slipped by almost going unnoticed. The railway reached the total of 700,000 paying passengers since it first started running in November 1988. Australian Sugar Cane Railway Facebook post 29 July.

DURUNDUR RAILWAY, Woodford

610 mm gauge

Next year is the 50th anniversary of ANGRMS that was officially incorporated on 27 September 1972. This is a significant milestone for any organisation and members are being asked for ideas and suggestions as to how to celebrate this special year.

Durundur Railway Bulletin 42: 368 May/June 2021

Due to the flow-on effect of delays caused by the rain earlier in the year, the start on work on the workshop annex now looks like sometime in August. In the meantime, work has continued on preparing the site by removing the old concrete slab where the BLC wagon body sat, as well as cutting up and scrapping the BLC body.

Obtaining suitable rail and sets of points within a reasonable distance from the railway is becoming an increasingly difficult task, so workers are very grateful to the Cross River Rail Authority which recently donated a set of 63 lb points and some associated lengths of rail from Clapham Yard, Yeerongpilly. A couple of days were spent preparing and loading these for transport to Woodford.

Durundur Railway Bulletin 42: 370 July/August 2021

ATHERTON-HERBERTON HISTORIC RAILWAY, Herbarton

1067 mm gauge

Steam trials were held on 14 August of its steam locomotive, Peckett number 1069 of 1905. According to the post, 'all went really well'.

Atherton-Herberton Historic Railway Facebook post 14 August

NEW SOUTH WALES

LILYVALE TUNNEL NUMBER ONE, Helensburgh

610 mm gauge

An 18-minute 1986 video posted on Youtube, details the work of a group of rail fans who re-furbished and used a two foot gauge railway into the Lilyvale number one tunnel. The tramway was built to service a mushroom farm that had been created in the tunnel. The group cleared the vegetation, straightened out the tramway and used its number one trolley to have rides along the approach to the tunnel and inside it. The rest of the video details the further adventures of number one trolley at the Corrmal Colliery line and then on the Yangardook Tramway near Melton in Victoria.

There are two tunnels in the immediate area: the disused original 1888 tunnel, now known as the Lilyvale Road access tunnel, and the 1915 tunnel, which provides road access to the



Top: Com-Eng 0-6-0DH 5802 (JA4282 of 1964) recently acquired by QPSR is seen on the Swanbank branch approaching Box Flat on 20 June 2021. **Above:** 5802 and DE 1616 (EE A-079/63) approaching Box Flat on 11 July 2021 coupled to allow short end leading, following the ban in place at the moment re long end leading! Photos: David Rollins

coast line. The tunnels are located southeast of Helensburgh, just south of the old Metropolitan Colliery which closed in 1915. The Lilyvale No. 1 tunnel (Tunnel No. 5 on the South Coast line), is an 80 metre single track tunnel with a slight curvature and one set of manholes in the middle on each side. It opened on 3 October 1888 and closed permanently on 20 May 1915. If you are interested, go to YouTube and search for Lilyvale tunnel number one.

BLUE CIRCLE SOUTHERN CEMENT No. 5 Andrew Barclay, Sons & Co. builder's number 1470 of 1916.

1435 mm gauge

Most readers of *Light Railways* will know the sad sight at Huon on the now defunct Cudgewa Railway in Victoria. Today, only the platform remains, along with two RY type goods trucks opposite the remnant goods shed, along with a 153 HP Walker rail car (24RM) sitting dormant and almost totally destroyed. This is all that is left from an abortive attempt to preserve the line in some form.

In an investigation into the failed Tallangatta Valley Steam Preservation Society, which attempted this preservation effort, and the rollingstock that was stored beside Lake Hume at Huon, findings suggested that a steam locomotive was purchased and stored by that society at Bandiana for future restoration. A web search found this information and history of that loco at <http://www.australiansteam.com/Barclay1470.htm>.

"This sturdy 0-6-0T locomotive was No.5 in the fleet of Blue Circle Southern Cement at its works at Portland, NSW. It was built by Andrew Barclay, Sons & Co. at Kilmarnock, Scotland and appears to be one of that company's standard designs for industrial shunting work. At Portland it shuttled over a short but steep branch line connecting the cement works to the New South Wales Government Railways at Portland station. The steam locomotive fleet at Portland was retired as late as 1983 and No.5 (together with locos No.3 and 2605) became available to preservation groups. No.5 had previously been

withdrawn for overhaul and was sitting outside the engine shed at Portland, raised off its wheels for repair of the axle boxes, motion etc. but this work had later been cancelled, leaving No.5 in a partially dismantled state.

No.5 was acquired (still partially dismantled) in approximately 1986 by the Tallangatta Railway Society for its proposed tourist railway at Tallangatta, Victoria, where it was planned to be regauged to 5 ft 3 in for operation on a restored portion of the Victorian Railways' Cudgewa branch. Unfortunately, these plans did not come to fruition and the rails of this scenic branch line were subsequently lifted. No.5 was taken to an industrial site in Wodonga in connection with its planned overhaul for use by the Tallangatta Railway Society, where it remained stored during the late 1980s.

Newsgroup posts stated that No.5 remained stored at Wodonga in the late 1990s, still sitting on its frame and without wheels, however it was subsequently moved to a private site nearby and its location had not been reported for many years. Evidence of this locomotive in Wodonga finally surfaced on 7 August 2010 when two wheelsets were spotted in an industrial storage compound. Further investigation revealed that No.5 was now stored on a rural property south of Wodonga (together with the third wheelset, motion and brake rigging) and that the locomotive was likely to be auctioned in the coming months.

Railway Digest magazine of October 2010 included a notice that this locomotive would be auctioned on 16 October 2010. Newsgroup reports after the auction suggest that No.5 was purchased by the Dorriggo Steam Railway and Museum. The locomotive had sustained considerable damage consistent with a 'bad lift' by an inexperienced crane operator.

As of July 2020, No.5's three wheelsets have been reunited and delivered to Dorriggo, but the locomotive itself remains in its rural setting south of Wodonga while awaiting transport to Dorriggo.

Since this report was written, the locomotive has been transported to Dorriggo where it is currently sitting on the semi-trailer waiting to be unloaded. Apparently it will stay on the low loader until another storage line is built as the museum has currently run out of room and the earthworks are still in progress to enable a few more storage lines.

Initial post on Facebook by Barry Sheffield 15 August 2021 on the *Light Railways of Australia* Facebook Group and subsequent posts by various people.

VICTORIA

WALHALLA GOLDFIELDS RAILWAY, Walhalla

762 mm gauge

Initial photographs after the recent wild weather looked bad and there was considerable surface damage with some areas of subsidence requiring Government assistance to repair. Fortunately, the railway is largely intact with only a couple

of small landslips which were easily cleared, but there had been no undermining of the track.

The railway engaged a local contractor to undertake a bridge inspection and remedial work. This inspection was already in train prior to the storm as part of the accreditation system which requires a three-year total bridge inspection and the railway did not re-open until this took place. Indications are that apart from debris piling up against bridge piles, no significant damage had occurred. Of course, as photos show the mighty, well-constructed Thomson Bridge once again weathered huge flood flows with nothing amiss.

Weather damage report to WGR members by Secretary Graeme Skinner and President Phillip Milbourne. 15/6/2021

The Railway then re-opened for one day on Wednesday, 14 July with good passenger numbers, before being closed again by Victoria's fifth lockdown. Since then regular winter timetable running commenced again on Sunday 1 August again with very good passenger numbers. Site inspections on those two days by your correspondent, revealed extensive scouring of Stringers Creek and extensive remedial work done by the local contractor.

The railway closed again for Victoria's sixth lockdown and at the time of writing is not operating. Andrew Webster site inspections, 14 July and 1 August; Walhalla Goldfields Facebook Page.

DAYLESFORD SPA COUNTRY RAILWAY, Daylesford

1600 mm

Further to the previous report, the funds raised from donations have allowed the railway to engage two local contractors to assist in removing dangerous trees in the Musk section and at Bullarto station. Another local provided, at no cost, an operator and HIRAIL excavator over six days that enabled the railway to be open to Musk on 8 August, just ten days after the storm. Members are continuing to work with the various stakeholders on a plan of action for the Bullarto section, with an assessment report on the works required and an initial quote on those works currently being prepared.

Daylesford Spa Country Railway Facebook page, 7 August

PUFFING BILLY RAILWAY, Belgrave

762 mm gauge

Due to the current lock downs in Melbourne the Puffing Billy Railway has not been operating. Ex South African Beyer-Garratt 2-6-2+2-6-2T, NG G16 129 has been fitted with a new ashpan and was seen on a test train early in August.

Frank Stamford

TASMANIA

IDA BAY RAILWAY, Lune River

610 mm gauge

As readers will be aware, the proponent of the Transformer art installation has submitted a Development Application to the Huon Valley Council.

Whilst the Society wholeheartedly supports appropriate investment in the Huon, the primary feature of the proposed Tourist Operation is an "immersive" art installation some distance from the historic site. It is the supporting functions to this development as detailed – i.e. proposed café/visitor centre and access works to the art installation – that will significantly affect the Railway's heritage-listed Ida Bay Works Depot site and the continuing conservation and operation of the Railway. These ancillary works pointedly compromise the integrity of the community-owned heritage listed site. The proposed works include the destruction of parts of the historic workshop complex, the covering of functional rail sidings and require the recovery of artifacts and equipment from the areas to be demolished.

Meanwhile work on the refurbishment of the Railway continues. Volunteers have just completed their fourth sleeper run, where they prepare and load freshly milled sleepers ready for later transport to Longford for treatment.

Ida Bay Railway Preservation Society (IBRPS) Facebook posts. 2 and 3 August

TASMANIAN TRANSPORT MUSEUM, Glenorchy

1067 mm and 610 mm gauges

Having sorted insurance issues, the Tasmanian Transport Museum Society recommenced shuttle operations on its short demonstration track, which parallels the former mainline out of Hobart, in late July. The TTMS has leased 4 km of this disused mainline through the northern suburbs and has already started trackwork which could see a staged reopening of the line for heritage traffic from the end of this year. Although much of the Society's railway collection comprises TGR/ANR and municipal tramways stock, there are some items that qualify for inclusion in *Light Railways*, including a rare vertical boiler locomotive and a Climax, both of which operated on private timber railways in the first half of the 20th century in southern Tasmania, and are now statically preserved in the museum roundhouse. James Shugg

REDWATER CREEK RAILWAY, Sheffield

610 mm gauge

In addition to the regular running weekends at the start of each month, Redwater Creek ran special trains into the night on 19 June to celebrate the approaching winter solstice. Attracted by the promise of unlimited train rides, fireworks and a sausage sizzle, many hundreds turned up, including very welcome visitors from the mainland, just prior to the recent covid lockdowns which have seen interstate tourism curtailed more recently. Running longer than usual and full trains, on poor quality local coal and at night which requires the use of a hungry steam powered generator for the lights, kept the locomotive crew very busy. But only the last train of the night was delayed by the need to clear the ash pan and quickly restart the fire, and the passengers accepted the holdup in good humour. James Shugg

SOUTH AUSTRALIA

MILANG RAILWAY MUSEUM, Milang

1600 mm and 610 mm gauges

If you have been through Milang in the past couple of months, you may have noticed a new addition at the Railway Museum. After searching for a steam locomotive for twenty-six years, we have finally been able to get one on loan. It is a 1927 Fowler locomotive which worked in the cane fields near Mackay before retiring in 1963. It then deteriorated in a playground for thirty years, followed by a period in open storage. Three months ago, it was offered to the Milang Railway Museum and we paid just under \$3000 to get it here. The first attached photo shows its arrival at the end of May. Since then, during gaps in the bad weather, the volunteers have been pushing forward with restoration and the second photo shows its current status. The locomotive is too far gone to run again, so we are restoring it to a level where visitors can learn its history and kids can climb on it.

The owners of the locomotive are in Sydney and have let us have it on loan. However, they have now offered to sell us the locomotive for \$5,000. The locomotive has already proved to be very popular with Milang residents, who are often heard to describe it as being "cute", and we would all like to see it become a permanent feature of Milang and a drawcard for visitors. We are therefore launching a campaign to raise the \$5,000.

If you would like to make a donation towards the purchase of this locomotive, you can do so by bank transfer to "Milang Railway Museum" at BSB 085 921 and account number 595 444 128 or by mailing a cheque to the Railway Museum at PO Box 260, Milang SA 5256. Please include the word FOWLER in the transfer details or on the cheque. The museum is a registered not-for-profit charity and we will send you a receipt so that you can claim a tax deduction. On completion of restoration, a donors list will be displayed on or near the locomotive.

Peter Lucas

WESTERN AUSTRALIA

BENNETT BROOK RAILWAY, Whiteman Park

610 mm gauge

The locomotive shed recently received its first new piece of equipment for a number of years in the form of a 30-ton hydraulic press. This will be used for removing and installing bearings and removing stuck components. It also has an attachment for small sheet metal bending.

The new tubeplates for the boiler of NG 123 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. This process has taken considerably longer than the museum would have liked, but the work has been very thoroughly done. There are one or two problems that still require addressing, the most important of which is to look at the (non)attachment of the crown-sheet girder stays at the rear of the



Top: On a visit on 1 August, James Shugg captured former EZ/EBR Ruston (b/n 284836/1950), which is now the mainstay shunter at Glenorchy (as former TGR C22 pulls into the station). **Centre:** The former EBR Wolseley (model 18/85 of 1947) was fitted with rail wheels to convey senior management between Rosebery and Guildford in the 1950s and 1960s. Although parked off the rails currently, this unique car is fully restored and operational. **Above:** The steam-powered generator on the Krauss (b/n 5682 of 1906) is working hard in this shot of the locomotive having just arrived at Sheffield station late on 19 June.. All photos: James Shugg

firebox roof. This matter is under consideration and a couple of options are being considered. It is now hoped that the museum can get the boiler back on the locomotive sometime in July, fully signed off, and hopefully to an increased working pressure. This timeframe will mean that the locomotive will not be operational for the coming 2021 steam season.

The Bennett Brooklet – May/June 2021

On 7 July 2021 BT1 was inspected and certified fit for use to operate this year. There have been a couple of problems with the locomotive that delayed the start of running steam with both the blast-pipe and regulator valve receiving attention. Its first weekend running was with the Atlantic Planet assisting to allow workers to do the final adjustments with the blast-pipe alignment.

Maylands ran its first full revenue day on the 24 June 2021. This gave Ashley a break and will extend the time before it needs its overhaul.

The Bennett Brooklet – July/August 2021

Krauss builder's number 2181 of 1889 was imported to Australia by J Robb for Victoria Dock construction work in Melbourne. It was one of six on the project and when that finished in 1892, all six went to the South Australian Engineering and Water Supply Department for construction of the Happy Valley reservoir (20 km south of Adelaide CBD), completed in 1896. No. 2181 was unrecorded from then until it appeared in 1906 at Lawlers in the WA Goldfields, working on the East Murchison United mines. However, it appears that it was the sole locomotive brought in to Bulong, just east of Kalgoorlie, in November 1897 to work the Bulong Mining, Tramway & Ore Reduction Company of Western Australia Ltd. four mile long line from the mines near the town to the company's battery on the shore of Lake

Yindarlgooda. But the operation was short-lived, possibly ceasing by the end of 1897 but certainly there was no operation by May 1898 when the company was put into liquidation.

The Krauss is assumed to have awaited a sale at a goldfields machinery dealers until it went to Lawlers and it operated there until 1919. It languished unused in the Goldfields, owned by Western Machinery Co., until obtained by Lew Whiteman, probably in 1963, and eventually put on display at his Mussel Pool property. Mussel

Pool is now a part of the WA state government's Whiteman Park. Lew agreed to provide the Krauss and his other Mussel Pool locomotive, the Mallet, to WALRPA in June 1984. The Mallet was moved to the WALRPA depot on 3 April 1985 and the Krauss soon after. Cosmetic restoration was undertaken largely by Charles De Bruin round 2005-6 and he was successful in obtaining some missing parts, donated by Redwater Creek Railway in Tasmania.

The Bennett Brooklet – July/August 2021



Above: The 1927 Fowler locomotive ex the cane fields near Mackay on its arrival at Milang at the end of May 2021. **Below:** After arrival at Milang, and during gaps in the bad weather, volunteers have been pushing forward with restoration and this photo shows its current status whilst on display. Photos: Peter Lucas





Above: South Johnstone Mill's Clyde 0-6-0DH 12 (55-60 of 1955) heading north with empties on the North Johnstone River bridge on 17 July. Photo: Luke Hornblow
Below: Inside the South Johnstone Mill loco shed on 1 July are left to right, Clyde 0-6-0DH 11 (55-64 of 1955) with Com-Eng 0-6-0DH multi-unit locos 8 (AA1543 of 1960) and 9 (AH3979 of 1964) and 10 (A2027 of 1958) and 1 (A1821 of 1957). Photo: Jason Sou

