NUMBER 285
ISSN 0 727 8101

JUNE 2022
$7.95 Recommended retail price only

LIGHT RAILWAYS

Australia's Magazine of Industrial & Narrow Gauge Railways

Light Railway Research Society of Australia Inc.

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Editor: Richard Warwick
PO Box 21, Surrey Hills Vic 3127
editor@lrrsa.org.au

Associate Editors: Mike McCarthy, Frank Stamford and Phil Rickard

Field Reports Editor: Peter Evans
fieldreports@lrrsa.org.au

Industrial Railway News Editor:
Chris Hart
industrial@lrrsa.org.au

Research Editor: Stuart Thyer
research@lrrsa.org.au

Heritage & Tourist Editor:
Andrew Webster
heritagetourist@lrrsa.org.au

Distributor: Are Direct
ISSN 0 727 8101, PP 100002829
Printed by Ligare Pty Ltd

COUNCIL
President: Bill Hanks (03) 5944 3839
Secretary: Nick Sheridan 0421 058 945

New South Wales Division
c/o PO Box 674 St Ives NSW 2075
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Imperial to metric conversions:

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

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No 285 June 2022

Contents

Editorial

In this edition we look at a subject "theme" of articles based on the light railways associated with some minor coal mines in the Hunter Valley of NSW. Firstly, Jim Longworth looks at some tramways associated with some early coal mines that were operated by his ancestors at Ashtonfields near Maitland. Secondly, just before he passed away in 2019, the late John Shoebridge submitted a nearly completed article regarding the coal fields at Tomago. With the assistance of Ross Mainwaring, we have been able to complete the article to enable its publication, along with some fascinating maps and photos that Ross has been able to find. I have some further articles on this subject covering coal mines at Greta and Leconfield, and at Rix's Creek and they will be published in due course. To 'round out' the 'black diamond' theme, we look at a small railway that John Shoebridge built in his back yard at Lithgow and was visited by several light railway "luminaries" in 1977.

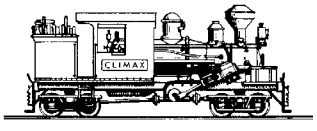
Additionally, as part of our semi-regular Looking Back series, we include a pictorial presentation of harbour construction works at Outer Harbor in South Australia, early in the 1900s, showing lots of steam power.

Of course, all the usual features of Field Reports, Industrial Railway News, and Heritage and Tourist are included.

I trust that you enjoy this edition

Richard Warwick

Front Cover: *On a sunny, Illawarra afternoon, possibly in the late 1890s, we find the crew of 0-6-0ST South Bulli No.3 pausing to be photographed. The loco was built at the Boyne Engine Works of Manning Wardle & Co, in Leeds, England (b/n 912, ex-works 30 Sept 1884) and arrived at the North Illawarra Coal-mining Company's North Bulli Colliery in late 1885. It was of Manning Wardle's standard K-class design, over 250 of which were built between 1864 and 1914. In about 1897 she was sold to the South Bulli Colliery at Bellambi, about 5½ miles to the south, and became No.3. Later in her lengthy career No.3 received a small gauze-type spark arrestor which rather disfigured her graceful funnel. After thirty years hard work around Bellambi, No.3 went onto stand-by duty. She was cut up for scrap in 1952. Photo: courtesy University of Newcastle, ARHS box 071_2014*

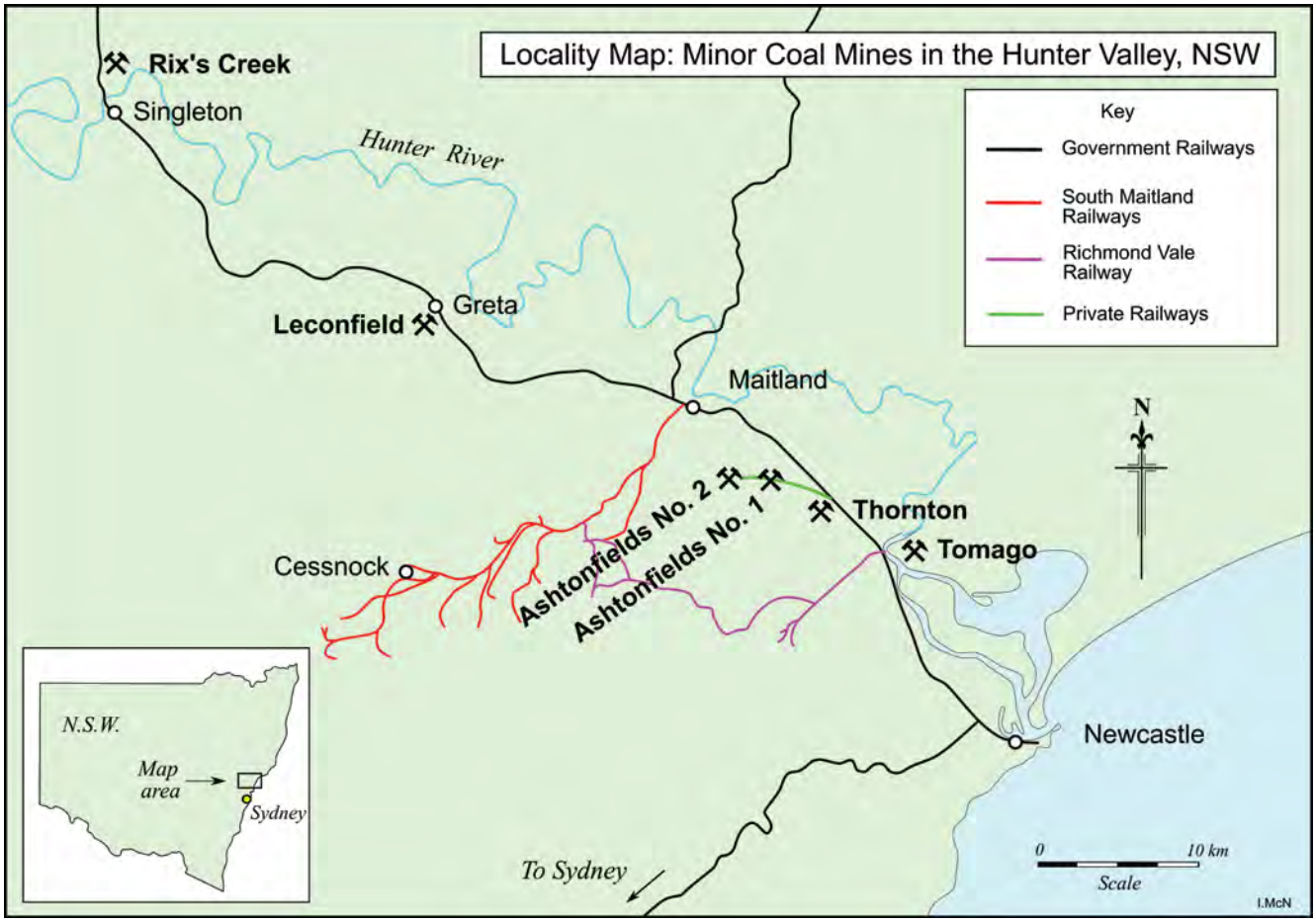


Light Railway Research Society of Australia Inc. A14384U
PO Box 21 Surrey Hills Vic 3127
www.lrrsa.org.au

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.

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



Tramways of the minor coal mines in the Hunter Valley

Part 1 – Longworth's Ashtonfields colliery railways

by Jim Longworth and Garry Allen

East Maitland coal fields

The East Maitland coal fields are located at Four Mile Creek and where the Longworths would develop their Ashtonfield Colliery at Thornton. Unlike the coal in the other two fields, the coal is of very variable quality, some of it providing a large percentage of gas, while much of it was of very inferior quality. The coal, as a rule, was hard, and would stand shipment without the pieces breaking up. Very little attention had been paid to this coal by capitalists until Messrs Longworth's operations. Very little of the coal had ever left the district. Opening up the Maitland coalfield on the great Greta seams overshadowed the thinner East Maitland measures.

Great Northern Railway

The Great Northern Railway (GNR) was opened between Newcastle, and East Maitland, on 30 March 1857. A station named Woodford was later opened on 1 August 1871, though was predated by just a platform, and later renamed Thornton in 1887, after which it was relocated a short distance to a new site on 10 February 1913.

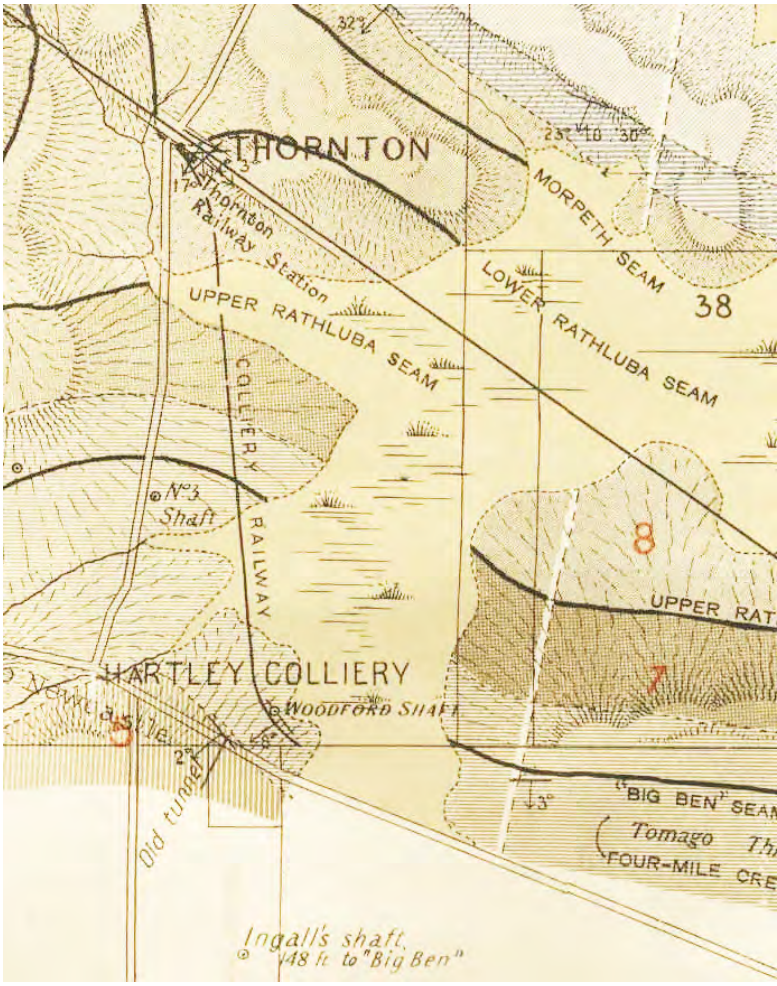
Woodford Colliery Estate

By 1861 the estate was in the ownership of O'Brien & Co, with a Mr Donaldson as the lessee. Coal that was being mined was taken by means of carts to the shipping point at Hexham. The intention was to construct a branch line to connect the mine to the GNR.[1]

Work on the Woodford Colliery progressed favourably through 1863, with an expected opening by the end of the year. The pit had been sunk to a depth of 90 ft, where the coal was found in a seam 6 ft 3 in thick. It was of excellent quality, being very similar to the Four Mile Creek coal. However, lack of economical transport meant that the mine could not be operated profitably. About 1000 tons lay at the pit mouth, awaiting transport to market. The colliery lay to the east of Woodford station on the southern side of the line, on the north side of and close to the main Newcastle-Maitland road (cf. Location plan). By May, work on laying in a branch line was about to commence.

By August 1863 a contract had been let to lay down a branch line connecting the works with the GNR, by which means it was proposed to send the coal to market. Construction of the branch was superintended by Mr Gwynneth, C E, and the contractor was the Mason Bros., who in August advertised for good hands for railway works. It was only a short line,[2] but took over a year to lay, being opened on 27 January 1865. The line left the GNR near the then Woodford platform between Hexham and East Maitland, formed a curve, passed over a 300ft long timber viaduct, cut through a hill, ran along an embankment, passed over two single 20ft opening timber bridges, and entered the colliery yard, giving a total length of one mile five chains two links. Arrangements were made with the railway authorities to work the mine traffic by the locomotive then on the Morpeth line.[3]

By August 1866 the mine was noted as having not been worked for some time. By May 1871 it had been renamed the New Colliery, from whence it was worked on-and-off for a few years.



Right: *Location of the Woodford shaft and colliery railway south of Thornton railway station, 1902, https://search.geoscience.nsw.gov.au/api/download/f99b1ba130ccceab58a871c0e791443b/Geological_Map_of_part_of_Maitland_Coalfield.jpg, accessed 21/09/2021; see also Department of Mines, 1938, Annual Report. The road shown crossing left-right just south of the shaft was the main Newcastle-Maitland road, later known as the New England Highway.*

Alnwick Colliery

Adjoining the Woodford Colliery on the southern side of the GNR, was the Alnwick Colliery. A prospectus was issued in August 1862 for a new coal company, to be called the Alnwick Coal Mining Company, which was leased from the Government at the rate of 5/- per acre per annum. The lease period was 14 years, and the holder was James Donaldson. The mouth of the proposed pit was about 1600 yds from the GNR and would require, inclusive of a curve, and junction and all sidings, a length of about 2000 yds. The Government charge for haulage was 2d per ton per mile. The mine was situated about three quarters of a mile from the GNR and 550 yds from the Woodford branch line.[4] By August 1866 the steam hauling engine and boilers were on site but had not yet been mounted.

Like Woodford, it was connected to the GNR by a short line branching off the Down line at Woodford station. The siding left the mainline in the Up direction, and must have been installed prior to or around May 1876 (cf. newspaper advertisement). By May 1880 the small mine was supplying 50 to 60 tons of coal a day, though it was said to have the capability of supplying 300 tons a day.

While the colliery siding was shown on the signal diagram of 5 February 1919 the colliery had reportedly been closed by February 1922.

WANTED, DRAUGHT HORSE
FOR
SHUNTING RAILWAY TRUCKS,
ALNWICK COLLIERY
3105 Woodford.

Newspaper evidence suggesting the colliery siding was about to be or had been recently opened, MM&HRGA*, 9 May 1876.*

Thomas Longworth

Thomas Longworth, a 29-year-old coal miner and free man, from Worsley, Lancashire County, arrived in Australia on 28 December 1849 to commence a contract as a coal miner for the Australian Agriculture Company at the company's mines at Newcastle. Among Thomas' sons were William (1846-1928) who had been born in England, and Thomas [Jnr] (1857-1927) who was born here.

Longworths at Ashton Fields

Brothers William and Thomas Longworth, who were part proprietors of the Great Cobar Copper-mining Syndicate, privately purchased the Woodford Colliery Estate at Thornton during 1901. The estate was seen as a valuable property over coal-bearing land. While the mine had been worked in a small way up until the 1893 flood, when the workings were flooded, the mine had not been worked since. Reputedly the purchase cost was £5,000 or £10,000; but in view of the revival in the coal industry it was thought that perhaps the mine could be reopened and systematically developed.[5] It was not.

The brothers established a new colliery west of the old Woodford and Alnwick collieries. The new colliery lay about half a mile from Thornton railway station, and a tunnel was driven down to the coal seam, which lay at no great depth.[6] The intention was to mine the coal and use it for coking purposes. A siding was put in connecting the double track mainline to the new colliery.

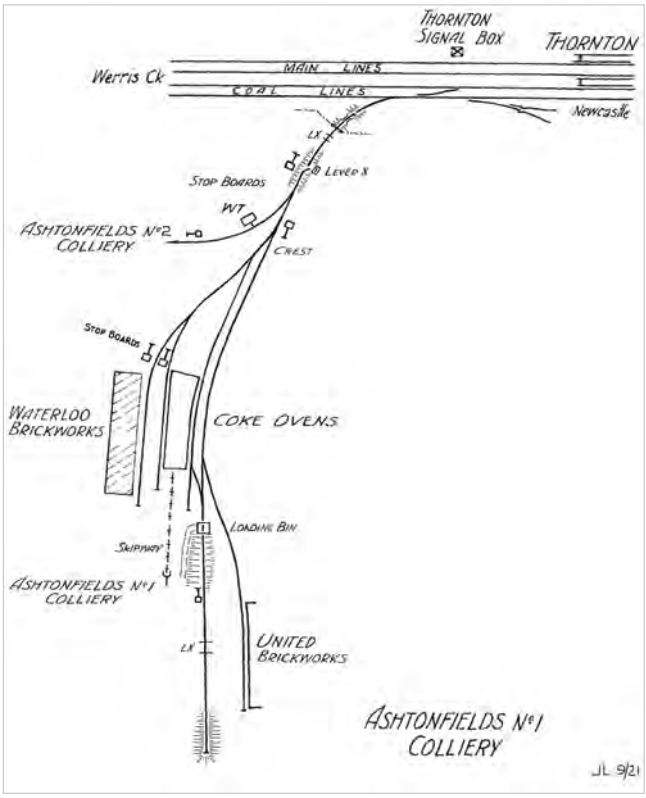
Work on connecting Longworth's new mine to the new Government double track coal-only lines at the new location of Thornton station was largely set aside till the Government decided on where to locate the two new coal-only lines. The only work undertaken being excavating a portion of a cutting. Once the position, location and level that these two new lines were to occupy became known, a start was made on constructing the colliery railway. A substantial brick culvert was put in close to the Government land, to carry away the strong rush of water that came down during heavy rain from the high ground. Several men were engaged at both ends of the cutting through which the colliery line would run. Much of the material taken out of the cutting was used to make the embankment over the culvert, to bring the colliery line up to a level with the main railway.[7] The two coal lines between Tarro and Metford were opened on 10 February 1913. Providing new siding connection for the Ashton Fields Colliery off the new coal lines, to replace the then existing connection off the old double track mainline, cost the railway £379.

The coal and brickworks sidings were connected to the coal lines only. There was no connection with the mainline at Thornton. A nest of sidings at the brickworks provided a

place for the private locomotives to exchange traffic with the Government locomotives. Traffic to and from the private works was given transit by Government Up and Down coal trains as may be convenient. As the sidings were on a heavy grade care had to be given when shunting. Later, Government locomotives were not to run on the private sidings beyond the catch point at the junction with the coal lines.

This Ashton Fields, later named Ashtonfields No.1 colliery, seems to have been closed around 1919.

Lever plates from Thornton Signal Box, date not known. Photo: Author's collection



Ashtonfields No.1 Colliery, brickworks, and coke ovens adapted from G H Eardley file, PXD 535 Vol 77 File 132, SLNSW collection. There was a large roughly triangular clay pit behind the Waterloo Brickworks between the kilns and branch line to No.2 colliery, and one across the two tracks opposite the Coke Ovens

Diversification

The brothers used their land at Thornton for diverse industries beyond just coal mining, which was actually seen as a subsidiary undertaking. Indeed it was questionable whether the mine would ever develop like other mines shipping coal, as the coal was of poorer quality than that from the Newcastle and Maitland collieries. However, the brothers intended to establish brickworks on their land, because bricks were very much in demand. The coal would primarily power the brickworks. Further they thought of dairying, sawmilling, and building railway wagons.

Brickmaking

Brickmaking was carried out using the dry pressure system. During October 1918 the works was acquired by the Waterloo Fire Brick Co of Sydney with the intention of extending the then existing works to include: manufacturing fire bricks; building bricks; building blocks; pipes; and roofing tiles. A notable improvement would be development along mass production lines; separating the works from most country brickworks. As from 1919 the government railway would charge 2/6d per four-wheeled truck and 5/- per eight-wheeled truck, subject to a maximum of 5/- each fifteen minutes or part thereof, for shunting loaded trucks into or out of the siding. By January 1922 the works could turn out nearly 1,000,000 bricks per month. The Waterloo Fire Brick Co Ltd was registered in 1923.

A set of trucks containing about 46,000 bricks was being run down an incline from the brickworks one August 1923 afternoon, when they got out of control. Gathering pace, by the time they reached the Thornton siding the trucks were travelling fairly fast. A locomotive was stationary there, waiting to pick them up. Foreseeing an accident, the driver and fireman jumped clear. The trucks hit the locomotive with such force it left the line, travelled down an embankment, and ended up upside down. The permanent-way was badly damaged; but the main lines were not touched.

During 1927 a new company of United Coke and Brick Co Ltd, with a nominal capital of £50,000, in shares of £1 each was formed to acquire the business of coke, brick, tile, and general manufacturer, then carried on by William, Longworth at Thornton. Subscribers were: William Longworth; Harold Longworth; John W Crane; William W Robinson; Thomas Longworth; and John Leach, with a registered office in Sydney.[8]

Mr J Douglas, who had been Manager at Muswellbrook Colliery for 16 years, was appointed as Manager of the brickworks and mines in May 1928.

Wagon building

Part of the diversification plan included wagon-building. So, a sawmill was erected south of the station alongside what had been the old Woodford Colliery siding.

Wagon-building was carried on at the sawmill, which was situated 30 chains from the colliery, and was not part of the coal part of the business. Physical and organisational separation of the wagon-building activity from the mining operations was to prove important in determining which award respective employees were to be paid under, sometimes with recourse to the courts.

To make space for the new double track coal lines, as described earlier, Government had to acquire a narrow strip of land along the southern side of the corridor opposite the station. Land that was owned by the Longworths. Worse was, that building a roadway overpass at the Up end of the station would sever rail access to Longworth's wagon building shops (cf. 1914 plan). Quite predictably, the owners claimed compensation – result unknown.

Looking towards the brickworks from the throat of the nest of sidings on 6 September 1970. Photo: N Munro, ARHSnsw collection Ref 462411

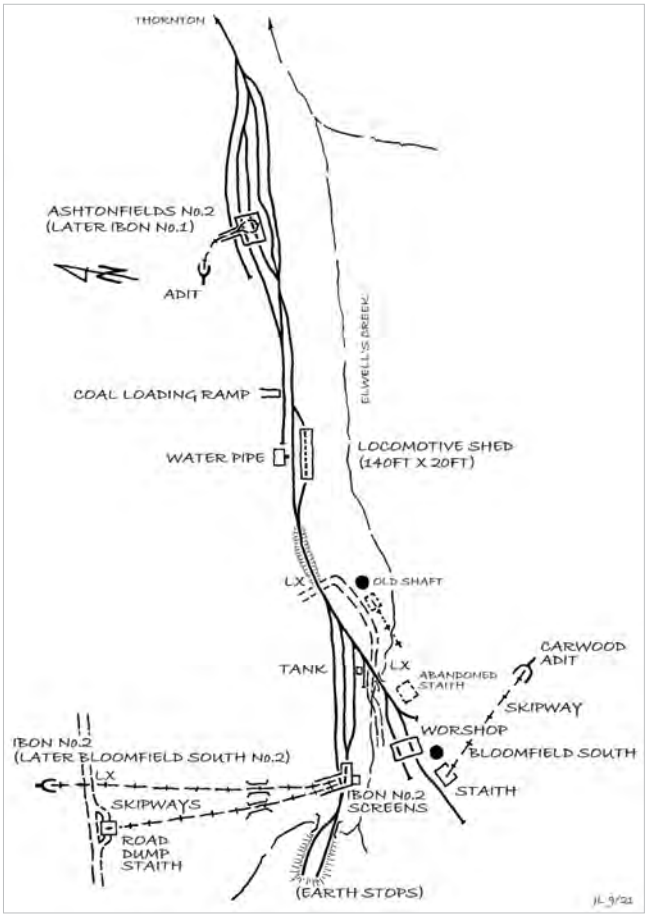
Buttai Coal Estate

Coal seams under the Buttai Estate, due west of Thornton, were likewise of the East Maitland Coal Measures. Likewise the seams were of very variable thickness, frequently splitting, and producing friable and inferior coal.[9]

Nevertheless, the Buttai Coal Estate of 3194 acres, was purchased in Sydney during March 1901 for the sum of £7 per acre, £22,362, through the firm of Richardson & Wrench Ltd. The buyer being Mr J W Crane on behalf of Messrs William Longworth and Dr Read. The estate was said to contain an enormous wealth of 'high-class' (sic) coal. Near Hexham, it was in the parishes of Maitland and Stockrington, about 3½ miles from the GNR, and 14 miles from the steam cranes in the port of Newcastle.[10]

A railway to Buttai

To move coal from the mine to the Great Northern Railway (GNR) economically, a tramway or railway would be required. A standard gauge railway was chosen. Because part of such railway and sidings were intended to be made on and pass through land believed to be the property of the Crown, bodies corporate, and private persons, it required Legislative authority. So on 19 August 1915 a Bill to enable William and Thomas Longworth, of Sydney, to construct a railway from coal lands at Buttai, Parish of Maitland, County of Northumberland, four miles to the GNR on the Maitland side of Thornton, in the parish of Alnwick, was read a first time in the Legislative Council. The Bill was read a second time in September 1915, and passed through committee.[11] The *Ashtonfields Coalmines Railway Act* was assented to on 7 December 1921. It enabled William and Thomas to construct a standard gauge railway from Buttai to Thornton. The land corridor was to be not more than 66ft wide, and the railway was to be constructed in a proper and workmanlike manner, to the satisfaction of the Secretary for Public Works and the Railway Commissioners.



Track layout at Ashtonfields No.2 Colliery terminus running along the left hand side of Elwell's Creek, sometimes referred to as Four Mile Creek, 1923, adapted from G H Eardley file, PXD 535 Vol 77 File 132, SLNSW collection. The screens were located at a distance of five miles 54 chains from the junction with the GNR at Thornton.

Ashtonfields No.2 colliery

The mine at Thornton railway station was initially known as Ashton Fields Colliery. When the line to Buttai was opened in 1916 the mine at Thornton was renamed Ashton Fields No.1 Colliery, and the new mine further away at the Down end of the private branch line named Ashton Fields No.2 Colliery. The compound name of Ashtonfields seems to have come into usage around 1918, with either name being used interchangeably for a few years.

Almost all of the No.2 colliery output was used for brick making at Thornton. It was a tunnel mine with an annual output of about 20,000 tons. Ventilation was by furnace moving about 12,000 cubic feet of air per minute. As at 1922, mine plant consisted of: three boilers; one hauling engine; one air compressor; and two pumps. There was no electric plant. About 50 men and boys were employed.

During March 1928 the Chairman of the Board of Directors of the mining company advised that the colliery had been closed down. The NSW Department of Mines received notice of the discontinuance of Ashtonfields Colliery during 1930. The name Ashtonfields seems to have had its name changed during 1932 and by 5 August of that year was named Ibon Colliery.

Locomotives

To work the line the company purchased two 0-6-0 saddle tank steam locomotives. One was NSW Public Works Department (PWD) number '26' and the other was *Ashtonfields No.1*. PWD 26 was built by Manning Wardle & Company, Builder's Number (B/N) 163 of 1865. It came from PWD in Port Kembla, via Rogers of Newcastle to Ashtonfield in 1919.[12]

However, the identity of *Ashtonfields No.1* is a mystery! It seems to have been under the radar to previous researchers who simply; but erroneously, assumed it was also a Manning Wardle locomotive. It looked like a Manning Wardle locomotive; but there were differences, such as in the wheels. The wheels appeared to be more simply designed, with spokes that appeared to be thicker and less finely shaped, and the wheel rims appeared to be thicker than those of Manning Wardle wheels. Assuming this was not simply a matter of aesthetics, it suggests less refined, more colonial styled engineering. The wheels alone are not the complete discussion; there are other distinguishing characteristics worthy of consideration, eg: chimney design; shape and positioning of sandboxes; cab design; shape of the cab front sheet; and shape of the cab steps.

Front and back views of ex-PWD No.26 abandoned at Thornton Brickworks, c.1922, Note the PWD locomotive number 26 painted onto the left-hand side of the rear bunker. Both photos: E A Downs

Top: *Front and back views of Ashtonfields No.1 at Thornton Brickworks, undated. Both Photos: E A Downs*
Above: *Front and back views of Henry Vale B/N 30 at Metropolitan Colliery, undated. Photo: G Eardley collection*
Below: *Partially stripped Ashtonfields No.1 at Howley's in, 1935. Photo: CC Singleton, ARHSnsw collection reference No 005936*

Ashtonfields No.1 looked very much like a sibling of Henry Vale B/N 30 of 1884, which ended up at Metropolitan Colliery (*cf.* photographs). One unsubstantiated theory is that *Ashtonfields No.1* could well have been the missing Henry Vale B/N 35. Perhaps they were both originally supplied to contractors? A tentative provenance might advance Rowe & Smith for Henry Vale B/N 30 and M E Kirwan for *Ashtonfields No.1* as the original customers.[13] The possibility of it being a Vale product was concurred with by pioneering light railway researcher G H Eardley.[14]

What is known is that both locomotives ended up at Howleys collieries on the coast just south of Newcastle during February 1935.[15]

A few years later, in March 1922, Ashtonfields Colliery purchased Government railway locomotive number 87, a 4-4-2 side tank locomotive by Beyer Peacock, B/N 1632 of June 1877.[16] Remains of the locomotive were seen onsite during April 1945, after which the locomotive was sold and cut up for scrap in April 1952.

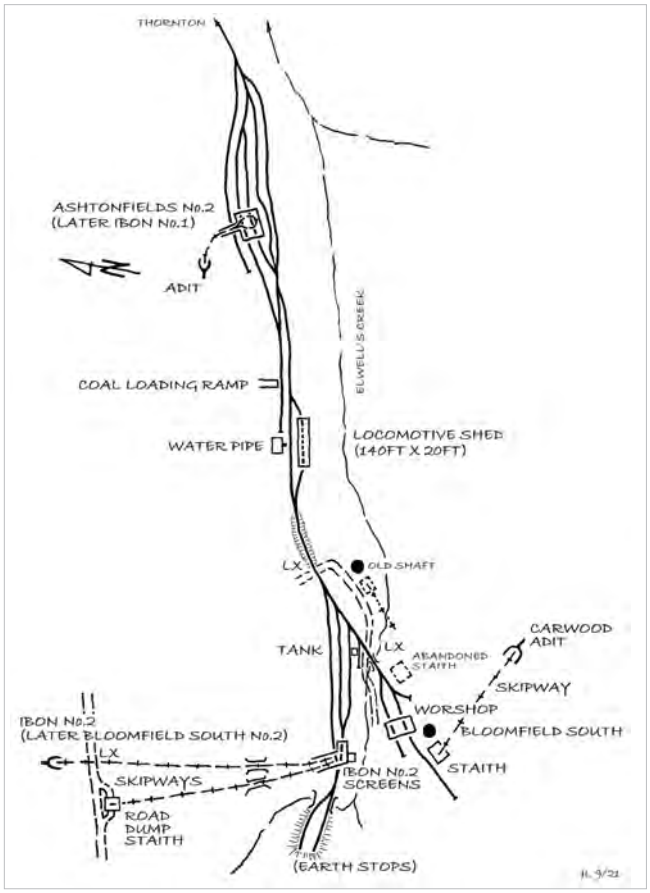
Subsequent light railway history

With the passing of Thomas Longworth who died on 5 February 1927, and William who died on 5 December 1928, this chapter in the history of Thornton's light railways draws to a close.

No.87 shunting in the colliery yard in 1933, note the 'Stop' board on far left. *Photo: ARHSnsw collection reference no. 853008*

Further mines were subsequently developed along the branch line under different company administrations, which modified track layouts and bought more steam locomotives.

Later still the line would be worked by Government railway locomotives.



Ibon No.1 and screens for Ibon No.2 on the extended track, later called the Bloomfield South Extension, nd, adapted from G H Eardley file, PXD 535 Vol 77 File 132, SLNSW collection.

Ibon Colliery

The name Ashtonfields seems to have had its name changed during 1932 and by 5 August of that year was named Ibon Colliery.

The Line Under Ibon Operation

At the time of acquisition, there were the remains of two 0-6-0 saddle tank locomotives at the brickworks. They were ex-PWD No.26 and Ashtonfields No.1. The remains of the two locomotives were subsequently sold to the Glen Rock Mining Company, on the coast just south of Newcastle, arriving there in February 1935.[17]

Prior to this, the company had advertised for railway sleepers. Interestingly the sleepers were to be cut from trees growing on the company owned land (*cf.* newspaper advertisement). The new sleepers may well have been used to extend the branch line from the then existing Ibon No.1 screens to the new Ibon No. screens c.1934.

TENDERS are invited for the Supply and Delivery of Pit Timber for Ibon Coal Company, 1933 supply, which includes props, slabs, lids, pit sleepers, balks and railway sleepers. All timber is cut on the colliery property. Particulars and specifications, apply to Colliery office. Tenders close on January 10th, 1933, at Colliery Office. The lowest or any tender not necessarily accepted. 265

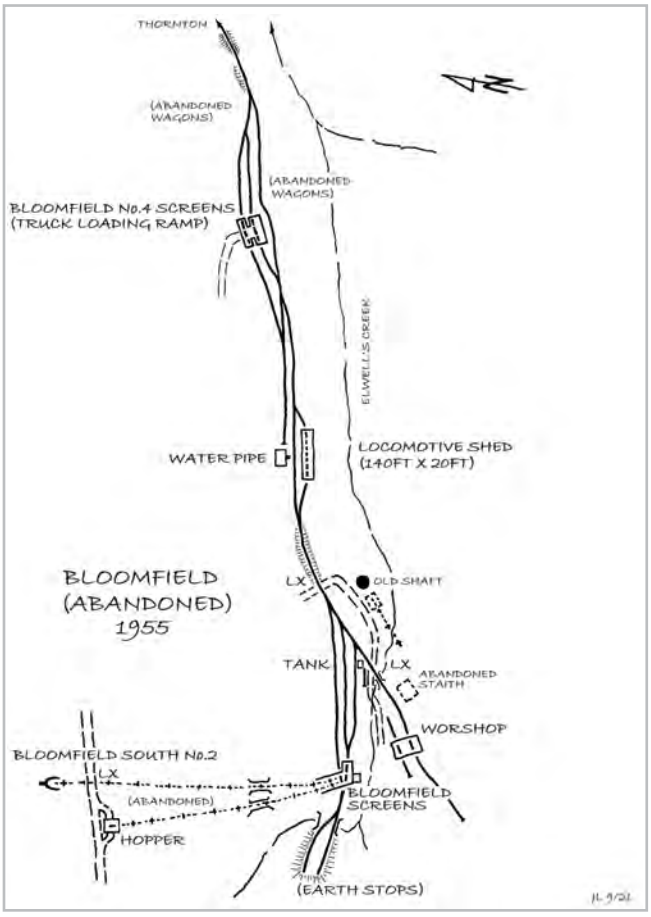
Ibon Colliery advertisement for railway sleepers, Maitland Daily Mercury*, 4 January 1933.*

On 18 April 1934, the Ibon Coal Co purchased Government railway locomotive number 2425, a 2-6-0 tender locomotive by Dübs & Co B/N 2648 of 13 July 1891.[18] Remains of the locomotive were seen during April 1945, and during October 1956 it was sitting on a disconnected length of track.

Locomotive 2425 on the line in 1933. *Photo: ARHSnsw collection reference no. 054238*

Bloomfield Colliery

A new company named the Bloomfield South Colliery Pty Ltd was registered with a nominal capital of £3000 in July 1937. The objects of the company were to carry on the business of colliery proprietors. Directors were W Beatty and J Beatty, with a registered office at 25 King-street, Newcastle.[19] The company is not to be confused with a company operating the Bloomfield Colliery near East Maitland during the previous century.



Bloomfield as derelict, 1955, adapted from G H Eardley file, PXD 535 Vol 77 File 132, SLNSW collection

Two electric loaders arrived at the colliery during 1938, and arrangements were made to assemble the machines on-site. Later that year coal was also being hauled from Rathluba colliery, where nine men were filling motor lorries which were driven to Bloomfield South colliery, where the coal was emptied into railway wagons.

Bloomfield South Colliery Pty Ltd entered into liquidation during May 1939; however, operation of the colliery had been undertaken by Bloomfield Collieries Ltd for the previous 18 months. Shortly afterwards, together with many other local collieries, the mine entered a period of horrendous industrial disputation. Industrial unrest caused both massive shortages of coal for the community and loss of income for the miners.

Bloomfield Collieries Pty Ltd was registered during June 1952, with a capital of £50,000 in 40,000 'A' £1 shares and 10,000 'B' £1 shares. The purpose of the company was to be for operating as colliery proprietors and coal masters.[20]

The Line Under Bloomfield Operation

As was then common, accidents involving colliery staff and railway wagons in the colliery yard were regularly reported in local newspapers. Not all were minor.

A mile and a half west of Thornton the colliery railway, still then known as the Ashtonfields line, crossed the New England Highway by an at-grade level crossing. A train crashed into a lorry on the crossing in July 1938. The Department of Main Roads (DMR) saw the crossing as a danger, so asked Tarro Shire Council to ask Bloomfield Collieries to erect swing gates at the crossing. Apparently, the company had previously sought DMR approval and assistance. Because the *Ashtonfields Coal Mines Railway Act (1921)*, placed responsibility for the safety of the crossing on the company the proposed level crossing was determined to be a company responsibility.[21]

Shortage of railway wagons during 1942, caused the colliery to cease working on some days each week. The wagons were

privately owned by others, who were not concerned about the loss of production at Bloomfield South. Lack of wagons was soon compounded by an inability of colliery management to find buyers for what coal was being produced and loaded into what wagons were available.

Road traffic between Maitland and Newcastle was blocked for about 15 minutes on 11 June 1948 when a derailment occurred on a private coal line near the crossing of the main highway. No one was injured. The locomotive, travelling on the private line from Bloomfield Collieries to Thornton, had passed over the roadway when one of the 20 full wagons of coal was derailed and seven other wagons crashed into it. The road was blocked by the loaded wagons, which were still on the line and were quickly manhandled back from the scene of the smash. Final clearance took an afternoon and the following morning. About 30yds of line were torn up requiring relaying but there was no interference with the colliery operations.[22]

Under Bloomfield Colliery operation, the colliery purchased two ex-Government railway locomotives numbers 2409 and 2411 in 1954. Both were acquired from Nepean Sand & Gravel at Yarramundi Falls on the Nepean River west of Sydney.[23] Both were noted on the Ashtonfields line in steam during October 1959. How much use they saw on the line is unknown; but was likely to have been little.

Later still the line would be worked by Government locomotives.

Bloomfield Colliery is now a massive open cut scar on the landscape, with coal being exported via a large rail balloon loop. Trains are once again operated by private companies; but are not owned by the relevant coal company.

Above: *Locomotive 2409 lifting a rake of empty 4-wheel coal wagons up out of the Colliery Exchange Sidings in front of the brickworks, with two rakes of loaded coal wagons standing on the two Brickworks Sidings, 9 October 1962. Photo: E G Skiller, ARHSnsw collection reference no 054230*

Left: *Locomotive 2411 at the double track loading screens. Photo: I K Winney, ARHSnsw collection reference no 104003*

Looking in the Down direction at locomotives 2409 and 2411 at the long, narrow, flat roofed, 140 ft x 20 ft, corrugated iron, locomotive shed beside the mainline (on right), c.1960. From this image we can deduce that both locomotives were run on the line heading in the Up direction.
Photo: ARHSnsw collection reference no 402533

Acknowledgements

Considerable assistance from J Browning and I Dixon is acknowledged and appreciated.

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UPCOMING ARTICLES IN *LIGHT RAILWAYS*

The Editorial team is very fortunate in having a very healthy list of articles on hand, which in most cases are ready for publication. To whet the appetite of our readers, here is an overview of a small selection of some of the main articles that are in the pipeline and that will be published over the next year or so. There are also many shorter articles that are not listed here, but which are ready and will be published when room permits.

- **Aramac Tramway locomotive problems.** The Shire owned tramway experienced considerable problems with locomotives in its early days of operation, and these are discussed in some detail.
- **Quarry and colliery tramways between Wollongong and Kiama.** There are several short articles describing some intriguing industrial railways serving quarries and collieries in that area.
- **Yamba Black Sands tramways.** This article describes the tramways used at Yamba to mine and transport black sands to extract titanium and zirconium for export to the US.
- **EBR rail motors.** Describes the various rail motors that the Emu Bay Railway used on its line between Burnie and Zeehan.
- **Lithgow State Mine tramways.** The tramways used in the mines and the impacts of fire and flood on the operations are described in this fascinating article.
- **Port MacDonnell jetty tramways.** This article will describe the jetty and its associated tramways on the south coast of South Australia
- **Salt from the Pink Lakes.** This article describes the operations and tramways associated with salt production in the Esperance area of Western Australia
- **Moving Mount Pinninger.** The story of the tramways used in the construction of the Sugarloaf Reservoir (now known as Eildon Weir) in Victoria. This article will describe the use of horse hauled sand trams, the use of gravity inclines at several locations and the later use of Malcolm Moore locomotives.

Failed dreams and broken promises – the sad saga of the Tomago Coalfield (1854 to 1873)

by the late John Shoebridge

Introduction

Tomago on the Hunter River, northwest of Newcastle in NSW, is today a busy industrial location, with an aluminum smelter, shipyard, and numerous smaller factories. Its subterranean sand beds supply much of the district's water and each weekend, the Corrective Services detention centre cools the heels of local felons.

Over 150 years ago, the sands were already yielding fresh water, week-end visitors in the form of picnic parties were landing in droves from river steamers and it was confidently predicted that the coal seams underlying the area would soon bring prosperity.

In the intervening decades, a great deal of capital has been invested in failed attempts to exploit the vast Tomago Coal Measures. Numerous boreholes have been drilled, several collieries were proposed, one was actually established, a second failed before production commenced, and two short railways were constructed.

The one mine which was worked, was the Tomago Colliery, and this article sets out the little that has been so far unearthed regarding this valiant undertaking and its isolated railway.

The Tomago Estate[1]

Farmer Robert Gordon purchased the freehold title to Portion 17 of the Tomago Estate in 1848. Previously owned by the Windeyer family, this land had been leased to Gordon for several years.[2]

Gordon's property comprised 500 acres (*202 ha*) in the Parish of Stockton, lying between the Oaklands Estate to the east, and the Kilcoy Estate (*Portion 20*) to the west, with the Hunter River as its southern boundary. Although generally swamp and sand hills, the property supported the grazing of dairy cattle.

By this time, the famed Borehole Coal Seam had been located by the Australian Agricultural Company's drill hole near Pittown (*now Hamilton*). What seams lay below this horizon had not been properly determined, but it was deduced that if there were any they would lie at a workable depth beneath the Tomago property.

Pioneer Mining Venture

In 1854 Dr William Brown and Mr Irvine Coulter, both of Maitland and in partnership, purchased 53½ acres (*22 ha*) fronting the Hunter River from Gordon, for the purpose of erecting 'outbuildings in connection with a proposed coal mine'. One acre of ground around 'The Well of Tomago' from whence came the local fresh water supply, was reserved from sale. In August the partners called tenders for sinking, 'one or three shafts' to a depth of 40 to 50 feet[3] and twelve months later they sought to employ a 'pair of sawyers.'[4] In December, advertisements related to the sale of the adjacent 'Oaklands' land included the advice that 'sinking for coal is now being carried out in the neighborhood.'[5,6] Their finance came from Dr Brown's brothers, James and Alexander who at that time had cash in hand, having just sold their mine on the Burwood Estate, to the Newcastle Coal and Copper Company for the substantial sum of £24,500[7] (*well over $2 million in today's terms*.) The following year Gordon himself borrowed £1,100 which he invested in the mine.

Research has so far failed to determine by what means the presence of coal was proven or inferred. If in fact no boreholes were put down, then it was a bold venture indeed. Although coal had been mined south of the river at least ten years previously by Edward Turner, who opened a mine at Upper Hexham in 1844, there was no correlation of the seams.[8]

A 12 feet square shaft was sunk about a half mile from the river and equipped with a steam winding engine imported from England.[9] The first 15 feet passed through running sand so that heavy timber lagging was required. It descended to a depth of 372 feet, (*113 m*) where a seven foot (*2.1m*) thick seam of coal was met, making this by far the deepest shaft in the district at that time.[10] The contemporary Australian Agricultural Company pits worked coal around 200 feet deep and it was not until 1884 that the Burwood Coal Mining Company's shaft beside Glenrock Lagoon reached the Borehole Seam at 300 feet.

Under the heading 'Discovery of Coal at Tomago' a local newspaper report somewhat belatedly advised as follows:[11]

> '… a fine seam of coal seven feet six inches thick, has been obtained at Tomago at a depth of 350 feet below the surface. Tomago is on the north side of the Hunter River and distant from Newcastle only a few miles, and this we believe is the first practical attempt of this kind in this direction, and may probably resolve a much-disputed point as to the existence of a commercial coalfield on that side of the river. At present we have not been able to ascertain with certainty whether this is a different seam to any previously worked hereabout; but there are some reasons for believing this to be the fact, and if so it may be from the depth at which it has been found, that it will prove to be a coal of superior quality to any yet produced. The proprietors, Dr Brown of Maitland and Mr Gordon of Tomago well deserve any amount of success since their operations have been conducted to this issue under very disturbing circumstances and at enormous cost….'

By 1856, 'extensive plant' had been purchased and a wharf was constructed, giving access to eleven feet deep navigable water. Although there is no specific mention of the railway, perhaps it can be assumed that this was included in the 'extensive plant.' The first coal was sent to Newcastle on 4 August and advertised for sale 'at the shoot' for 13/6 per ton, it initially found a ready market.[12] Further investment appeared warranted and additional finance was obtained from Thomas Woolley in 1857 and again the following year from the Browns. By this time Coulter appears to have withdrawn and William Brown and Robert Gordon are recorded as the owners of the mine.[13]

The progress of the venture did not go unnoticed by the neighbouring landowners and it was soon reported that 'young Mr Windeyer of Tomago' was proposing to sink a shaft on the family estate nearby.[14] Competition, in the form of John Eale's mine at Minmi was also in the wind, and when his railway reached the opposite side of the river a little further upstream at the end of 1856, it allowed his superior quality Borehole Seam coal to be similarly shipped.

The 'Well of Tomago' too, was under commercial negotiation:[15]

> 'To be let for twelve months or on a term of years as may be agreed to, the WELL, known as "Tomago Well" situated on the banks of the Hunter river on the Tomago property.

As numerous settlers living both up and down the river are solely dependent on this well for water, a fair source of income is now offered to any enterprising person who would lease the well and charge for the use of the water. For terms etc apply to Archd H Jacob. Raymond Terrace.'

Tomago Coal Mining Company

In 1858 Captain James Williamson, a Sydney merchant, purchased Dr Brown's share in the venture. Brown died the following year and it was later claimed by his descendents that he had 'lost his fortune in the Tomago Mine.'[16] Shortly afterwards, Williamson also bought out Gordon, thus becoming the sole owner. At the same time, he recruited Mr William Young, 'an experienced miner' as his colliery manager. Young put down a borehole which indicated another slightly deeper coal seam. He engaged additional miners and turned his attention to deepening the shaft:[17]

'WANTED: 40 Miners at the Tomago Colliery Hunter's River.

Price Five shillings and six pence (5/6) per Miners Ton the same quality as given at the other coal works; the working places from 6 to 8 yards wide and 6 feet high.

Apply at the Tomago Colliery Hunter's River'

Before long, having deepened the shaft a mere 20 feet (*6.0m*) they opened out the second seam. Although only three feet thick (*0.9m*) the quality appeared to be better than the top seam and in August 1859, some 110 tons of this coal had been excavated, picked over, and loaded aboard a barge to go to Newcastle.[18] Transhipped onto the brig *Daniel Watson*, the shipment was subjected to intense local scrutiny but eventually it was 'declared by all to be splendid coal.'[19]

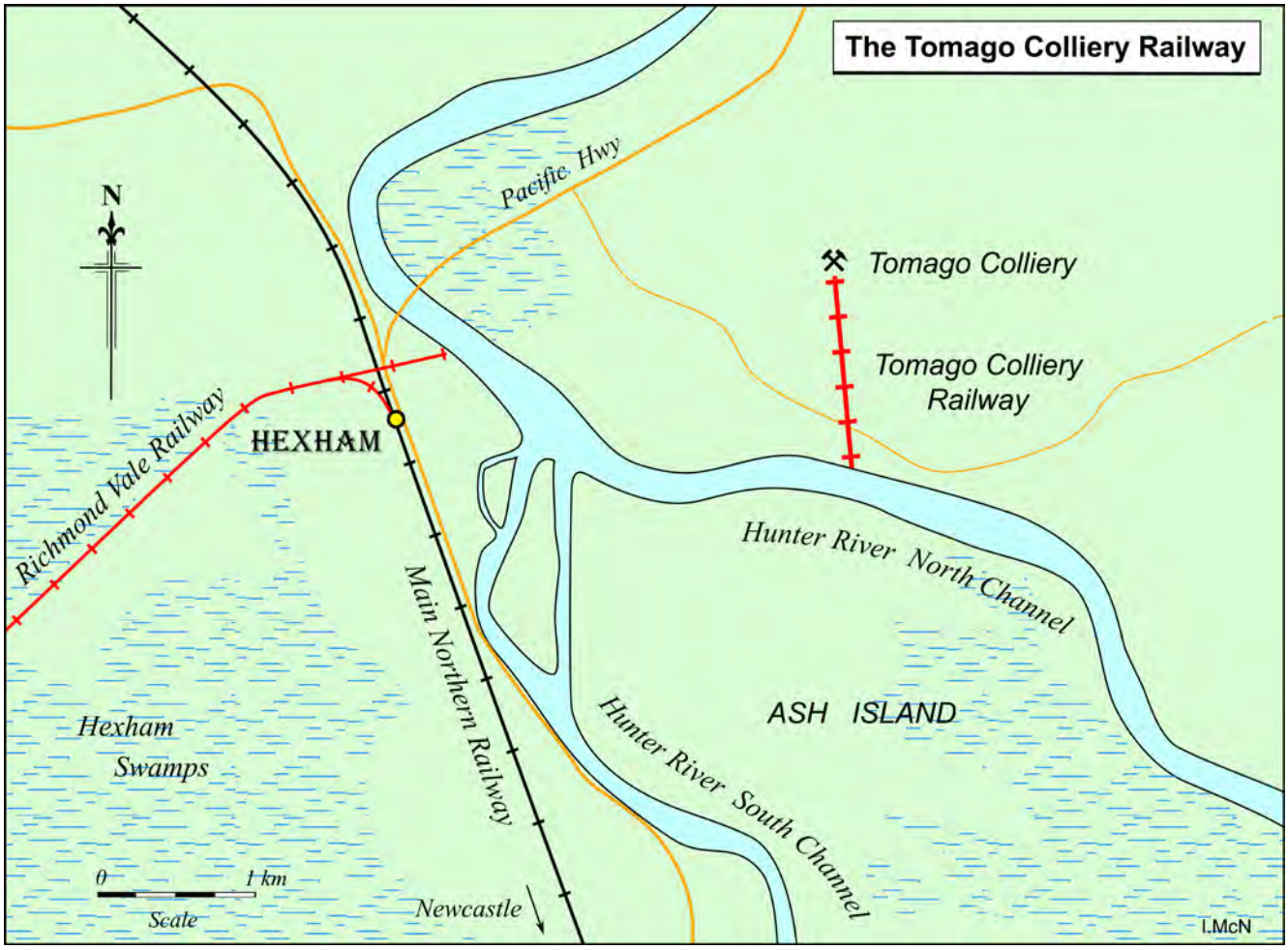
Williamson invested considerable capital in the mine, as is apparent by the following 1860 description:[20]

'Captain Williamson's Colliery at Tomago.

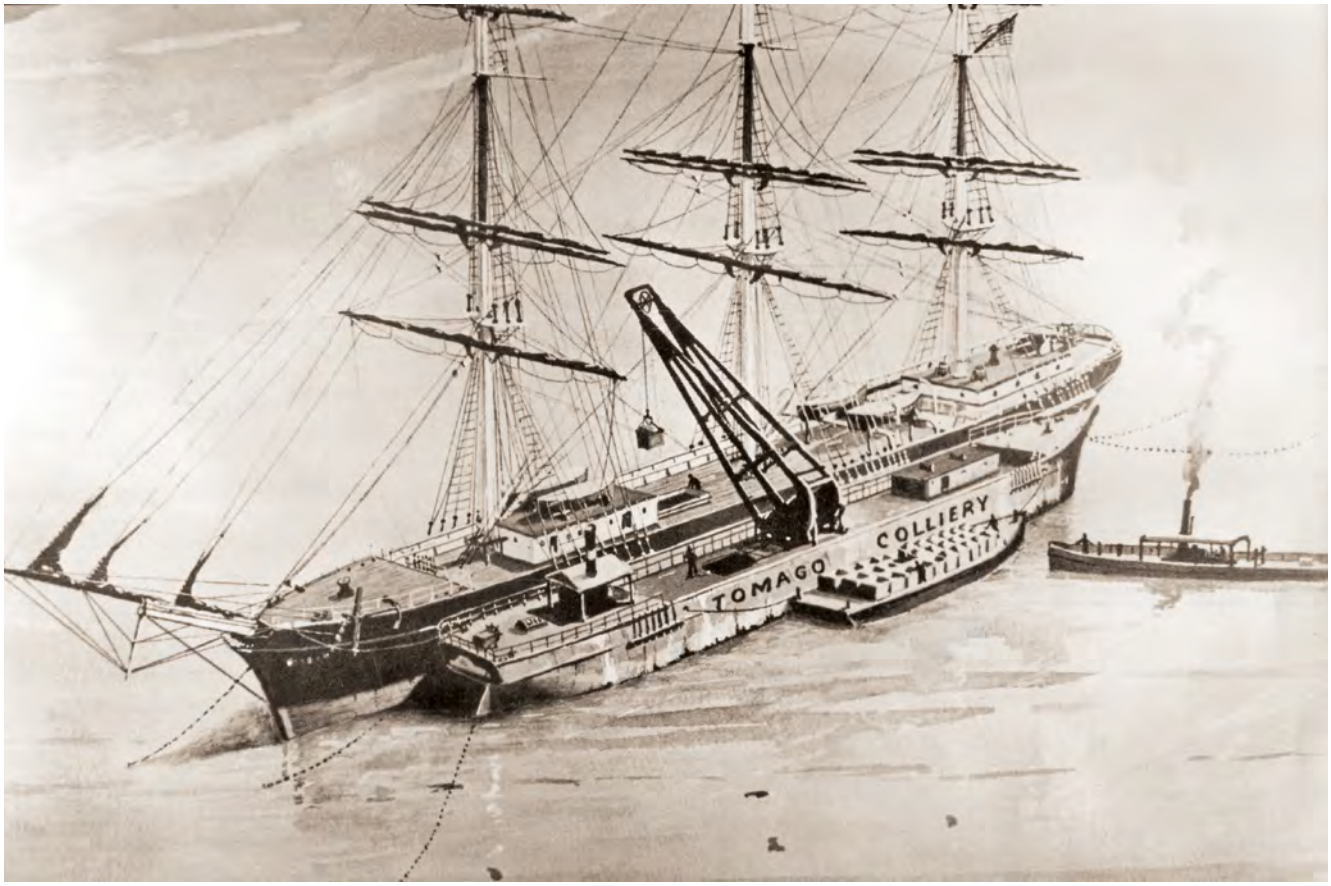
The coal mine at Tomago on the north side of the Hunter River, nearly opposite Hexham, was commenced about five years ago by Messrs Gordon and Brown, but worked with indifferent success until the property was purchased last year by Captain Williamson. Under the direction of Mr Young, an experienced miner, deeper borings were carried on and a seam of four and a half feet of coal having been found at a further depth of one hundred and fifty feet, a shaft was sunk and a pit opened out. The present depth of the pit is about four hundred feet. The exterior machinery resembles that at other collieries but the mine is worked upon a different principle. Instead of the pillar-and-stall system, that known as longwall working is adopted; nearly the whole of the coal is removed, nothing being left to support the roof but "nogs" or timber pillars. A longwall face of about three hundred yards is being excavated; from this the coal is brought through nogged gateways and the "gobbin" – waste stones or strata taken out of the coal or surrounding strata – is left behind to fill up the excavation to prevent premature descent of the roof.

The pit is about three quarters of a mile from the river, and the coal is brought down to the water's side on a railway. Some admirable contrivances are adapted for the shipment of the coal. The wagons which are constructed on a new principal, widen at the top and are made to hold four tons, two in each partition.

The wharf is carried on piles a considerable distance into the river, allowing the barges to come underneath. They are not, however, discharged promiscuously into the barge but into boxes which hold two tons of which there are twenty-one in each barge. At present



Locality plan showing the location of the Tomago tramway.



A painting portraying Tomago Colliery's 'drop ship' loading an American flagged merchant vessel (most probably the Matilda*) in Newcastle harbour. The drop ship (the first of its kind in the colony and referred to as* Williamson's Derrick*) was securely anchored in deep water of the North Channel opposite Bullock Island. This 400-ton vessel was formerly a barque sailing ship (the* Anthracite *of 300 tons) with all its sailing paraphernalia removed and now outfitted with a 20 hp steam engine powering the metal shears, which were 50 feet in height. The chain which ran over an iron pulley atop the shears was controlled by a steam winch; a two-ton capacity wooden coal box from the company's barge tied alongside was raised up to clear the ship's side. The 'quadrant motion' was then applied to the shears which positioned the coal box above the merchantman's hatchway in the deck. The box was lowered to the hatch, then a pin was knocked out opening the bottom of the box, allowing the coal to fall into the hold without undue breakage. Rate of loading was said to be 300 tons a day. The small screw steam-tug nearby was used to shuttle the barges back and forth from the company's wharf at Tomago. Courtesy University of Newcastle, Cultural Collections, Auchmuty Library. (Ross and Pat Craig Collection)*

there are only two of these barges in use but two more are in course of construction and will shortly be employed. The steam-tug *Aquarius* belonging to Captain Williamson is employed to tow these barges to and from the wharf.

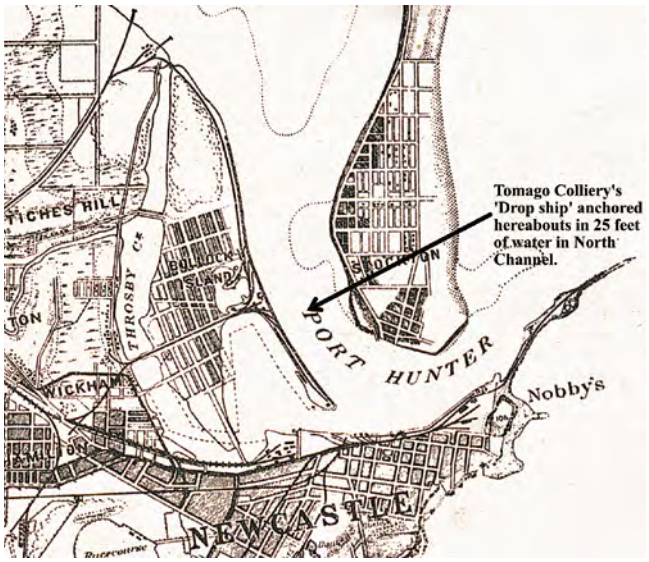
The apparatus for shipping the coal brought down by the steamer is also of a new and ingenious character. An old vessel of three or four hundred tons, called a "drop ship" is anchored in the deepest part of the harbour; upon her deck a pair of sheers is fixed and to this is fixed an iron crank which moves backwards and forwards from a few feet beyond the bulwarks on one side to the same distance beyond those on the other side. The vessel about to receive a cargo of coal is brought to one side of the drop ship, and the barge with the boxes of coal on the other. With each motion of the crank which only occupies a few seconds, one of the boxes of coal is lifted from the barge and carried across the deck till it is vertical to the ships hold, when the floor of the box is opened and the coals are discharged. The returning motion of the crank replaces the empty box when a new one is ready to be removed with the next revolution of the crank. The machinery is worked by an engine of twenty horsepower and is able to load three hundred tons per day. The drop ship is a great accommodation both to the owner and to those who have large vessels to load, as ships of a large tonnage can now take coals alongside her than can be brought under the shoots. The apparatus was contrived and put together by Captain Rowntree of Waterview Bay.'

On one voyage of the tug *Aquarius* a crew member met with an unfortunate accident. The captain went ashore at Tomago on business, leaving the tug's 'engine-driver' asleep on the deck in a state of inebriation. Upon the captains return, the driver, Lewis O'Neil, described as 'a man of generally sober habits' was nowhere to be found.[21] A day later his lifeless body was found floating in the river – the doctor's verdict was 'death by drowning.'[22] It was thought that his intoxication had caused him to inadvertently tumble overboard as there were no bulwarks around the side of the steam-tug.

The first vessel to be loaded with Tomago export coal at 'Williamson's Derrick' was the *Matilda*, an American merchant ship. Its cargo was destined for a Chinese port. On 23 November 1859, as the paddlewheeler steam-tug *Lowestoft* towed the heavily laden ship down the north channel of Newcastle Harbour, 'the event was thought worthy of some distinction' so with official approval the *Matilda* fired off a 19-gun farewell salute.[23]

Within two years all this expenditure had left Williamson well out of pocket and even though over 16,000 tons of coal was raised during 1860, in March 1861 the Tomago mine was offered for sale.[24] The advertisement describes the improvements, including:

'…a substantial railway, shipping wharves, engine house, screens, workshops, manager's house and upwards of 30 workman's cottages.'



The approximate location of Tomago Colliery's 'drop ship' anchorage in the North Channel of Newcastle Harbour. It was opposite Stockton and the future wharves of The Dyke where all northern coalfield's coal was eventually to be loaded into ships by crane. Courtesy Mark Rigby

The property, sold through Messrs Mort & Company,[25] was purchased by the Tomago Coal Mining Company which had been incorporated by Act of Parliament the same year with a capital of £20,000.[26] This act mentions the 'coal plant, tramways and railway machinery' on site and although his name does not appear in the sale document, it appears that Williamson retained an interest in the new firm. Young also stayed on as mine manager.[27]

When the initial meeting of the Company was held on 20 January 1862, the following information was reported: A second steam engine had been installed at the mine beside the original machine. Five month's production had raised 13,000 tons of saleable coal which fetched £12,250. When working and management expenses were deducted the remaining profit was £3,630 permitting a dividend of 1½ per cent.

At the second half-yearly meeting held in August, the Directors announced that it was their intention to sink a second shaft, closer to Stockton. A short time previously Young had called tenders to lay 700 yards (*640m*) of 'rolleyway' at Tomago and as the above advertisement confirms that the original mine railway was at that time in place, it may well be that this work was associated with the new proposal.[28]

In January 1863, it was announced that boring near the chosen site had proved the seam to be 10 feet thick. A further announcement in April confirmed that the 240 feet deep bore was close to deep water frontage near Stockton and that it had been drilled 'under the superintendence of Mr Young of and for the Tomago Colliery Company.'[29] The specific location is not apparent but there are several subsequent references which imply that shaft sinking was in fact commenced.

Williamson had earlier refused to join the local Coal Masters' Association, and the new Company maintained this stance. As a consequence, the Hunter Mineworkers' Association permitted its Tomago members to work during most district strikes, thereby giving the company access to the markets when coal was in short supply. By this means a sporadic demand for Tomago coal continued, inducing the captains of larger ships to bring them up river and by September 1861, even with the mine producing 800 tons per week, one report claims that ten vessels were awaiting cargoes at the Company's wharf.[30]

The development of this export trade led to the following special dispensation being included in the 1862 'Navigable Water Protection Act':

'Ballast may be Discharged: -

At Tomago, along the north bank of the river Hunter, commencing at a point twenty-five from the top of the bank, in line with the fence below Tomago Inn, and extending thence westward on a regular curved line, averaging thirty-five feet from top of bank up to heap of ballast at the well above miners' huts, and thence on a line averaging forty feet from bank to point of mangroves.'

Sale and Closure

This advantage notwithstanding, and despite Tomago coal selling at 15/- per ton, by 1863 the mine was still not doing well. Not only was there no half-yearly dividend, but shareholders were told that a further share issue was required to finance a second shaft required by new legislation. Despite this, the Board considered that year's results to be 'very satisfactory.'[32] Indeed, the high hopes continued and in September 1863 the arrival in Australian waters of the Tomago Coal Company's screw collier SS *Thorne* was announced.[33] Despite all the above, in January 1864 with Tomago shares trading at £4 a Special General Meeting of shareholders moved to appoint auditors to examine the Company's position. A further meeting was held the following month and after considering the auditors' report, it was decided that the mine should be closed and the property offered for sale.[34]

Newspaper advertisements were accordingly placed, advising of a 'Peremptory Unreserved Sale by order of the Directors of the Tomago Coal Mining Company.' In these it was stated that longwall working had been adopted and confirmed that an engine house, screens, workshops, manager's residence and some 40 miners' cottages had been constructed at a cost of £35,000.[35] Included in the sale was an option to purchase a further 1,980 acres (*801 ha*) of land, comprising Portion 6 of the adjoining Kennington Park Estate.

Describing the railway as 'substantial' the advertisement further notes that:

'…the pit being distant only about 800 yards from the point of shipment on the river places this mine in this respect in a very great advantage compared with other collieries, and the cost of haulage is very trifling, one horse being capable of taking the loaded waggons along a well-laid railway to the staithes, where vessels of 200 tons can load.'

The property changed hands for only £5,000 and by October 1864 the original Tomago Coal Mining Company had been declared insolvent with debts of £20,798.[36] Once again Williamson continued his association with the new company and Young remained the mine manager.

Considering their position, the new owners decided that the mine must remain closed.[37] The reasons stated were the competitive state of the coal trade and the foreseen requirement to outlay unproductive capital in complying with the requirements of the newly-proclaimed Coal Mines Regulation Act, especially the provision of a second shaft.[38]

The *Maitland Mercury* commented:[39]

'We regret to learn that the proprietors of the Tomago Colliery have come to the determination to abandon its working altogether. The underground plant, such as tramways, pumps, &c., are all ordered to be brought up to the surface. Thus the water will be allowed to flood the workings throughout the pit. At the recent sale of the property, it was said to have been bought in at the nominated rate of £5000. In the present competitive state of the coal trade here it has ceased to be profitable, and the additional expenditure the company would have to incur, in compliance with the Mines Regulation Act, are considerations no doubt that have led to this final determination.'

There is no mention of any activity in the 1864 *Mines Department Annual Report*.

In 1865, there is a brief mention that a borehole put down near Raymond Terrace on Mrs Dillyends property *Roslyn*, had struck a three-foot coal seam underlain by kerosene shale. Leases had been taken up and a shaft was proposed.[40] Nothing further is known.

Brief Revival

The pit lay waterlogged and dormant until 1869 when the directors had a change of heart and financed its dewatering. A new pumping engine had been installed but shortly after it commenced work the pump itself failed. In a letter headed 'Wallsend Colliery Tomago' and dated 8 June 1859, Captain Williamson writes as follows, describing the problem and his solution:[41]

'William Keene Esq
Inspector of Collieries

My Dear Sir

If I had had the opportunity of detaining you when you passed up in the steamer in the beginning of the week I would gladly have done so as I was about to introduce for coal-mining purposes, a branch of science, which in all your experience, I felt convinced you have never witnessed, but which, I believed you would view with great interest; and as it has proved so completely successful, I send you now a few particulars for your guidance for those who in future may require such assistance.

I informed you about a fortnight ago at Raymond Terrace that my new engine and pumps were in full working order and that I hoped to get rid of the water that had accumulated for the last seven or eight weeks in a few days. Well everything appeared to go right and the water was reduced from 250 feet to 50 feet deep; and I returned to Sydney; but to my dismay I received a letter the very next morning from Mr Young, stating that shortly after my leaving, the lower pump lost her water and he was busy fitting casks to draw the water. Next day and the following, he reported being able to make no impression on the water; and I resolved as a desperate resource, to endeavour to make available the services of divers employed by my firm in Sydney. For this purpose, after arriving here with the men and requisite apparatus, a stage was erected in the fore pit about twelve feet above the water (which by this time had risen to 60 feet) and two long ladders spliced together, placed perpendicular in line with the brattice, and four large lamps burning at the surface of the water; and the diver safely descended, and found the bucket door broken. He then descended to the clack door 58 feet below the surface of the water and carefully examined it by feeling and found it in good order. He then examined the bucket valves and detached and sent up the broken door and returned to the surface and made his report. A new bucket door was then sent down fitted with a leather gasket, and he again descended and at a depth of 45 feet, placed it in its position and in four hours he had finished screwing it up and fitting it perfectly tight.

The time employed altogether in this most difficult undertaking occupied twelve hours, and the lamps being found no service to the diver at a greater depth than 9 feet, the entire work had to be done in total darkness, and I think you will agree with me, considering that he had never in his life before been in a coal pit, he is a brave fellow to undertake the job and a smart fellow to do it.

I have only to add the pumps are now working beautifully and the water is now down to the old seam and will be soon entirely cleared.

I am my dear sir, yours sincerely,
Jas Williamson

PS- I ought to mention the name of the diver alluded to is Thomas Macnab who has acquired his arte (sic) entirely in this Colony.'

The mine, now under the name of 'Tomago Wallsend Colliery' re-opened on a small scale working only the lower seam (later known as the '*Tomago Thin Seam*'.) The longwall method of extraction, said to better accommodate the restricted seam thickness of 3 ft 3 in (*99 cm*) continued to be employed. The coal proved more saleable and by 1870, around 100 tons per day were being won. Messrs Dibbs, Thorne and Coy were appointed shipping agents and Williamson arranged for a sample of the product to be sent to England for appraisal. There is no mention how the matter of a second egress was avoided…perhaps the Mines Department issued a temporary suspension of this requirement until the seam was proved.[42]

It was all too good to last, and around 1873, the mine was again closed. The surface plant was soon removed and the tramway dismantled but the coal holding appears to have retained. The monies realised from the sale of the plant and machinery were returned to the debenture holders:

'Tomago Coal Mining Company. A statement with plan of distribution, showing a further payment of 1s and 2⅝d per pound to debenture holders, out of proceeds of assets realised in the insolvent estate of the Tomago Coal Mining Company has been lodged with the Supreme Court Sydney, and will be submitted for confirmation on Thursday 7th December next if not previously objected to.'[43]

Some (or all) of the coal trucks were sold to the Burwood Coal Company. They are first noted as being in use on the Burwood Estate railways in 1875, making it more than likely that they were standard gauge. Described as 'the two-ton trucks,' they ran on these lines until at least 1879 by which time they were in a sad state of disrepair and the cause of many complaints from various shippers.[44] The winding engine went to the Scott's Dairy mine near Thornton. It was later used for a time at Donaldson's Woodford Colliery and eventually ended up at South Waratah Colliery in 1874.[45]

The NSW Government Geologist, T W Edgeworth David mentions Tomago Colliery in his prestigious 'Memoirs of the Newcastle and Hunter Coalfield', but only so far as to quote details of coal quality from the sale advertisement.[46] He correlates the (*upper*) Tomago Thick Seam with the Big Ben seam of the East Maitland Coal Measures and the (*lower*) Tomago Thin Seam with the Donaldson Seam in the same series. In error, David states that the mine closed in 1861.[47]

Sale of Assets

By March 1888 the Tomago coal holding itself was on the market. This time the mine, long abandoned was not offered as a going concern. The following advertisement appeared in the *Wallsend and Plattsburg Sun*:

' FOR POSITIVE SALE TO CLOSE ACCOUNTS
TOMAGO COAL MINE

Containing 300 acres of freehold coal land with rights to mining under 200 acres adjoining, making 500 acres in all, situated on and having about a mile frontage to the North bank of the Hunter River about eight miles distant from the City and Port of Newcastle.

PRELIMINARY ANNOUNCEMENT

Richardson and Wrench have received instructions to sell by public auction at Rooms Pitt St Sydney on Friday 23rd March 1888 at 11 o'clock.

This important mineral property of which the following few points may be mentioned:

1) There is already one shaft about 372 ft deep from which many years ago the mine was worked on the Longwall system. About 5 acres are believed to be taken out of the seam then worked.
2) The mine is on the bank of the river with deep water frontage to which vessels drawing 11 ft may be brought for lading.
3) The distance from the pit's mouth to the river is a little over a quarter of a mile and the old road requires but little making up for laying an iron tramway, its gradient is hardly perceptible from a dead level.
4) The price of haulage from the pit's mouth to the river is of the cheapest kind.

Full particulars of the above property may be obtained from the office of the auctioneers where a plan of the underground workings may also be inspected…. Terms: "LIBERAL AT SALE"[48]

Tomago Community

As noted previously, a village comprising some 40 cottages had sprung up around the coal mine and a subdivision plan in 1891 indicates that blocks were marked out and streets allocated.[49] In February 1861 the Tomago mineworkers formed a lodge and elected three representatives to attend the initial meeting of the Hunter River Miners' Protective Association. Despite this show of unity, the remote location of the village and the factors noted previously, meant that Tomago miners were rarely represented in any collective strike action.

The mining community did not always find favour with the older locals. In 1857, newspaper correspondent James Inglis, later to become Minister for Public Instruction, said of the coal miners:

'They steal what they can lift and smash what they can't… one of their latest movements is to steal most of the nuts from the bolts in the railway bridge over Ironbark Creek, to be used as sinkers for fishing… their vagaries are those of an uncivilized and brutish race.'[50]

They were indeed a rough lot at Tomago, including when two miners charged with assaulting Mr Young, 'with murderous intent' served time in Maitland Gaol.

Tomago Post Office was opened in 1862 following representation from the colliery owners who claimed that the Tomago Colliery Settlement had more than 100 persons in residence. Mine Manager, William Young was appointed as the first Postmaster and when he resigned in January 1864 'in consequence of the closure of the mine,' Robert Gordon's daughter was appointed to the position. Although there was a post office, the Education Department would never concede a school and the miners' children attended the Tomago School on the nearby Windeyer property.

The end for the colliery village, now virtually deserted, was near in May 1891 when Maitland land agents, Brunker and Wolfe advertised in the local papers the intended sale of 300 acres of land, 'comprising the Village of Tomago'… in order to settle a joint account.[51] An auction on the site was held on 30 May with a large number of residential and rural blocks offered for sale. Although all mineral rights were reserved, the subdivisions cut through the old mine site and the railway formation.

Close to the Hunter River, Gordon had established an inn patronised by miners and sailors. Beside the Tomago Well, Turnbull the lessee, installed a steam pump to fill elevated tanks and commenced to supply water for shipping. The Tomago Water Company was formed, and ran a brisk trade supplying 'soft fresh water' to ships moored in Newcastle Harbour using tank lighters towed by their steam-tugs *Tomago* and *Lily*.

Virtually all communication with Newcastle was by river steamer and before long these began to bring picnic parties from Newcastle. Despite this welcome patronage, the mineworkers had been the mainstay of the Tomago Inn and in 1865, Gordon offered it for sale and moved on. For a time, sufficient residents remained to warrant the retention of the post office.

The new owner of the Inn persisted, he erected a hall and set out picnic gardens nearby and by the 1880s, the weekends saw a regular procession of little steamships bringing picnic parties to enjoy the excitements of Tomago. On one such excursion in February 1875, the employees of J & A Rodgers 'Newcastle Foundry' sailed up the Hunter River aboard the steam-tug *Cobra* for the firm's picnic at Tomago. (Back in November 1862, Mr Young, manager of the Tomago Colliery was invited to the foundry's opening celebrations.) After lunch, sports events included foot races for those tradesmen employed as blacksmiths, engineers, moulders and labourers and also races for the young boys in the company employ.[52] In 1878 this firm built a small 0-4-0 steam locomotive, the first constructed outside of Sydney, for a local coal company.

Some excitements were better avoided: one December afternoon in 1890, some 150 members of the Tighes Hill Primitive Methodist Church crowded Tyler's Jetty to find places on the returning steamers.[53] The structure collapsed without warning and 20 persons were precipitated into the river. It was low tide, so no one drowned, and all were soon back onboard to dry out beside the boiler.

The steam-tug *Tomago* was also chartered occasionally for ferrying excursionists to Tomago wharf.

Tomago Railway

An 1860 description of Williamson's operations at Tomago mentions the railway but gives no details of the track. It does however state that his coal trucks had a capacity of four tons and were 'constructed on a new principle.'[54] Their sides tapered outwards at the top, they were divided by a centre partition and fitted with twin bottom doors.

At the riverside, in addition to the original shoot where small ships were still loaded, a siding ran on piles out over the water allowing the trucks to dump their loads directly into coal barges moored beneath. (See more below.)

In 1861, the *Newcastle Chronicle* states that the Tomago mine tramway was constructed on a gentle incline so that full trucks ran by gravity from the mine to the wharf with a single horse employed to return the empties.[55] The account of the 1864 sale, notes that the tramway had been constructed from the shaft to the river 'some years earlier.'

Three years later, the *Sydney Morning Herald* describes the 800-yard-long railway as being well laid and graded, 'so that one horse can haul coal wagons to the wharf.'[56] Another report around this time records that a picnic party from Newcastle landed at Tomago wharf and rode the Tomago Company's train to the mine.

The line is shown on a number of more recent plans, in some cases captioned 'Tomago Railway.' In Edgeworth's report he notes that the surface level of the shaft is 35 feet above the river. The topography is such that very minor earthworks would have been required and at normal river height there was sufficient elevation at the waterfront to allow smaller vessels to be loaded by gravity. It appears that the track was removed some time between 1873 and 1876.

As noted above, evidence regarding the subsequent use of the trucks indicates the line was standard gauge, and the statement that '…the old road requires but little making up for laying an iron tramway…' appears to imply that the original line was laid with wooden rails.

Coal Handling

The location of the Tomago mine had always placed it at a marketing disadvantage with ships' masters reluctant to expend time and towage to move ocean-going sailing vessels upriver. The varying river heights also made it difficult to load larger vessels from the small Tomago staithes.

When Williamson took over, bringing with him maritime and mercantile experience, he set out to remedy the problem. In consultation with his Sydney confrere, Captain Rowntree he invested heavily in appliances to transfer the point of shiploading into Newcastle Harbour.[57]

A new wharf with a siding extending over the water was built at Tomago, four barges were constructed, and the steam-tug *Aquarius* was assigned the duty of towing them down to a 'drop ship' moored in Newcastle Harbour. Initially it was proposed that rails would be laid on the barges and the coal trucks themselves be taken down river. When this was found to be impracticable due to the tidal range, each barge was fitted out instead with 20 (later increased to 30), two-ton removable coal boxes.

The 'drop ship' itself was built by Rowntree's Balmain shipyard on the hulk of the 300-ton sailing-ship *Anthracite*.[58] As noted above, the masts and rigging were removed and twin shears erected, fifty feet high and six feet apart. Between them a pair of steam-powered segmental 'iron cranks' pivoted on a horizontal two-inch shaft. With a coal barge moored on one side and an ocean-going ship on the other, the swinging cranks lifted one coal box at a time from the barge and positioned it over the appropriate hatchway. The bottom door on the box was opened and the coal loaded with minimum manual involvement 'as fast as it could be trimmed.' Utilising a 20-horsepower engine the drop ship was said to be capable of loading coal at the rate 300 tons per day.

The contrivance, in a dismantled state, arrived in Newcastle on 8 October 1859 towed by Williamson's steam-tug *Washington*.[59] Painted buff with 'Tomago Colliery' boldly lettered in white on the hull, it was re-erected and moored on the Stockton shore of the estuary, opposite Bullock Island, where it soon became a local landmark. The first ship to be loaded was the brig *Daniel Watson* with a cargo of 216 tons of best Tomago coal for Sydney, sailing on the 28 October.[60]

Earlier in the year the *Washington* was called upon to assist loaded sailing ships, in the face of a nor-easterly wind, when departing Newcastle Harbour. It would tow them out past Nobby's at the harbour entrance where they 'could catch the fair wind' if sailing towards Sydney. The steam-tug would later steam back up river to the Tomago coal wharf to replenish its fuel bunker.[61]

Browns' Massive Machine(s)

Faced with the same problem after taking over Eales mine at Minmi, in 1860, Messrs J & A Brown were said to be constructing a similar land-based appliance: [62]

> 'At present the coal is taken by a locomotive engine to the water's side and there conveyed through shoots into small vessels which come up the river for cargoes. A large barge measuring 124 feet by 32 feet and capable of carrying 400 tons of coal was recently built at Newcastle. The barge will be employed for loading vessels of heavy tonnage on the completion of a large derrick or crane, now being fixed for that purpose at Stockton, opposite Newcastle, by Mr James Scott, who superintended the construction of the patent slip at Pyrmont. The derrick will reach one hundred feet above high water, and will overhang a distance of seventy feet from the line of beach, so as to afford deep water for the vessel about to be loaded and to allow the coal barge to come between her and the wharf. The apparatus will be worked by a direct acting cylinder and piston, twenty-five feet long, lifting the coal from the barge into the ship. The derrick will be finished and ready for loading ships in a few weeks.'

The article goes on to state that Alexander Brown was at that time returning from Britain, bringing with him additional machinery, including one hundred coal boxes and a crane.

A later report describes a similar (perhaps the same steam ram) in use at Hexham:[63]

> '…on the wharf at Hexham, where a steam crane, worked by a direct action of steam on the piston, lifts the coal boxes from the trucks into vessels' holds, where they are emptied and again lifted by the steam crane onto the trucks on the railway. This crane is the only one of its kind in Australia and is of exceedingly simple construction. The boiler is perpendicular and the cylinder horizontal. Galvanised wire has taken the place of hemp ropes and chains at Minmi and some of the other mines and is found more safe and economical.'

The device does not appear to have been a success, in any case, later in 1860, the Tomago coal barges and drop ship were acquired by the Browns for the sum of £4,000.[64] *Alfred the Great* was the last ship to take on Tomago coal from the drop ship, sailing for Guam with 712 tons on 26 May.[65] After this date all ships were towed by company steam-tug to load at the Tomago wharf.[66]

In October the versatility of the drop ship was demonstrated with the arrival of the ship *Saldanha* on a voyage from Liverpool. This vessel was of the largest tonnage to enter the Hunter River to date, that of 1563 tons and it was capable of carrying a cargo of over 2000 tons of coal. *Saldanha* sailed from Newcastle on 28 October 1860 with 1000 tons of coal destined for Hong Kong.[67]

The development of cranes on the Newcastle waterfront led to the drop ship's redundancy and by 1869, the hulk, said to be in need of extensive repairs was removed from the harbour.[68]

Interest Wanes

For ten years or so there seems to have been little interest in Tomago coal. Although several more shafts were sunk 'near Hexham,' they appear to be seeking upper measure seams in the Tarro area.[69] Then in 1879, an article appeared in the *Newcastle Herald* attributed to a 'Special Correspondent,' possibly Mr George Pepper of Motto Farm, drawing attention to the supposed coal beneath Tomago.[70] Under the heading 'Report on the Coalfields of Raymond Terrace and Stockton,' it outlined the geological outcrops from which the presence of coal beneath Fullerton Cove and Tomago could be inferred, at the same time noting that the coal holdings at Stockton were currently 'in Chancery.' Some tunnels were driven into the northern outcrop with inconclusive results.[71]

Indeed, when the Motto Farm property of 600 acres was offered for sale in 1883, mention was made of the underlying coal and of the land 'being in a direct line with, and approximate to, the famous (!) Tomago Seam.'[72]

By 1888 at least two major companies had become interested in the Tomago Coalfield.

Big Ben Company

Moving now forty or so years onwards to 1921, we find the *Newcastle Morning Herald* reporting a renewal of interest in the Tomago coalfield with the formation, in that year of the Newcastle Big Ben Coal Mining Company under the aegis of Messrs Thompson and Young.[73] This firm, reported to have a capital of £20,000, took up leases over some 3000 acres at Tomago and partially dewatered the original 1855 shaft.

Workmen's' accommodation was erected nearby and steam pumps supplied by a large boiler, were set to work.[74] Although the shaft had not collapsed and the timbers were reported to be in a good state of preservation, operations were suspended whilst 'legal matters were finalised' in London.[75] No further work was done, and in 1926, claiming an expenditure of £15,000, the Company was granted a suspension of labour clause on its leases, which in any event were relinquished soon after.[76]

As the *Herald* commented:[77]

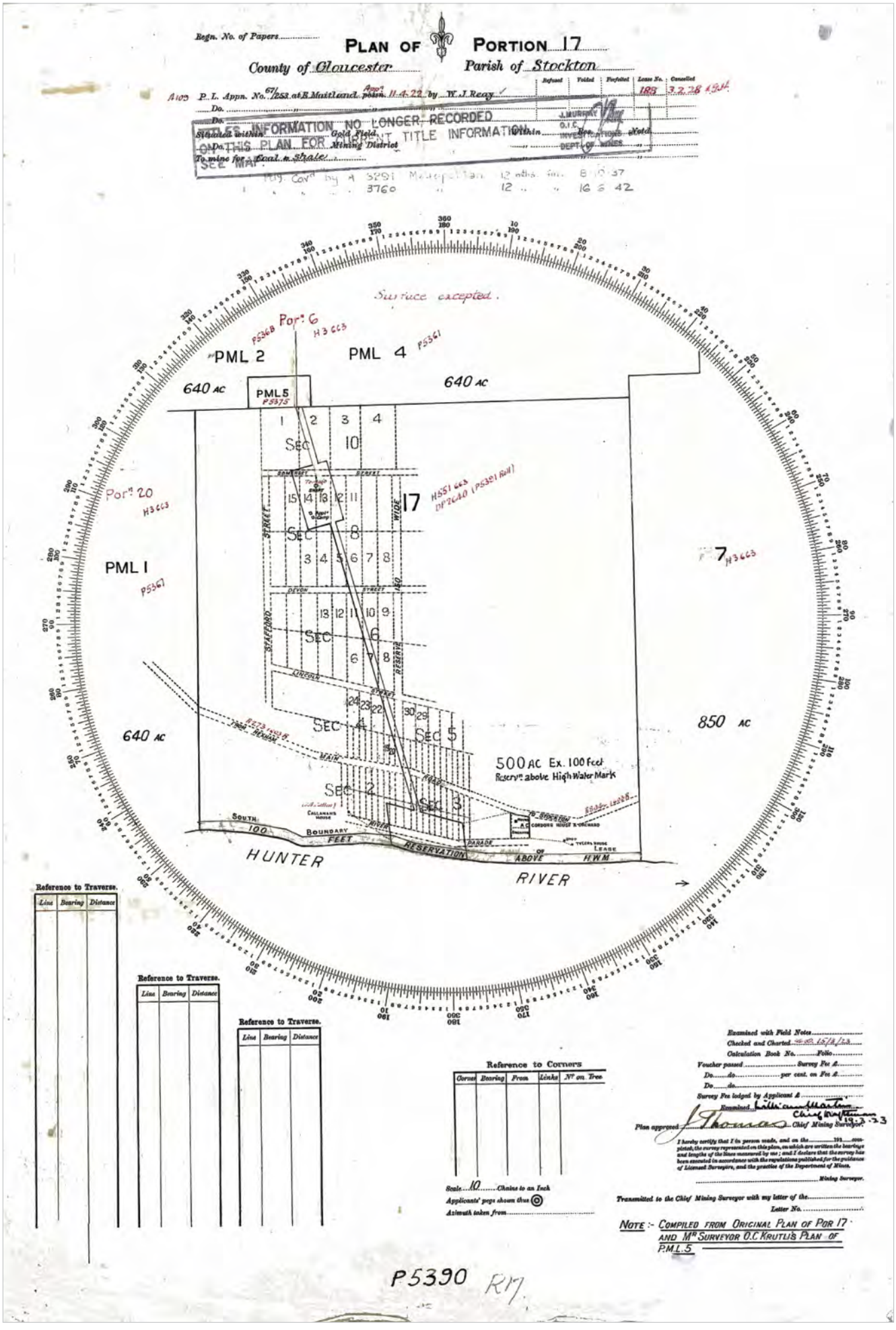
> 'Tomago is essentially an agricultural and dairying centre. At one time in its life, however, it had some pretensions to being a mining town, and had its colliery in operation. The body which worked the pit was known as the Tomago Coal Co. …. The property was being worked in 1861, and apparently had a fair local market then, but for some reason it was not continued. A few years ago, attention was given to the mine again, but this has not been proceeded with, although the property, having the mineral so near the surface and within easy distance of the waterfront, should pay handsomely.'

Still the field would not die...During the 1950s the Joint Coal Board did some boring in the area, and Andrew Sneddon Pty Ltd, owners of Northern Extended Colliery at Teralba took out lease options in 1962, and briefly considered the area...once again the decision was that Tomago coal was not, at that time, a commercial proposition.[78] Shortly afterwards, J & A Brown and Abermain Seaham Collieries Ltd and BHP Collieries Ltd, each similarly investigated the field and each reached the same conclusion.[79] Government Geologist Pitman appears to have summed up the matter back in 1898 in his brief 'Report on Coal Seams at Hexham' in which he states: '…the Tomago seams have proved decidedly inferior to the Borehole seam and the operations at Ash Island have not resulted in profitable working of these seams there.'[80]

One red herring exists in the guise of plans prepared in the 1960s by Cessnock Collieries Limited for a 'North Tomago Open Cut.' They show the outline of proposed surface mine, overlaying some old underground workings, but a closer examination of the drawings indicates that they relate to an area near Neath North Tunnel on the Cessnock coalfield.[81]

Above: *This December 1897 scene encompasses the workshops of Messrs J & A Brown at Hexham. This busy location was the terminus of their private railway from the coal mines of Minmi. Coal was loaded here directly into ships moored at the 'shoots' beside the Hunter River. In the foreground, the Maitland Road is protected by a timber post-and-rail fence. The camera of the photographer, Ralph Snowball, has captured the steam punt on the north bank of the river (mid-left) while between the deck crane of the ship and the right-hand ship's stack, can be barely discerned the North Stockton Coal Company's Kilcoy shaft headframe. This shaft (12ft dia) struck a coal seam (9ft 6in thick) at a depth of 501 feet. The company planned to drive a tunnel beneath the Hunter River in this seam to another shaft (about 3000ft) on Hexham Island, of which the company had purchased in its entirety. No photographs have been located of Tomago Colliery, it very approximately lay about one mile beyond the Kilcoy shaft headframe, astride the 25ft contour line, slightly northwards to this direction of sight. Photo courtesy University of Newcastle, Cultural Collections, Auchmuty Library. (Ralph Snowball Collection – 'Road to J & A Brown's Mines and Railway works, Hexham, NSW, 9 December 1897')*

Right (page 21): *Plan (Portion 17), County of Gloucester, Parish of Stockton showing the location of the Tomago Colliery shaft and the disused route of the railway to the Hunter River (North Channel) wharf. This lease plan was probably drawn up at the request of the Newcastle Big Ben Coal Mining Company of 1921 but the lease was relinquished in 1928. Note that the street grid was laid out for the residences of the colliery employees from the 1860s period. Today, the Tomago aluminium smelter occupies most of this land (north of the main road) while the Periodic Detention Centre has mostly obliterated the river wharf frontage.* *Late John Shoebridge Collection*



A map of the Tomago area and surrounds dated 1893. At top centre, the long closed Tomago Colliery is shown, along with its abandoned railway formation – 'old tramway, dismantled' – to the wharf on the North Channel of the Hunter River. On the far left at Hexham, Messrs Brown's private railway from the Minmi collieries is shown emerging from the Hexham Swamp then crossing the Great Northern Railway on its way to the ship loading staithes beside the river. Travellers using the Maitland Road but wishing to travel north to Raymond Terrace could cross the river by a steam punt. The present-day Pacific Highway bridge (c1952) is just upstream of this location. At 8 miles 20 chains from Newcastle, a branch line accessing Hexham Island curved away from the Great Northern Railway. The island, about 100 acres in extent, was owned by the North Stockton Coal Company and the branch line, spanning the South Channel of the Hunter River by a timber bridge, served the Company's new shaft (sinking 1890). The underground workings were to be connected with a present shaft (sunk 1889) just across the river at Kilcoy. The venture was an expensive failure (nearly £60,000 of capital lost) as during sinking through sand and mud the island shaft collapsed and a costly lawsuit with the contractors, Russell and Company, resulted. Another failed dream of the Tomago Coalfield.
Map courtesy Newcastle City Library, Heritage Collections. (Plan of the Tomago Estate and surrounds in 1893. Original: Major T S Parrott, Map of the country around Newcastle NSW, 1893)

Subsequent Surface Use

In 1944 Courtaulds (Australia) Ltd purchased 1300 acres (526 ha) of scrubland at Tomago, including Portion 17, the site of the old colliery. Here it proceeded to establish a large factory for the manufacture of Rayon fibre. Much of the mine site and the remains of Tomago Village were obliterated in the process. The old shaft was at that time, still open, gradually filling with rubbish, whilst portion of the low embankment which had formed the roadbed of the Tomago Railway remained, readily discernable, and still referred to by local residents as 'the pit line.'[82]

In 1976 Courtauld's factory closed, a victim of East Asian imports. By 1981 the property had changed hands and planning approval was granted for the establishment of an aluminium smelter to take advantage of the district's cheap coal-generated electricity. This plant, now operated by Tomago Aluminium Co Pty Ltd commenced production in 1983. In the course of its construction, the railway bank was levelled, and the shaft was filled with rubble and capped with a concrete slab so that the plant's main switchyard could be located atop it.

The river-side terminus of the line adjoins the western boundary of the Department of Corrective Services Periodic Detention Centre (now known as the Hunter Academy for Corrective Service!) In the 1980s a section of brick walling still remained on the riverbank but it appears to have been demolished when the facility was constructed.[83] Near the water's edge there is still (2008) a small section of rubble-filled embankment, possibly the last vestige of the coal loading point.

Otherwise very little remains of this pioneer enterprise save for the indication of the railway route on some land maps, still captioned: 'Old Tramway … Abandoned.'

Acknowledgements

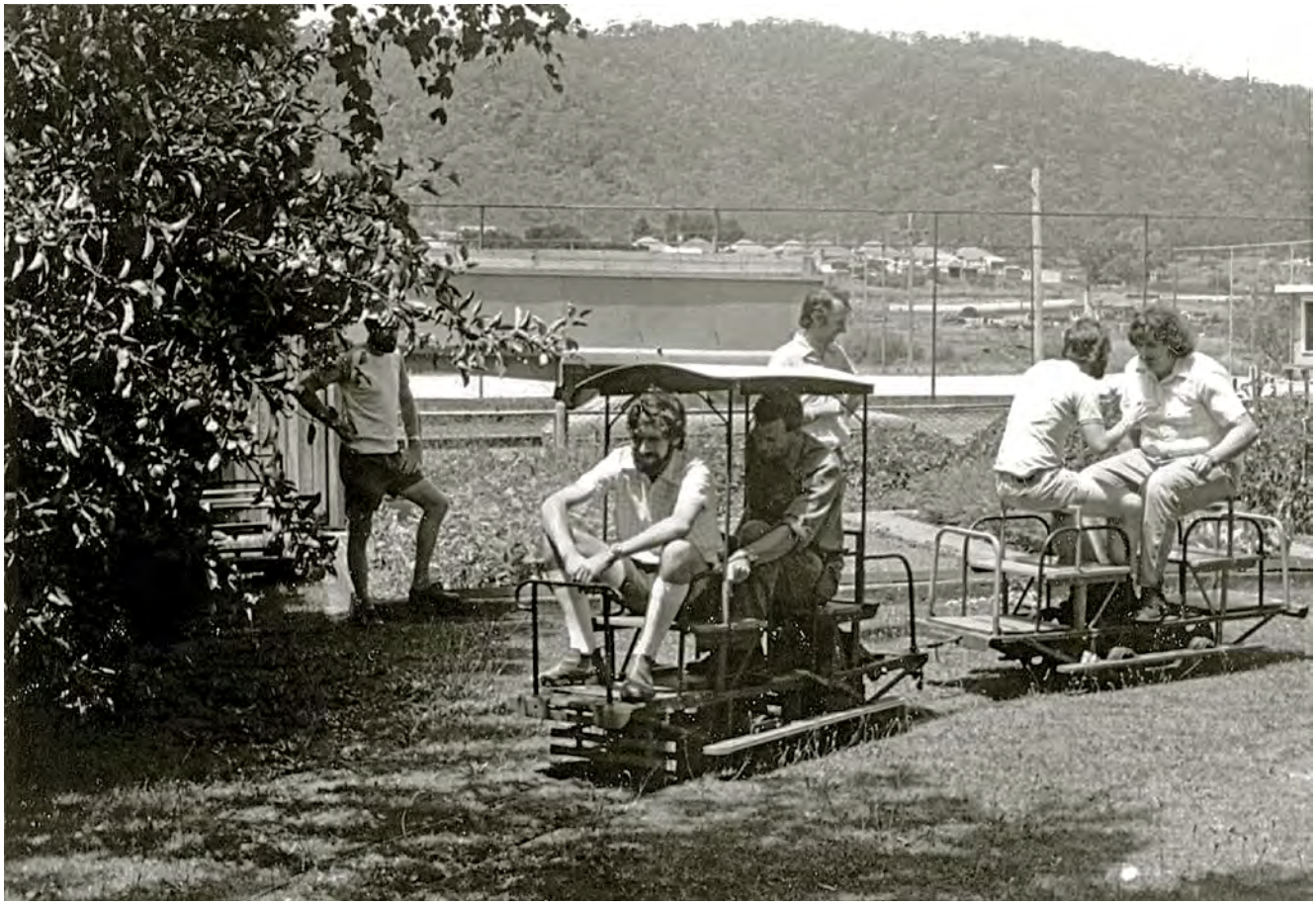
The assistance of the following people and entities is acknowledged: Dulcie Hartley, Ross Mainwaring, Mark Metrikas, Mark Rigby (Stockton Historical Society Inc), Ed Tonks, Newcastle City Library (Heritage Collections) and University of Newcastle (Cultural Collections.)

End notes

1. Most of the early history of the area is drawn from Dulcie Hartley's books 'Men of Their Time; Pioneers of the Hunter River': (Aquila Agribusiness P/l 1995) and 'From Fullerton Cove to Motto Farm': (Self-published 1987) which I gratefully acknowledge.
2. This land was originally taken up in 1829 by Colonel Snodgrass and Major Mitchell. It was purchased by Richard Windeyer, a prominent lawyer, around 1842. Before long Windeyer found himself in financial difficulties and after his sudden death in 1847, his widow was forced to sell off much of their original 30,000 acres.
3. *Maitland Mercury*: 26 Aug 1854
4. *Maitland Mercury*: 4 Aug 1855
5. *Maitland Mercury*: 20 Dec 1854.
6. It may be that Gordon bought Coulter out.
7. Deed of Sale: J & A Brown to Newcastle Coal & Copper Company, 31 Dec 1855
8. Returns of the Colony, 1844: Newcastle City Library, Local History Section. 'Upper Hexham' was probably in the vicinity of Woodford.
9. *Maitland Mercury*: 5 May 1874.
10. Far deeper than was anticipated in the tender advertisement!
11. *Maitland Mercury*: 11 Feb 1857
12. Equivalent in today's terms to more then $60 per tonne.
13. *Sydney Morning Herald*: 11 Aug 1859.
14. *Sydney Morning Herald*: 10 Dec 1856. Nothing appears to have come of this. 'Young Mr Windeyer' was soon to marry the daughter of William Keene, the Chief Examiner of Coalfields. Maybe he advised against it.
15. *Maitland Mercury*: 17 Feb 1857.
16. Jay C: 'The Coal Masters - A History of J&A Brown', Focus Publishing, Sydney 1994
17. *Maitland Mercury*: 30 Dec 1858. This action gives rise to the suggestion that some boring had been carried out.

18. *Sydney Morning Herald*: 11 Aug 1859. The report describes this as the first parcel of coal to be brought down by the barges, either meaning the first from this seam…or the first for the type of vessel
19. *Maitland Mercury*: 11 August 1859.
20. *Sydney Morning Herald*: 12 May 1860.
21. *Sydney Morning Herald*: 3 January 1860, p 2
22. *Newcastle Chronicle and Hunter River District News*: 31 December 1859.
23. *Illawarra Mercury*: 1 December 1859.
24. *Sydney Morning Herald*: 30 Mar 1861.
25. *Empire*: 9 May 1861, p 4
26. The Tomago Coal Mining Company Incorporation Act of 1861 (25 Vic).
27. Thus, more a 'restructure' than a 'sale.' In addition to Williamson, the principals are named as Donald M'Lean, Alexander Campbell, Francis Mitchell and Edward Cornish…all described as 'Gentlemen' of Sydney.
28. *Newcastle Miners Advocate*: 15 Mar 1862. Rolleyway = trolleyway = light railway. Generally an underground term.
29. *Maitland Mercury*: 7 Apr 1863. It is the author's opinion that this was in fact the Borehole Seam.
30. *Newcastle Chronicle*: 7 Sep 1861.
31. To this day, ballast stone can still be seen where it was dumped in the river at this location.
32. *Newcastle Chronicle*: 21 Jan 1863.
33. *Sydney Morning Herald*: 17 Sep 1863. The *Thorne* continued to trade interstate and overseas but there is no further mention of it in connection with the Tomago firm. The ship may have been on charter or associated with Williamson's shipping interests.
34. *Sydney Morning Herald*: 21 Feb 1864.
35. *Maitland Mercury*: 21 April 1864
36. *Maitland Mercury*: 15 Oct 1864
37. So far, I have unable to determine who the new owners were. It appears that (as before) many of the original shareholders, including Williamson remained.
38. The new regulations required, inter alia, that all producing mines have two means of egress.
39. *Maitland Mercury*: 17 May 1864.
40. *Maitland Mercury*: 23 Nov 1865
41. *Maitland Mercury*: 9 Jun 1869.
42. The new Coal Mines Regulation Act provided for such contingency so long as a limited number of men were employed underground.
43. *Newcastle Morning Herald*: 24 Nov 1876
44. Burwood Estate; Cash Book and Inwards correspondence (Various) Newcastle City Library Local History Collection.
45. *Maitland Mercury*: 5 May 1874.
46. David TWE: 'Memoirs of the Newcastle and Hunter Coalfields' 1907; NSW Govt Printer, Sydney.
47. No doubt quoting local residents.
48. *Wallsend and Plattsburg Sun*: 7 Mar 1888.
49. 1891 Subdivison Plan quoted by Noach T: Unpublished thesis, Macquarie University. 2006.
50. Inglis J: Our Country Cousins: Mc Millan and Coy, London 1857
51. *Newcastle Morning Herald*: 2 May 1891.
52. *Newcastle Chronicle*: 23 February 1875.
53. *Newcastle Morning Herald*: 27 Dec 1892.
54. As noted above, when they were later sold to the Burwood Estate they were described as 'two-ton trucks.' I cannot explain this discrepancy, unless it refers to other vehicles.
55. *Newcastle Chronicle*: 7 Sep 1861.
56. *Sydney Morning Herald*: 14 Apr 1864.
57. Rowntree a Master Mariner turned ship builder and entrepreneur founded the shipyard which was to become Morts Dock
58. *Sydney Morning Herald*: 25 Oct 1859. The newspaper report refers to this ship as the *Antrocite*. This is believed to be a grammatical error as only the ship name *Anthracite* was registered with Lloyds of London at that time. Coincidentally, 'Antrocite' is the Italian word for 'Anthracite.' Today, Antrocite coloured kitchen and house floor tiles are a popular choice and feature in many commercial tile catalogues and displays.
59. *Shipping Gazette and Sydney General Trade List*: 31 October 1859, p 175
60. *The Maitland Mercury and Hunter River General Advertiser*: 1 November 1859, p 2
61. *Northern Times*: 9 February 1859, p 3
62. *Sydney Morning Herald*: 12 May 1860
63. *Maitland Mercury*: 12 Sept 1861.
64. *Newcastle Chronicle*: 19 May 1860
65. *Shipping Gazette and Sydney General Trade List*: 26 May 1860
66. *Maitland Mercury and Hunter River General Advertiser*: 24 May 1860, p 3
67. *Sydney Morning Herald*: 30 October 1860. An obstructive sandbar prevented the ship from being loaded to full capacity.
68. *Sydney Morning Herald*: 28 Jan 1869.
69. East Maitland Coal Measures.
70. *Newcastle Morning Herald*: 23 Aug 1879
71. The author inspected one of these beside the Pacific Highway north of Raymond Terrace in the 1960's.
72. *Maitland Mercury*: 23 Aug 1883
73. *Newcastle Morning Herald*: 17 June 1921. The Big Ben coal seam outcrops around the Thornton area.
74. *Raymond Terrace Examiner*: 13 Jul 1923
75. *Newcastle Morning Herald*: 4 May 1923.
76. *Newcastle Morning Herald*: 6 Feb 1926
77. *Newcastle Morning Herald*: 17 Oct 1928
78. Details from plan noted above, in Author's possession.
79. Colyn Harrison (Gen Supt, Coal & Allied Industries Ltd): Personal Communication. Norman Monger (Supt of Collieries, BHP Collieries Ltd) Personal Communication
80. NSW Mines Department Annual Report: 1898
81. Lake Macquarie City Council Mining Records Collection. This one is a mystery. It may well be that Cessnock Collieries were at one time proposing to explore the Tomago area and had formed subsidiary company for that purpose.
82. Dulcie Hartley: Personal Communication. (Mrs Hartley interviewed numerous local residents in the course of researching her books)
83. *Newcastle Morning Herald*: 19 Aug 1878. Report states that 25,000 bricks were delivered here to the order of Mansfield Bros of Sydney.

Between the Tomago Road and the Hunter River, what is thought to be Tomago Colliery railway embankment remains were located a little way before the site of the company's North Channel coal 'shoots' (chutes) and wharf. Trees and dense thickets of lantana made research difficult but small pieces of coal were found on the top of the embankment. The western boundary fence of the Detention Centre lies several metres away in the background. North of the main road, (Tomago Road) the railway formation from the colliery has been obliterated by industry. Photo dated 19 June 2020.
Photo courtesy Mark Metrikas



Some members of the Signalling Record Society-NSW Branch enjoying a train ride around John Shoebridge's narrow-gauge railway at Lithgow on 12 February 1977. The subject of this article is at the controls of his diminutive 'loco,' shaded by the canopy roof. The track circuit was fairly level. *Photo: Robert Taaffe*

Lithgow's Narrow-Gauge Railway

by Ross Mainwaring

At its industrial peak, the western NSW town of Lithgow hosted many industries with a large number using narrow-gauge railway systems. The chief employer was the coal industry with a multitude of collieries in the Lithgow Valley and surrounding district.

The late John Shoebridge, a long time LRRSA society member, contributed one additional narrow-gauge railway to the scene. It ran around his home in the town.

John followed in the footsteps of his father and entered the coal industry in 1953 at a northern NSW colliery. He obtained his mine manager's certificate in 1963 and after a stint at Richmond Main Colliery south of Kurri Kurri, he secured the position of Superintendent at the Mines Rescue Station at Lithgow in 1974. A house on a double-block was also provided as part of this position.

This rescue station, situated in Hassans Walls Road had opened in 1926 with Mr W L Evans appointed Superintendent and Mr H Minchin, the instructor. Central Rescue Stations, instituted in response to the Bellbird Colliery disaster of 1923 were established on the northern, southern and western NSW coalfields and were financed by the coal companies. They paid for the station, equipment, and salaries of the staff and trainees.

With ready access to discarded rail and skip wheels lying about the many disused mines of the Lithgow valley, John Shoebridge decided to lay down a miniature railway running around his house. The track gauge is not definitely known, but was perhaps 18 inches or thereabouts.

A friend, Dennis O'Brien, donated a Villiers two stroke petrol engine (75 cc or 100 cc) that came from a self-propelled lawnmower. A centrifugal clutch was an added convenience but the final drive, by chain, still had to be geared down to provide a more manageable speed. It was push start!

The small 'locomotive' was extremely basic; an 0-4-0 wheel arrangement using colliery skip wheels with traditional curved spokes. A canopy roof offered some basic weather protection and wooden footboards were attached to the axle boxes each side. A rudimentary 'cowcatcher' was bolted to the front. One single transverse bench seat could accommodate an adult passenger with the driver sitting at the rear. A primitive four-wheel trolley, fitted with timber seats, could be coupled behind to carry additional passengers if required.

During February 1977, the Signalling Record Society – NSW Branch visited the railway signal boxes of Lithgow. An added highlight of its day was a specially arranged trip underground at Lithgow Valley Colliery. The members sat in a man transport car propelled by a 42-inch gauge storage battery locomotive. The visit notes stated: '…the road being fairly rough and the ride enjoyable beyond description.' Lithgow Valley Colliery operated both diesel and electric locomotives in its mine. (see *Light Railways* No.231, June 2013)

Upon regaining daylight, John conducted a tour of the Rescue Station after which all adjourned for lunch in the yard of his home. Of course, after lunch, the railway was put to good use with innumerable runs around the circuit. As is the want of signalling aficionados, with a single-track railway, it was thought that a Staff system of safeworking should be

Lying semi-derelict in the yard of the Newcastle Mines Rescue Station at Argenton in 1994, the Shoebridge 'carriage' is in the foreground with the 'loco', less its canopy roof, behind. Photo: Suzanne Weller

instituted so two 'Staff stations' were established equidistant around the track. Good fun was had by all!

On some occasions when his daughters returned home by the afternoon school bus, John would be waiting with the 'train' at the front of his property to transport his 'passengers' around to the back door of the house. This caused some embarrassment as the remaining bus passengers watched out the windows! His youngest daughter considered herself to be the best 'loco driver' of the household!

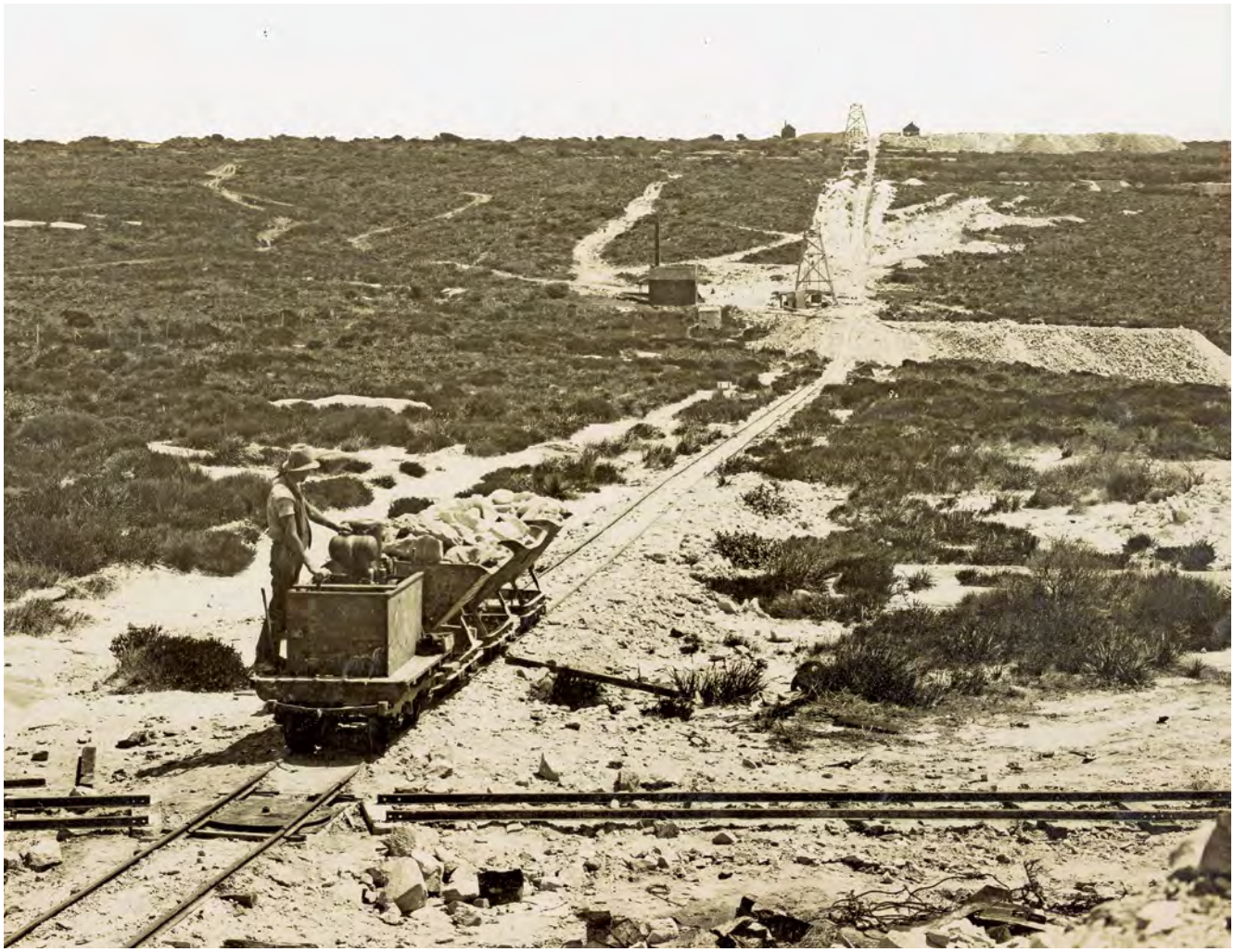
In 1979 John was appointed to the Superintendent's position at the Newcastle Mines Recue Station at Argenton. This Rescue Station was also opened in 1926. The railway at Lithgow was dismantled and the locomotive and carriage were packed off to Argenton but saw no further use. With retirement in 1994 and the move to a new house, the rail vehicles were no longer required so were 'scrapped.'

This ended the short story of 'Lithgow's Narrow-gauge Railway.'

Acknowledgements

The author wishes to thank Dennis O'Brien, Bob Taaffe, Suzanne Weller and Tony Weston for their generous assistance.

Photographed on a wet day in December 1973, this 42-inch gauge storage-battery locomotive is an Australian built Gibson Battle/Jeffrey 10-ton unit as was used during the underground visit by the Signalling Record Society to Lithgow Valley Colliery in February 1977. The visitors rode in either a four-wheel mine car or a transport car of this type that is leading the loco. Loaded timber skips are ready to go underground.
Photo: Tony Weston



The superbly-detailed photo that started the quest. *Gifford Eardley Collection PXD 535 Vol 77 File 192, State Library of NSW*

Pansy and the 'Blue Fish Limited'

by John Browning

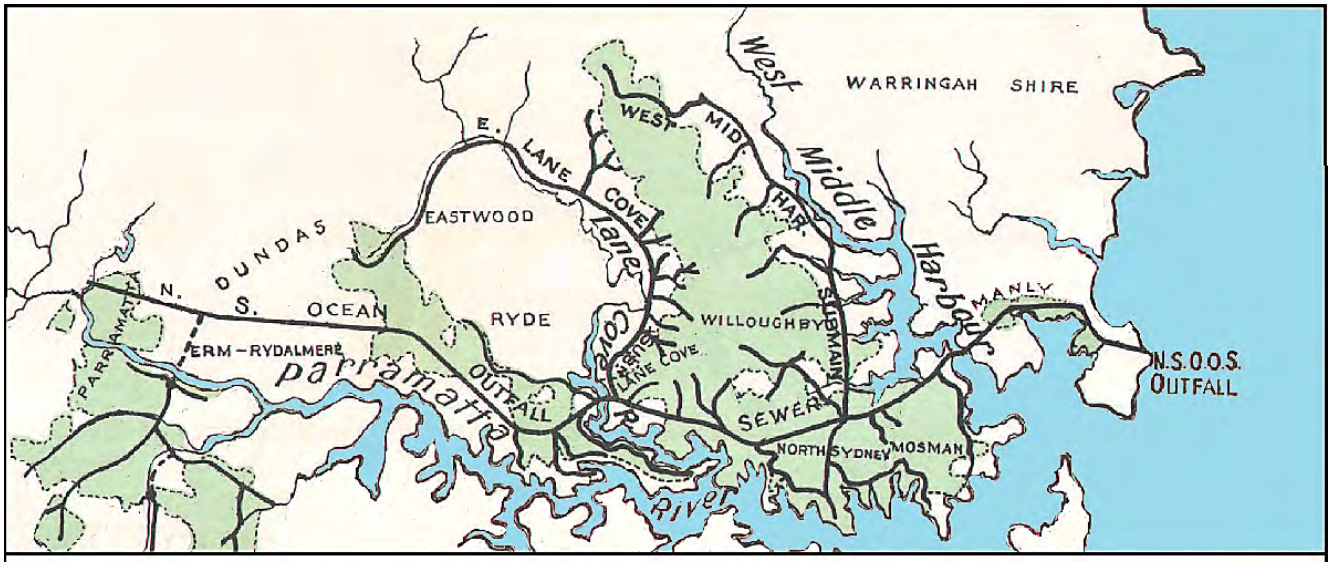
This is about a research challenge dismissed as almost impossible to pursue but which finished with a happy ending. It started with the discovery of the superb accompanying photograph in the Gifford Eardley collection at the State Library of NSW. It was in his subject file entitled *Metropolitan Water Board Railways* and appeared after pages on Cordeaux Dam.

The photograph shows a small improvised internal-combustion locomotive with three skips loaded with rock. The track appears fairly level but in the distance it rises up a lengthy slope and there is a suggestion of roller blocks indicating that this may have been a rope-hauled incline. Areas of disturbed ground show that the area is very sandy. Two headframes are visible to the left of the line, one just above where the track begins to rise up and another on the horizon at the head of the incline. Adjacent to each of the headframes there is a building with a tall chimney, indicating a steam engine house used to power the hoisting gear for a shaft below the headframe. In the foreground there is a turntable and there appears to be another one at the first headframe, where rock has been tipped on the right hand side and a line runs to the engine house to the left. A little further up is a siding to the right and as the line rises, there appear to be several other levels at which rock has been tipped. At the top of the rise, the rock tipping has been extensive. This appeared to be a tunnelling job.

First port of call was Jim Longworth, with his extensive knowledge of dam building in NSW, but he was definite that the scene was not at Cordeaux or any other dam site he was familiar with. Some research then alerted me to the construction of the Northern Suburbs Ocean Outfall sewer in Sydney in the 1920s, which I considered one of many possibilities. The ocean outfall was at Sydney's North Head.

I consulted with a "brains trust" consisting of Ross Mainwaring and Chris Hart, without informing them what my suspicions were. Here are their responses: Ross Mainwaring - "*My guess is that this is the eastern suburbs of Sydney, perhaps constructing a sewer outfall tunnel. That scrubby countryside is similar to that seen on the headlands over that way*." Chris Hart - "*I presume the steam plant would be driving the shaft winches and maybe the incline if it is rope hauled. Do you think those are rollers up the incline? Could it be a sewage tunnel to an outfall into the ocean? That would require a constant grade and tunnelling. The North Head at Sydney has light coloured stone and a sewage treatment plant*."

Pretty good responses! Encouraged by these educated suggestions, I decided to investigate further the possibilities for Sydney's North Head and the Northern Suburbs Ocean Outfall sewer. I discovered that construction of the 33.5km of main sewer was in the hands of the NSW Public Works Department between 1916 and 1928, when it was handed over to the Metropolitan Water Sewerage & Drainage Board for completion. At the time of transfer, four sections of the main outfall had been completed, enabling the interception of



NORTHERN SUBURBS OCEAN OUTFALL SEWER SYSTEM 1939

sewerage previously directed to the treatment works at North Sydney and Mosman for discharge into the ocean beneath the high sandstone cliffs at Blue Fish Point, North Head, within the quarantine station reserve. The sewer was a major engineering work that crossed beneath the Lane Cove River and Middle Harbour on its path from Wentworthville and with its branches drained the whole of the northern suburbs.

Contact with Geoff Lambert of the North Head Sanctuary Foundation confirmed the likelihood that the photo was taken during construction of the line of sewer at North Head. He stated that in around 1930 Manly Council constructed a Telford-style cobbled road on North Head. By 1936 the spoil heaps from tunnel excavation were not visible in an aerial photo, opening up the possibility that the stone for the road construction came from the spoil heaps, which would have been ideal - Telford cobbles are irregular just like the rubble would have been.

NORTHERN SUBURBS OCEAN OUTFALL SEWER, NORTH HEAD, MANLY, NSW
Surmised tunnel route and the approximate locations of the shafts constructed by October 1919

The first section of the tunnel to be constructed was at the Manly end. By October 1919, work was well advanced on this section with seven shafts sunk about 280 metres apart, between the cliff top at Blue Fish Point to where Darley Road began to rise at Addison Road. The deepest shaft, at the highest point of the ridge on what is now Blue Fish Drive, went down 91.5 metres. It was remarked that the line of poppet heads visible on the surface were reminiscent of a mining field, and indeed it was said that the construction site was used as a movie location to depict just such a scene. Compressed air powered the drills used by the miners who worked to join up the underground headings that extended from each shaft. The tunnel in this section was excavated to internal dimensions of 2.7 metres high and 4 metres wide. A temporary tramway, worked by hand, was laid in the tunnel to remove spoil as well as to convey construction materials including cement for the concrete lining. Leading from an underground outfall chamber were twin outfall outlets to the ocean, situated 11 metres below mean sea level. These outlets were opened up by explosives on 9 August 1922.[1]

The first use of a battery locomotive in Australia for underground construction work was in a different section of the tunnel at Berry's Bay in North Sydney in 1924 where a 2ft gauge British Electric Vehicles machine (B/n. 559) supplied by Empire Agencies was put to work.[2]

It seems likely that on the occasion of the blasting of the ocean outlets, the home-built locomotive that features in the photo attracted the attention of a reporter from *The Sun* newspaper. As a result, it featured in a photograph and report two days later. The article began as follows:

SPEEDY PANSY
Making the Track Hot
BLUE FISH LIMITED
Manly's Home-made Engine.

Credit to whom credit is due! In the construction of the huge sewerage works now proceeding everyone and everything has received its meed of praise — except Pansy, the Blue Fish Point limited express. There are men who claim that but for Pansy they wouldn't have reached the blasting point they did on Wednesday for months to come yet. For Pansy has hauled practically everything along to the job, and yet she is the target for the cruel jibes of any man who cares to single her out.

The Sun was an afternoon tabloid daily, well-known for the reporting of popular issues in sensational style. The account on the 'Blue Fish Limited' was well larded with hyperbole and it trivialised domestic violence, but a few factual nuggets were contained.

The 'curious contraption' *Pansy* was made on site, combining an old wagon and a 6½ hp petrol engine recycled from a concrete mixer. It worked over a mile of track and was driven by Percy Wheeler with Mr J Butler as his offsider. It may have been unidirectional as mention was made of the use of a turntable. Much was made in the newspaper article of the locomotive's unpredictability and the excessive speed of which it was capable, resulting in derailments, and of its mechanical foibles requiring it to be 'hit with a hammer'.[3]

What can be concluded about Gifford Eardley's photo? It seems likely to have been taken during 1922 when the sewer tunnel in this section was being finished off. It appears

Tunnel section nearing completion deep under North Head *Photo:* The Sun *11 September 1922 page 7*

The B.E.V. battery locomotive that was used on the Berry's Bay section of the sewer construction in North Sydney
Photo: The Sun *4 June 1925 page 20*

likely that the headframe on the horizon would have been the one over the deepest shaft, probably No.3. Only one other headframe is shown; the two that would have corresponded to the two levels visible along the descent of the incline must have already been removed, together with their haulage plant, for use on another section of tunnel. The locomotive is just passing another level, marked by the turntable and lateral track. If we assume that No.3 headframe is the one furthest away, then the photograph was probably taken in the vicinity of No.7 shaft, somewhere near today's intersection of Darley Road and Addison Road.

'Patsy' and her crew. *Photo:* The Sun *11 August 1922 page 6*

Acknowledgments

Thanks to all those mentioned, together with the helpful staff at the State Library of NSW.

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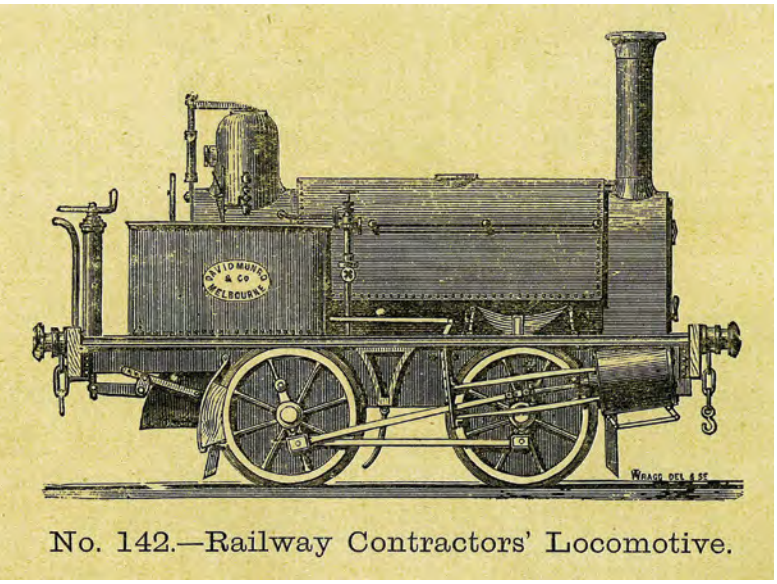
David Munro catalogue illustration

by John Browning

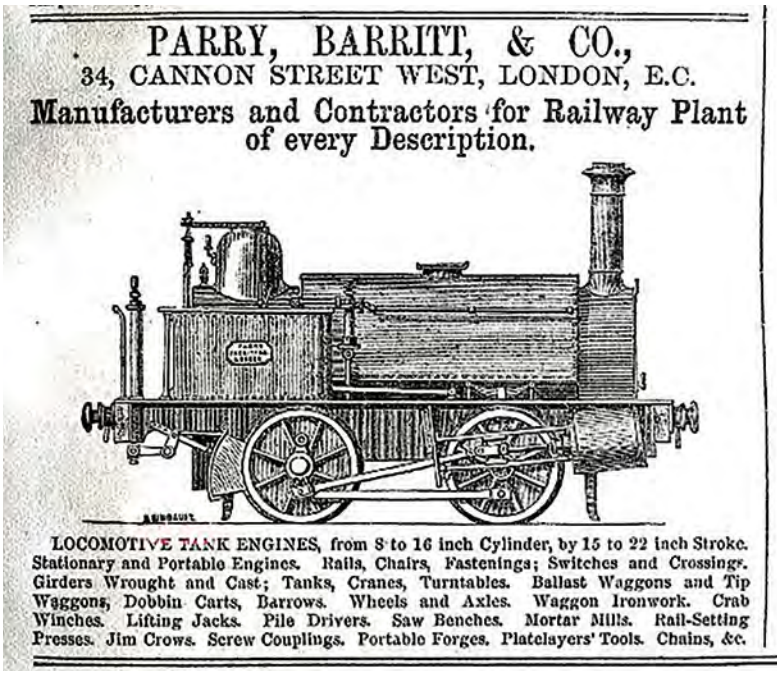
Peter Evans has been looking at David Munro (1844-1898) as part of his ongoing series on 'Lives of the Engineers' in *The Old Machinery Magazine*. Munro was a Victorian-based machinery agent and manufacturer, and also a railway contractor. A David Munro machinery catalogue from the 1880s, kindly made available by Peter Byron, features an engraving of an 0-4-0ST labelled "Railway Contractors' Locomotive". It features an oval cabside plate inscribed DAVID MUNRO & CO MELBOURNE. The question arises whether this locomotive was ever built, and if it was, who built it. The engraving was marked 'WRAGG' (with a 'T' superimposed on the 'W'). This indicates that the engraver was Thomas Wragg, who had worked at the *Illustrated London News* and became a settler in north-western Tasmania in the early 1860s. He subsequently took up his trade again in Melbourne and prepared many illustrations of machinery for David Munro's catalogues. He drowned in the Cam River at Somerset, Tasmania, in 1901, at the age of 79.[1]

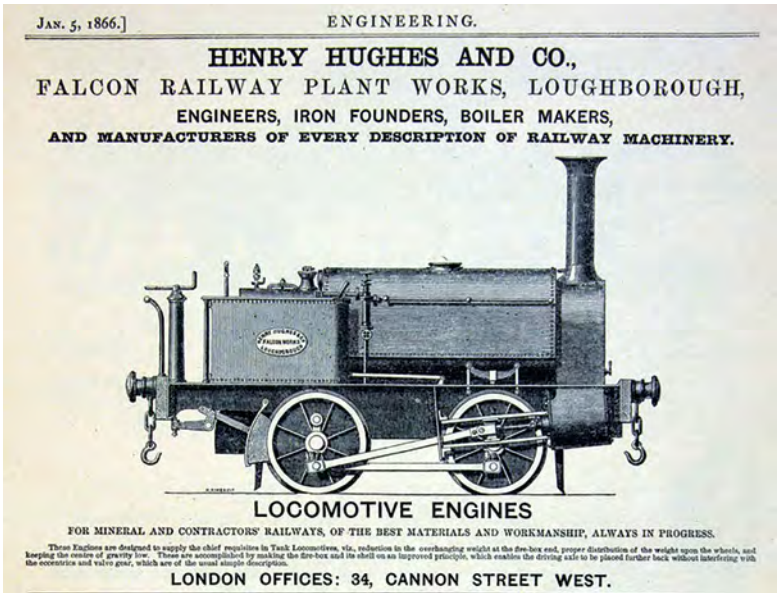


No. 142.—Railway Contractors' Locomotive.

Following an appeal for information, Chris West in London came up with a very similar, but not identical, illustration that appeared in an advertisement in *The Railway Times* of 8 May 1865. Parry, Barritt & Co are not known to have made any locomotives. The engraving is marked 'RIMBAULT', indicating that it was produced by John Henry Rimbault, who worked in London and from 1866 produced engravings that appeared in *Engineering*. He died in 1888, aged 68, after being run over outside the Houses of Parliament in Westminster by a Kennington horse omnibus.[2]

Chris West subsequently produced further evidence, initially pointing out advertisements that had appeared in *The Engineer* in 1866. These, again with engravings by Rimbault, date from as early as 5 January 1866. One advertised an 0-4-0ST for Henry Hughes & Co and the other advertised an 0-4-0WT for Fletcher, Jenning & Co. It can be seen that Rimbault had used the Henry Hughes engraving as the basis for the Parry, Barritt locomotive, adding the dome and associated fittings from the Fletcher, Jennings locomotive and seemingly redesigning certain details such as the wheels, chimney, tank filler, rear cab



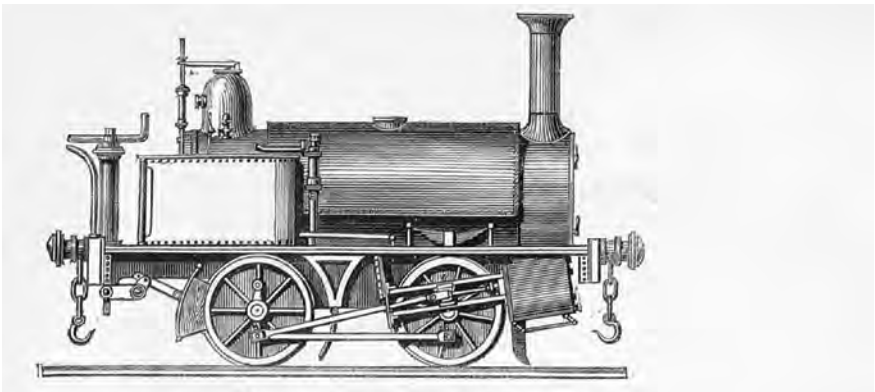


railing, brake block and coupling gear. It will also be noted that the Parry, Barritt locomotive does not feature the raised height buffer beam of the Henry Hughes but shows the top of the buffer beam in line with the top of the footplate, a feature of the Fletcher, Jennings locomotive. All this indicates that the engravings for the Henry Hughes and Fletcher, Jennings advertisements must predate the one made for Parry, Barritt in spite of their respective publication dates. Henry Hughes & Co was only established in 1865, but it appears that he had been in business at the Falcon Works, Loughborough, a few years before. At the London Exhibition of 1862 he showed a drawing of a "*locomotive engine for contractors and mineral railways, and all purposes where a light engine is required to ascend steep gradients and turn sharp curves*". No Hughes locomotive is known of before 1865.[3]

Chris West and George Toms then produced two further interesting Henry Hughes locomotive engravings dating from 1867. The first was another from Rimbault, published in the *Colliery Guardian* Volume XIII, January-June 1867. This has many similarities with the Henry Hughes advertisement of 1866 but as in the case of the Parry, Barritt & Co locomotive, the dome is situated on top of the firebox. It has lost its rear coupling hook, and has gained drain cocks and sanding equipment in front of the rear axle. The spring over the front axle seems to have come from the Fletcher, Jennings advertisement.

The second engraving, this time without attribution, appeared in *The Engineer* of 1 November 1867. It was included in the journal's coverage at the 1867 Paris Exposition, at which a Henry Hughes contractor's engine of this type was exhibited. It is slightly more crudely drawn but is otherwise extremely similar to the *Colliery Guardian* engraving although it has two oversized coupling hooks, has gained a lengthened spindle on the Salter safety valves, and has lost some frame depth behind the rear wheels. The sanding gear has become even more decorative in appearance than functional.

The evidence appears to indicate that it is very likely that in Australia Thomas Wragg worked from the engraving that had appeared in *The Colliery Guardian*. He even followed the missing rear coupling hook and the only indulgence he seems to have allowed himself is to have varied slightly the rotation of the wheels.



CONTRACTORS' ENGINE BY H. HUGHES.

Length of grate, 3ft. 1in.	Stroke, 20in.
Width of ditto, 2ft. 4⅜in.	Number of wheels, 4.
Total grate surface, 7½ square feet.	Ditto ditto, coupled, 4
Height of crown of fire-box over fire-bars, 3ft. 4in.	Distance between leading and trailing wheels, 5ft. 2in.
Number of tubes, 100.	Diameter of driving or coupled wheels, 3ft.
External diameter of tubes, 2in.	Diameter of leading or trailing ditto, 3ft.
Mean diameter of body of boiler, 3ft. 2·58in.	Total weight of locomotive, empty, 11 tons 10 cwt.
Thickness of plate, ·39in.	
Diameter of cylinders, 12in.	

Engravings like these of locomotives, and of other equipment, appeared many times in railway and engineering journals and catalogues in the nineteenth century. From what we can see, some engravings may well have been held as generic stock images and redrawn to reflect proposed modifications or to avoid allegations of outright copyright piracy. It appears that what we might call "cut and paste" techniques were used to combine features from different engravings. It is often impossible to ascertain whether the images represented designs that had actually been produced by the advertiser, had been built by another manufacturer, or were simply speculative in nature.

In this case, given the ancestry of the image, the locomotive in the David Munro catalogue illustration seems likely to have existed only in the imagination of its creator. The only locomotive that David Munro is known to have imported was an Aveling & Porter that was exhibited in Melbourne in 1886.[4]

Many thanks to Peter Evans, Peter Byron, Chris West and George Toms for their assistance in preparing this brief item.

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Port Adelaide's Outer Harbor works

During 1906 the South Australian Engineer-in-Chief's Department took over the construction of a wharf at Light's Passage, the entrance to the Port River, to enable large ocean liners to dock there. It was building revetment mounds with large rocks to extend the shoreline out to the existing channel. Floating dredges recovered material from the seabed, transferred it to rail trucks and it was dumped behind the mounds to reclaim land. The large rocks were sourced from off-site foothills quarries and carted by the SAR to Largs Bay where the trains were taken over by departmental or, earlier, contractor's locomotives for delivery to the mounds. The project design of 1886 by the famous English engineer Sir John Coode was modified by Lindon Bates in 1901. The work was begun in 1903 by contractors Waring & Rowdon, who subsequently merged with Baxter & Boyne to become Rowdon & Baxter. They used three locomotives, all from Victoria - two of them being ex-VR, and about 40 trucks, cranes and assorted machinery. The LRRSA's SA Group has collected a large amount of source reference material, and this would make an ideal subject for a more detailed article in LR if anyone is interested in doing further research.

Right: *One of the contractor's locomotives was the former No. 5 from the Melbourne & Hobson's Bay United Railway Company (M&HBUR), shown here at work at Outer Harbor. Note the river in the background and lack of cab on the locomotive. It was built by Robert Stephenson & Co (B/N 1177/1857) for the Melbourne & Hobson's Bay Railway Co. for working the Railway Pier, Sandridge and was generally referred to as the Pier donkey; it weighed a mere 10½ tons. In 1865 it passed to the M&HBUR where it received its No.5. In 1878 it came into the stock of the Victorian Railways, retaining its previous number. When the traversers were abolished on the pier the locomotive was sold, in 1904, to Rowdon & Baxter for £150. Photo: A D Edwardes from the Arnold Lockyer collection at the NRM*

Below: *Outer Harbor 1905 – Govt photolithographer" is all the information that this wonderful image had to accompany it. It shows three fixed vertical-boilered steam cranes lifting bucket-loads of silt from barges that had collected it from suction dredges working offshore. The silt is being dumped in a rake of dump wagons under the command of Beyer Peacock b/n 2980/1888, an 0-4-0T purchased from Victoria. It is thought that the silt will be part of the back-filling for the landward side of the new wharfage. Photo: courtesy State Library of South Australia B 11389*

The sand from the seabed was hauled up by a suction dredge which then pumped it into rail trucks. This photo shows a train load of sand hauled by the contractor's 0-4-0 saddle tank locomotive (BP 2980/1888) to reclaim land behind the revetment mounds.
Photo: L S Kingsborough from the Arnold Lockyer collection at the NRM

Overall view of the Outer Harbor works at the state of development when the crucial dispute occurred between the Engineer-in-Chief and the contractor. It shows idle cranes and a donkey engine on the wharf. Note the former Hobson's Bay locomotive No.5 is now fitted with a rather crude cab, and in the background the pipeline used to transfer sand from the suction dredge to the muck wagons. The vertical steam boiler probably powered the wharf pile driver.
Photo: Courtesy L S Kingsborough from the Adelaide Observer *of 21 January 1906 page 27 (Trove 19060127)*

Contractor's saddle tank locomotive in the works area at Outer Harbor – note the sheds in the background and the Western Dump style wagon. This Beyer Peacock locomotive (B/N 2980/1888) later became No. 161 of the SAR's 2nd I class. It originally came from Victoria where it was used by the Hoffman Brick Company, Brunswick, for shunting its extensive sidings between the brick works and the VR. It was sold to the contractors in 1903.
Photo: Courtesy L S Kingsborough from the Arnold Lockyer collection at the NRM

Above: *This fine image seems to be to the right, and out of frame, of the photo taken from the water. From left to right, we have a tug sitting offshore, then possibly a suction dredge supplying the pipeline seen in the background, and a bucket dredge awaiting another barge to fill. In the centre a vertical boiler is powering a pile driver, then at least three steam cranes are lifting silt from barges and loading it into waiting dump wagons. At right, Beyer Peacock b/n 2980/1888 is availing of loco refreshments from a neat wooden coal stage (with stacks of empty coal baskets) and, on the far side of the coal stage, a couple of ships' tanks on a wooden stand for supplying water.*
Photo: courtesy State Library of South Australia B 11388
Below: *A closer view of the busy scene (visible right of middle in above image) where steam cranes are unloading barges and filling dump trucks. It is believed that the locomotive also brought the coal to the various cranes for firing the vertical boilers, hence the large coal baskets seen in the above photo. Note also the small open wooden structures – the nearest is to the left of the closest truck. Are these lighting fixtures to allow operations after dark? – there is one opposite each crane. Also apparent is that there seems to be a lot less men than one sees on construction sites today – indeed, there is no one on their mobile phone or leaning on a shovel!*
Photo: courtesy State Library of South Australia PRG 280/1/2/394

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Please send contributions to:
Industrial Railway News Editor, Christopher Hart
15 Dalrymple St, Ingham, QLD 4850
Phone: (07) 47766294
e-mail: industrial@lrrsa.org.au

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

QUEENSLAND

MSF SUGAR LTD, Mulgrave Mill
(see LR 283 p.30)
610 mm gauge
Clyde 0-6-0DH 25 *Cucania* (63-289 of 1963) was seen on duty at the bin shop on 5 March. It is to have its cab replaced by a Mulgrave Mill cab previously fitted to Com-Eng 0-6-0DH 9 *Meerawa* (FC3473 of 1964).
Luke Horniblow 3/22; John Charleton 3/22

MSF SUGAR LTD, South Johnstone Mill
(see LR 284 p.40)
610 mm gauge
The new bridge over the North Johnstone River had been substantially completed by 26 February with abutments, end spans and approaches still to be done. Clyde 0-6-0DH 12 (55-60 of 1955) was seen with the rail welding wagon at a track relay in the Garradunga area on 26 February and 5 March. The Tamper STM-XLC tamping machine (94962 of 1995) was in the loco shed at the Silkwood Depot on 5 March.
Gregorio Bortolussi 2/22; Luke Horniblow 3/22

TULLY SUGAR LTD
(see LR 284 p.40)
610 mm gauge
Seen parked in the storage line at the mill on 6 March were EM Baldwin 0-4-0DH 2 (6/1082.2 2.65 of 1965), Tully Sugar bogie brake wagon 3 (built in 1996), Com-Eng 0-6-0DH 17 (AH52100 of 1966), Com-Eng 0-6-0DH multi-unit locos 12 (AD1351 of 1961) and 15 (AK3574 of 1964), the ex Mulgrave Mill NQEA bogie brake wagon (built in 1995) and the Tully Sugar 6 wheeled brake wagon built on the frame of Clyde DHI-4 in 1989. Outside the loco shed on 17 April was the frame of the latest Walkers B-B DH rebuild (586 of 1968) on shop bogies with its own freshly painted bogies adjacent.
Luke Horniblow 3/22, 4/22

WILMAR SUGAR (HERBERT) PTY LTD, Herbert River Mills
(see LR 284 p.40)
610 mm gauge
A new EM Baldwin type bogie loco to be named the *Brisbane* is being assembled at the Macknade Mill loco shed this year. The frame was manufactured by Bundaberg Walkers at Bundaberg and arrived at Macknade on 4 April. The cab was built at Wilmar's Pioneer Mill workshop and arrived late in March, then was promptly sent over to Victoria Mill where it will be fitted out. The bogies and final drives are being built by David Brown Santasalo in Mackay. The assembly of 168 new 11 tonne bogie bins for Victoria Mill was completed at the Macknade Mill truck shop on 18 March with the assembly of another 150 expected to commence some time in May. A ballast bed for the new crossing loop in the 4 Mile had been laid by 11 April and culvert work was also underway. Hudswell Clarke 0-6-0 *Homebush* (1067 of 1914) was steamed for its annual boiler inspection on 8 March.
Editor 3/22, 4/22; Steven Jesser 3/22; Peter Phillips 3/22

WILMAR SUGAR PTY LTD, Burdekin mills
One or two tractors with spray rigs are used for herbicide spraying on trackage at the four Burdekin mills.
Luke Horniblow 3/22

WILMAR SUGAR (INVICTA) PTY LTD, Invicta Mill, Giru
(see LR 284 p.41)
610 mm gauge
Kalamia Mill's Com-Eng 0-6-0DH *Chiverton* (C1030 of 1958) was on the ballast train at Upper Haughton 1 on 7 April. Also present was the Tamper STM-XLC tamping machine (94952 of 1993)
Luke Horniblow 4/22

EM Baldwin 0-6-0DH Hobart (4413.1 7.72 of 1972) on standby for shunting duties at the Macknade Mill truck shop on 22 February. Photo: Chris Hart

WILMAR SUGAR PTY LTD,
Pioneer Mill, Brandon
(see LR 284 p.41)
1067 mm gauge
Three Walkers B-B DH locos are being rebuilt for Wilmar mills at the Pioneer workshop this year. 12 (680 of 1972), formerly Victoria Mill's *Jourama*, was dispatched to Proserpine Mill on 7 April. 14 (681 of 1972), formerly Victoria Mill's *Cairns*, is also being rebuilt for Proserpine Mill but had not been dispatched by 23 April. *Karloo* (632 of 1969), formerly Invicta Mill's *Kilrie*, was expected to arrive at Plane Creek Mill on 8 April. Walkers B-B DH 2 *Karloo* (630 of 1969) from Plane Creek Mill arrived here for a future rebuild on 7 April. The frames of Walkers B-B DH locos 12 (673 of 1971) and 14 (701 of 1972) from Proserpine Mill had arrived here by 22 April and will be used as the basis for future rebuilds.
Kieran Koppen 4/22; Adrian Guistelli 4/22; Luke Axiak 4/22; Luke Horniblow 4/22; Arthur Shale 4/22; Tom Badger 4/22; Steven Allan 4/22

WILMAR SUGAR (KALAMIA) PTY LTD,
Kalamia Mill
(see LR 283 p.32)
610 mm gauge
Com-Eng 0-6-0DH *Chiverton* (C1030 of 1958) was seen with the Invicta Mill ballast train on 7 April. Luke Horniblow 4/22

WILMAR SUGAR (PROSERPINE) PTY LTD,
Proserpine Mill
(see LR 284 p.41)
610 mm gauge
A relay was being done in the Foxdale area in March and April with a mill roller pinion in use as a stop block at the commencement of works. Walkers B-B DH 12 (680 of 1972) arrived here on 7 April from rebuild at Pioneer Mill. Walkers B-B DH 14 (681 of 1972) had still to arrive from rebuild at Pioneer by 23 April. The frames of Walkers B-B DH locos 12 (673 of 1971) and 14 (701 of 1972) had gone to Pioneer Mill for future rebuilds by 22 April. In a correction to a report in *Light Railways* 284, 55,000 tonnes of cane from

Top: *South Johnstone Mill's Clyde 0-6-0DH 12 (55-60 of 1955) with the rail welding wagon at Garradunga on 5 March. Photo: Luke Horniblow*
Above: *The frame for the new build Wilmar B-B DH loco on arrival at Macknade Mill from Bundaberg Walkers Engineering Limited on 4 April. Photo: Chris Hart*
Below: *The old and new bridges across the North Johnstone River on South Johnstone Mill's main line north on 26 February. Photo: Gregorio Bortolussi*

Above: *Freshly repainted Walkers B-B DH* Miclere *(664 of 1970) at the Racecourse Mill loco workshop on 14 April. This was the last loco to be repainted in the Mackay Sugar yellow and green livery. Photos: Steven Jesser*

the Yalbaroo area previously crushed at Farleigh Mill will be crushed at Proserpine from this year, not next year.
Peter Crossley 3/22, 4/22; Tom Badger 3/22, 4/22; Luke Horniblow 4/22

MACKAY SUGAR LTD, Mackay mills
(see LR 284 p.41)
610 mm gauge
Slack season activity on the rail system has included the following. EM Baldwin B-B DH *Balmoral* (10684.1 4.83 of 1983) with a ballast train loading ballast on the Benholme line in early March. Walkers B-B DH *Calen* (692 of 1972) moving bins around at Nebia Junction in mid-March. EM Baldwin B-B DH *Hampden* (6706.1 5.76 of 1976) on ballast trains at Miles Loop on the Racecourse Mill system on 22 March and at Jukes Junction on the Marian Mill system on 22 April. Plasser PBR-201 ballast regulator BREG1 (247 of 1982) working at the bottom of the 12 Mile on the Farleigh Mill North Coast line on 31 March. Clyde 0-6-0DH *Victoria Plains* (66-490 of 1966) with a rail train at Mirani 1 on 13 April. Plasser KMX-12T tamping machine TTAMP5 (376 of 1990) working at Jukes Junction on 22 April. Marian Mill's Walkers B-B DH *Miclere* (664 of 1970) has been repaired following accident damage last December. The work was done at the Racecourse Mill locomotive workshop and included a repaint in the Mackay Sugar yellow and green livery. It will be the last loco painted in this livery with future repaints to be done in the Nordzucker corporate colours.
In a correction to a report in *Light Railways* 284, 55,000 tonnes of cane from the Yalbaroo area previously crushed at Farleigh Mill will be crushed at Proserpine Mill from this year, not next year.
Tom Badger 3/22; Sean Yasserie 3/22, 4/22; Steven Jesser 3/22, 4/22

WILMAR SUGAR (PLANE CREEK) PTY LTD, Plane Creek Mill, Sarina
(see LR 284 p.42)
610 mm gauge
Walkers B-B DH 2 *Karloo* (630 of 1969) has been

sent to Pioneer Mill for a future rebuild and arrived there on 7 April. The new *Karloo*, Walkers B-B DH (632 of 1969), was expected to arrive here on 8 April after being rebuilt at Pioneer Mill.
Adrian Guistelli 4/22; Luke Axiak 4/22; Luke Horniblow 4/22

Top: *Com-Eng 0-6-0DH multi-unit locos 12 (AD1351 of 1961) and 15 (AK3574 of 1964) plus Com-Eng 0-6-0DH 17 (AH52100 of 1966) on the storage line at Tully Mill on 6 March. Photo: Luke Horniblow*
Centre: *Wilmar's Burdekin region mills use tractor mounted spray rigs for vegetation control along their rail network and this is one such unit at work on 14 March. Photo: Luke Horniblow*
Above: *Mackay Sugar's Clyde 0-6-0DH* Palms *(70-708 of 1970) newly painted in the new livery at Farleigh Mill on 5 May. Photo: Steven Jesser*

BUNDABERG SUGAR LTD, Millaquin Mill
(see LR 284 p.42)
610 mm gauge
Com-Eng 0-6-0DH *Invicta* (A1513 of 1956) was working a ballast train in South Kolan on 21 April.
Mitch Zunker 4/22

ISIS CENTRAL SUGAR MILL CO LTD
(see LR 284 p.42)
610 mm gauge
Track laying of the new Wallaville line had reached the terminus at the Burnett River on Greensill's farm by 21 April. The washouts sustained to this line during torrential rain in December have been repaired. The Adies line beyond the first siding, Adies, had been lifted by 30 March owing to much of the cane in the area being replaced by macadamia tree orchards. Clyde 0-6-0DH 9 (75-812 of 1975) was seen stored in the sleeper shed area at the mill on 21 March.
Ben Glossop 3/22; Brian Bouchardt 3/22; Mitch Zunker 4/22

DOWNER EDI, Maryborough
(see LR 284 p.42)
1067 mm gauge
During flooding over late February and early March, Walkers B-B DH locos 1104 (641 of 1970) and DH73 *Hugh Boge* (718 of 1974) were moved to high ground at the old Maryborough yard.
John Browning 3/22

PROGRESS RAIL SERVICES, Redbank
(see LR 281 p.39)
1067 mm gauge
Clyde Co-Co DE 1745 (67-559 of 1967) was purchased from QR in January 2019.
Joshua West 4/22

NEW SOUTH WALES

MANILDRA, SHOALHAVEN STARCHES PTY LTD, Bomaderry
(see LR 279 p.36)
1435 mm gauge
Walkers B-B DH 7315 (674 of 1971) has been sold to Brimble Rail, which is a track maintenance company and by 21 April, it had been parked in Bomaderry Station siding. Goodwin Co-Co DE 44209 (G-6045-09 of 1971) had disappeared from site by 21 April and is thought to be away receiving an overhaul, upgrade and repaint.
John Medcalf 4/22; Bradly Coulter 4/22

MANILDRA FLOUR MILLS PTY LTD, Manildra
(see LR 279 p.36)
1435 mm gauge
Goodwin Co-Co DE 44208 (G-6045-08 of 1971) is to receive an overhaul, upgrade and repaint.
Bradly Coulter 4/22

MANILDRA FLOUR MILLS PTY LTD, Narrandera
(see LR 279 p.36)
1435 mm gauge
Walkers B-B DH 7340 (702 of 1972) which has been in storage here, has been sold to track maintenance company, Brimble Rail.
Bradly Coulter 4/22

Above: *Mackay Sugar's Plasser PBR-201 ballast regulator BREG1 (247 of 1982) at work between Belmunda Loop and Howells Loop on Farleigh Mill's main line north on 31 March. Photo: Steven Jesser*
Below: *Millaquin Mill's Com-Eng 0-6-0DH* Invicta *(A1513 of 1956) with the ballast train on lunch time break at South Kolan on 21 April. Photo: Mitch Zunker*

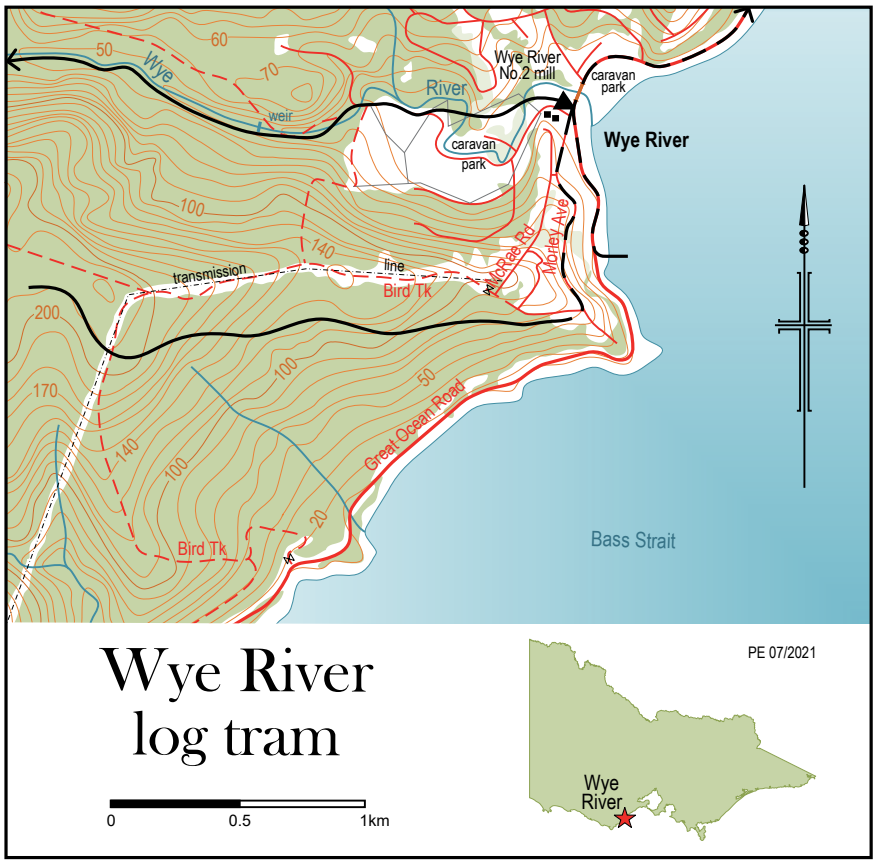
Field Reports

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

Wye River log tramway, Victoria
Gauge 914mm
Norman Houghton reports

On Christmas Day 2015 a bushfire ripped through Wye River, Separation Creek and surrounds on Victoria's south-west coast. Some 45 houses were destroyed and a few thousand hectares of forest burnt to a crisp. The fire exposed the landscape as never before, including the high-lying timber tramways in the area.

After the fire an economic and tourism recovery group was formed by locals to rebuild and reinstate tourist features, and propose new ventures. One of the proposals was to open walking trails along timber tramways. I was invited by this group to suggest some trails. This entailed doing a site survey of likely trail routes. The main suggestion being bandied around was for a trail along the old tram that traversed the Wye River, but I advised against as the tram had many bridges, all long-gone and, therefore, making a continuous paved route impossible, it was close to the waterline, and not a very hospitable environment. Instead, I suggested the log line that ran south and west out of the mill on the high ground. This tram was installed in 1921 by the Wye River Sawmill Co that operated here from 1919 to 1921. I made



Looking east along the well-defined bench of the formation, with Bird Track on the ridge to the left. Photo: Norman Houghton

a survey of this route in January 2016, one year after the fires. I was advised to be very careful in the bush as damaged trees were still toppling over without warning. With this in mind, and an ear tuned to the forest sounds, I set off.

The tram was 3 ft [914mm] gauge built with 40 lb [20 kg/m] iron rails laid on wooden packing. The track came out of the mill, which was at the present site of the Wye River general store, ran south upslope on a bench for 600 metres along the present Morley Avenue then turned west into the bush. The landscape from where Morley Avenue ends and the bush starts had been bulldozed, so there was no obvious continuation for the tram roadbed. A dirt and gravel road named Bird Track follows on from Morley Avenue, so I walked along this for a bit, and then dived south down-slope to where I thought the tram should be. It was there. The tram runs below Bird Track and trends upgrade all the way on a well-defined bench, curving this way and that, going over three bridges crossing very small gullies before levelling out near the end and running to a flat spot on a dividing spur nearly two km from Morley Avenue.

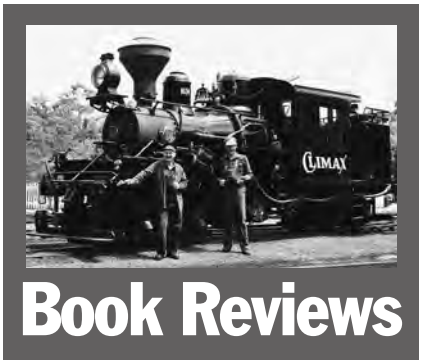
Nothing remains of the rails or packing except for some curved iron rails at the three bridge sites. These were left in situ when the tram was salvaged as they had no reusable value because of their bent shape.

The logging plan of the day was to employ horse snigging along the tram in summer and bring in a steam winch during winter when there would be sufficient rainfall to supply the winch boiler. It was intended to have a winch site at the terminus, but it was never installed as the mill closed before this log line was ever used. I could find no log landings or winch sites along the tram, so this confirms that no logs were ever conveyed over this line. The gradient suggests that any log loads would have been gravitated down to the mill with the horses trotting along behind.

I reported back to the recovery group suggesting that a circular route could be implemented by going along the tram and then coming back on Bird Track. Well, as often happens to opinion given on an honorary basis, my report was flicked into the bottom drawer and that was the end of the proposed walking trail on the tramline. A trail was eventually built, but it has nothing to do with any of the tramways at Wye River.

The images here are a sample of what I saw along the route.

Looking west near the terminus of the line, with the tramway in a long shallow cutting. Photo: Norman Houghton



Book Reviews

CLYDE

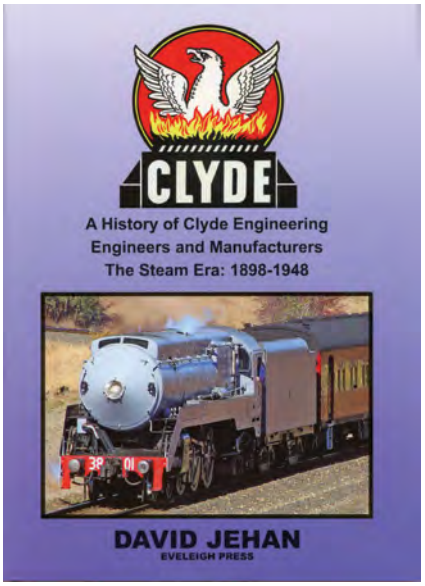
A history of Clyde Engineering: The steam era 1898 to 1948

by David Jehan

Published by Eveleigh Press, the book has 336 pages A4 portrait format (310 mm x 220 mm) with a hard cover. There are many photos and illustrations and all have been reproduced to a very high standard.
Available from the LRRSA online bookshop – $90.00 plus postage ($81.10 for LRRSA members).

David Jehan has written this excellent book to detail the history of Clyde Engineering and highlight the wide variety of products that it manufactured. This book follows on from his previous book on the predecessor company, Hudson Brothers which was published a couple of years ago. Whilst at first glance it may appear that this book is about the manufacture of main line locomotives (and 3801 in particular), it is far from that. It is very much a product-based history of the company and covers a huge range of items for the agricultural, mining, rail and transport industries.

The book deliberately only covers the years from 1898 up to 1948 and has been labelled as the "steam era" of the business. The author has started work on the follow up book on the diesel era and those interested in the light railways associated with the Queensland sugar industry can look forward to that.
The company manufactured a huge variety of products during its life and that included main line railway equipment (locomotives, coaches and goods wagons), tramcars, agricultural and mining equipment, tanks, and bridges.



Of particular interest to those with a penchant for light railways are the sections on industrial locomotives and mining equipment. The company built seven steam locomotives for four industrial railways. These were built to the operator's specifications and drawings or a copy of an existing locomotive from another manufacturer. The company also provided maintenance services to the general industry including overhauls, wheel turning, and building new boilers. The company also provided consumables to operators including cast iron fire bars, wheel bearings, couplers, buffers and brake shoes and so on. It is fascinating to read all of the various tasks undertaken by Clyde on industrial locomotives ranging from boiler replacements to general maintenance and what impact that had on the operations of the railways both from a timing and cost perspective. The company also manufactured goods and tank wagons and other items of rolling stock for clients such as East Greta, Dudley Colliery, Commonwealth Oil Corp, Cobar Mines, BHP Newcastle, AI&S Port Kembla, and the Bunnerong Power Station.
The wide range of customers included BHP Newcastle, G and C Hoskins Limited, Allen Taylor and Company Limited, AI&S at Port Kembla, John Lysaght Pty Ltd, South Maitland Railway, CSR and many colliery companies.
During the second world war Clyde Engineering was heavily involved in the development and manufacture of the Australian Standard Garratt locomotives and ultimately built 22 of them.
Another interesting aspect for our readers was the products manufactured by Clyde being mining and industrial machinery. The range included many different types of boilers, engines, pumps and tramway skips. In addition, there many traction and portable engines and these were often manufactured by John Fowler and Co. from the UK and sold through the Clyde Engineering network – and marketed as the "Clyde- Fowler" range of equipment. This equipment would be

supplemented by road wagons, road rollers and ploughs manufactured by Clyde.
The book has been very well researched with a full list of references, is easy to read, is always interesting, and has a huge range of excellent photos.
This book is highly recommended to anyone with an interest in a detailed description of a bygone Australian manufacturing business and the huge range of products that it produced.

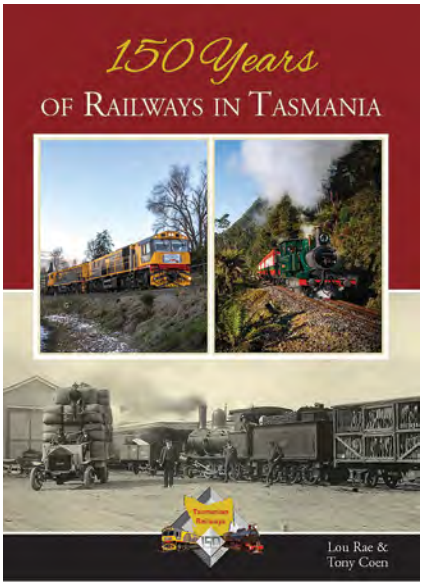
Richard Warwick

150 Years of Railways in Tasmania

by Lou Rae and Tony Coen

268 pages in large format (240 mm x 330 mm) with 501 photographs, illustrations and maps. Available in both hard and soft cover editions from the LRRSA on line shop. Hard cover is $80 plus postage ($72 plus postage for LRRSA members) and the soft cover is $59.95 plus postage ($53.95 plus postage for LRRSA members)

The book was prepared to celebrate the 150th birthday of railways in Tasmania and provides a comprehensive history of their growth and development beginning in the 1850s and extending up to the current day. It also covers 62 individual main and branch lines as well as many tramways scattered about the island, several of which proved extremely profitable and some that lasted only a few years. Separate sections on the Tasman Limited, unusual locomotives and current railway preservation societies are also included.
The book has been jointly written by eminent rail historians Tony Coen and Lou Rae who are both well known and recognised for their knowledge and expertise of the subject and for their skills in writing such a history. Both Tony and Lou have written several books on Tasmanian history and also articles in *Light Railways* over the years.
The book has been structured in such a way that the first 18 chapters cover each decade from 1850 to the present day and all of the things that happened in each decade are discussed in some detail and profusely illustrated with some excellent photographs. At the front of the book is an excellent map of Tasmania showing all of the railways and tramways that are covered in the book – this reviewer found this map to be very clear and helpful. Whilst the main subject is the overall development of the main line railways throughout Tasmania, there is ample coverage of the many and varied light and industrial railways that by necessity are interspersed through the history. This is covered by descriptions of construction trains and locomotives of the main lines through the use of sometimes weird and wonderful locomotives.
Whilst the main lines were transferred to government ownership in 1872, the book covers the many and varied tramways, construction trains and mining tramways still in private ownership in great detail for the period up to about 1910. The section of the book covering from 1910 to the present time chronicles the development of the TGR and its successor organisations.



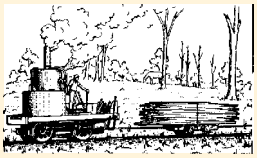
Chapter 19 provides a detailed listing and description with many photographs of all lines, branches and tramways. Of particular interest to readers of *Light Railways* are the descriptions of the many tramways including those associated with Mount Bischoff, the Emu Bay Railway, Mt Lyell, the tramways around Zeehan, the Magnet Tramway, North East Dundas Tramway, North Mount Farrell, Ida Bay, the Huon Timber Company and the Marrawah Tramway amongst many others.
The style of writing throughout the book is very informative, interesting and easy to read. There are just over 500 photographs included in the book and they have all been reproduced to a very high standard and provide an excellent coverage of the history of railways in Tasmania.
This book is highly recommended to those interested in the railways and tramways in Tasmania.

Richard Warwick

July 2022 members Zoom meeting
Date: Thursday 14 July 2022 at 8.00pm AEDT
This will be a special meeting where David Jehan will be making a presentation on the light railways used at Nauru and Ocean Island. The presentation will coincide with the publication of the LRRSA's newest book called *Tramways, Coconuts and Phosphate* written by David and covering this fascinating subject.

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.



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.

June 2022 members Zoom meeting
Date: Thursday 9 June 2022 at 8.00pm AEDT
Jim Longworth will make a presentation titled "Early Australian railed – ways: 1788 to 1855". This promises to be a fascinating subject and you are encouraged to book early to avoid disappointment.

August 2022 members Zoom meeting
Date: Thursday 11 August 2022 at 8.00pm AEDT
Tony Weston will give a presentation on rail haulage in Australian underground metal mines. In the 1500s Engineers building and operating underground copper, silver, gold and lead mines in Europe came upon an alternative to leather sacks on men's backs for the transport of ore and waste rock. Small trollies running on wooden wheels worked by skilled men, carried ore on parallel wooden planks in small profile tunnels and greatly increased the productivity of metal mines.

BRISBANE: "No Meeting"
It has been decided to postpone the Brisbane meetings until 21 October 2022. This decision will be reviewed in September 2022.

SYDNEY: "AGM and Utah narrow gauge."
The Society's NSW Division AGM will be conducted. Following the concise general meeting, Ross Mainwaring will present a collection of interesting industrial narrow-gauge photos of interest from Utah, USA.
Location: CHANGE OF VENUE. Club Burwood RSL, 96 Shaftesbury Road, Burwood in the Private Room, Brasserie Restaurant (at back of restaurant). Free parking in the RSL, only 10 minutes easy walk from Burwood railway station. Please contact Ross on 0415995304 or David on 0400347127 upon arrival if you need to be signed in.
Date: Wednesday 22 June at 7:30pm

MELBOURNE: "No meeting"
On line meetings via Zoom will be hosted from Melbourne and will feature presenters from far and wide.

ADELAIDE: "Bi monthly meeting"
The SA group meets every second month on the first Thursday of every even month to discuss matters of light railway interest. As accommodation is limited, interested persons should contact Les Howard at sa_group@lrrsa.org.au for details if you have not been to a meeting before.
Location: 1 Kindergarten Drive, Hawthorndene
Date: Thursday 2 June 2022 at 7.30pm

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

THE GULFLANDER, Normanton
1067 mm gauge
The 2-6-0DM locomotive DL4 has had a fresh coat of paint in the workshops at Normanton Station. The first locomotive of this class (DL1) was built at Queensland Railways' Ipswich Workshops in 1939. It was historically significant as being the first Australian built diesel locomotive for use on a public railway. All four members of the class still exist, but only DL4 is operational. DL1 is on display at The Workshops Rail Museum in North Ipswich, DL2 is on display in its namesake town of Forsayth and DL3 is at the ARHS Rosewood Railway. DL4 is still in service on the Normanton to Croydon line. The line opened for this season on 9 March and last year celebrated 130 years of running.

BRAMPTON ISLAND RAILWAY, Brampton Island
762 mm gauge
James Michael writes that while working on Brampton Island in November 2021, he stumbled across the decaying remains of the former Brampton Island 2 ft 6 in gauge resort train. Opened in 1966, but closed in 2010 after successive owners, it ran for a kilometre to the Deep Water Jetty. He noted the abandoned locomotive, a rotting flat top truck for the transportation of guests' luggage, and a rotting passenger carriage. It is possible to make out the abandoned line on the latest Google earth photograph (2016). James says that the YouTube video (https://www.youtube.com/watch?v=HolRvoN5_ck) is worth watching for the images of the new (1966) line and the train. Facebook post by James Michael on the Abandoned Railways of Australia Facebook Group, 18/2/2022

DURUNDUR RAILWAY, Woodford
610 mm gauge
The Baguley 0-6-0DM locomotive has been moved into the workshop for restoration to operating condition including accreditation. This loco came from Mulgrave Mill at Gordonvale and is being painted in a very attractive blue. This different colour will certainly create a lot of interest.
While train operations take up a lot of time and effort, it is important not to neglect the museum side. Queensland Rail, as a contribution to ANGRMS 50th anniversary this year, has generously donated four history signs. These record the history of the Railway's ex-QR buildings: D'Aguilar and Wamuran station buildings, the ex-Northgate Workshops First Aid room and the compressor shed (current workshop). There is also a history sign giving the history of the ex-Beaudesert turntable.
On 20 February 2022 the Office of National Rail Safety Regulator, (ONRSR) conducted Inspection No.9561 – Procedure of Operation. The Inspection was conducted on site during a running day, a day which turned out to be ANGRMS' busiest day on record for passengers, so ONRSR got to see the operation tested. No issues were raised by ONRSR on the day, with some documentation to be supplied over the next few days. ANGRMS awaits the final report. *Durundur Railway Bulletin* 43: 374 March/April 2022

NEW SOUTH WALES

TIMBERTOWN, Wauchope
610 mm gauge
Green Hornet (John Fowler 0-6-0T 12271 of 1910) returned to Timbertown on 16 March 2022. It originally arrived in April 1975 and was later sold by the local council in 1999 to someone in Taree where it sat out in the weather for 23 years. It is now top of the restoration project list at Timbertown. Workers are not sure why the super popular loco was ever sold, however it is back and will be restored to the same level it operated

John Fowler & Co 0-6-2T locomotive Invicta *(B/N 11277 of 1907) with its train at the Bundaberg Steam Tramway at the Bundaberg Botanical Gardens on Sunday 27 March 2022. Both photos: "Queensland correspondent"*

The Border Steam and Oil Club held its Easter Steam Rally at Leneva, near Wodonga in Victoria and these photos were taken on 16 April 2022. Geared engine No 3 Bill Odgers, *was running the regular train services, and there were several steam and oil engines working at the site. Three photos: Trevor Staats*

in during the 70s and 80s and it is claimed that it will be in service for the 2022 Christmas holidays. There is a lot of rubbish inside the boiler from having spent its whole time in Taree with the angled steam dome cover-plate removed.
David White, 16 March 2022, on the Light Railways of Australia Facebook Group.

ZIG ZAG RAILWAY, Lithgow
1067 mm gauge
On 6 February 2022 the Member for Bathurst announced that the NSW Government will contribute almost $1 million in extra funding to inject fresh impetus into the final stages of the restoration of the historic Zig Zag Railway at Lithgow.
This extra funding will support restoration of the Railway's workshop building including replacing damaged structural steel, cladding, retaining walls, and roofing. The NSW Government previously announced $2.3 million in 2018 for repair work, and the Zig Zag Railway has also contributed $881,000 in what has been a resilient partnership with the community."
Paul Brown on the NSW Railways – Past and Present Facebook Group, 6 February 2022

VICTORIA

DAYLESFORD SPA COUNTRY RAILWAY, Daylesford
1600 mm gauge
Recent photographs of the line to the west of the Dolphins Road crossing show that the line is still obstructed by trees following a huge storm in 2021. Once the trees are cleared, the more difficult task of assessing the damage to the line and repairing the line must be faced. No public trains have run in this section since 23 May 2021. It is reported that the railway is still waiting on its insurance claim to be finalised, after which management can get the track professionally assessed before repair work commences. It is also suggested that between c. 300 and 1000 trees fell over the line with a further c. 500 standing damaged trees to be worked on or removed. The railway is waiting on a decision to fund the rehabilitation by the State Government.
Stuart Smithwick commenting on a post by Andrew Gruevski on 11 April in Railways in Victoria … Past and Present Facebook Group

CARRIBEAN GARDENS RAILWAY, Scoresby
610 mm gauge
The Caribbean gardens railway in Scoresby is in the process of being disassembled and stockpiles of lifted rail, old sleepers and the abandoned roadbed have been noted on site. No information was given about the possible destination of this material.
Rodney Reed, 1 April 2022 on the Light Railways of Australia Facebook Group

WOMBAT GULLY TRAMWAY, (THE BORDER STEAM AND OIL CLUB), Leneva
18 inch gauge
The Border Steam and Oil Club's Easter Steam Rally was held on 16 April. Geared engine No. 3

was performing on the regular train services, and a lot of amazing old steam and oil engines were on site doing their thing.
Trevor Staats on the Light Railways of Australia Facebook Group, 16 April 2022.

WALHALLA GOLDFIELDS RAILWAY, Walhalla
762 mm gauge
The two main locomotives used at Walhalla, the class 10 and the Fowler, have both had new paint jobs. The Fowler has been painted in the original red with yellow logos and name as well as big number 14 brass number plate. The class 10 has been painted in a darker red with black trim and looks imposing. Both locomotives had been looking shabby and the paint work certainly improves their appearance. Photographs will appear once the paint work is totally complete.
Andrew Webster on-site visit, 20 April 2022.

PUFFING BILLY RAILWAY, Belgrave
762 mm gauge
The *Puffing Billy Railway Act of 2022* has passed through the Victorian Parliament and now becomes law. This new legislation had been introduced into State Parliament to secure the future of the Puffing Billy Railway. The legislation proposes replacing the *Emerald Tourist Railway Act 1977* with the *Puffing Billy Railway Act*, which will see the Emerald Tourist Railway Board renamed the Puffing Billy Railway Board with updated responsibilities as a significant Victorian tourist attraction.
The legislation will support Puffing Billy's partnership with local businesses including wineries and producers to showcase the region's products to visitors and also recognises the importance of volunteers' contribution to the historic railway. Minister for Tourism, Sport and Major Events, Martin Pakula, said Puffing Billy has been, "a favourite destination for Victorians and international visitors for well over a century. Local businesses still get the benefits from this attraction today. The Puffing Billy Railway Bill will improve the management of the railway and ensure its success for years to come. This means more jobs and flow-on opportunities for local businesses."
The Railway is supported by more than 300 volunteers, with two-thirds of its suppliers being Victorian companies.
Star Mail, 8 March 2022

Top: *Walhalla Goldfields Railway volunteers painting the former Emu Bay Railway 10 class locomotive at Thomson on 30 March 2022.* ***Above:*** Spirit of Yallourn *in its new paint job running around its train at Thomson on 30 March 2022. Both photos: Peter Sansom*

Top: *Krauss b/n 5682/5800 at Sheffield in the very late afternoon on 12 March 2022.* ***Centre:*** *The Nicola Romeo locomotive ran passenger services on 29 March 2022 while a new ash pan was being fitted to the Fowler loco.* ***Above:*** *Sleeper replacement in the forest behind Tullah with the Nicola Romeo loco at the head of the works train on 19 April 2022. Three photos: James Shugg*

TASMANIA

WEE GEORGIE WOOD RAILWAY, Tullah

610mm gauge

Although passenger trains do not operate during the winter hiatus, regular trackwork days have focussed on sleeper replacement along the main running line. The Fowler steam locomotive was fitted with a new ash pan in late March, generously fabricated by Queenstown firm Setori Engineering. Other projects that will keep volunteers busy over the next few months include inspection and refurbishment of the passenger carriage bogies and overhaul of the Nicola Romeo petrol locomotive's transmission. The new operating season will commence on the first weekend in October.

James Shugg

REDWATER CREEK STEAM RAILWAY, Sheffield

610mm gauge

The composite Krauss locomotive will continue to run trains on the first weekend of the month throughout winter. In addition, a Midwinter Festival will be held on 25 June, when trains will run all day from 11.00 am and into the night. Recent works have included repainting the main Sheffield station building and fitting buffer beams to the Ruston diesel loco.

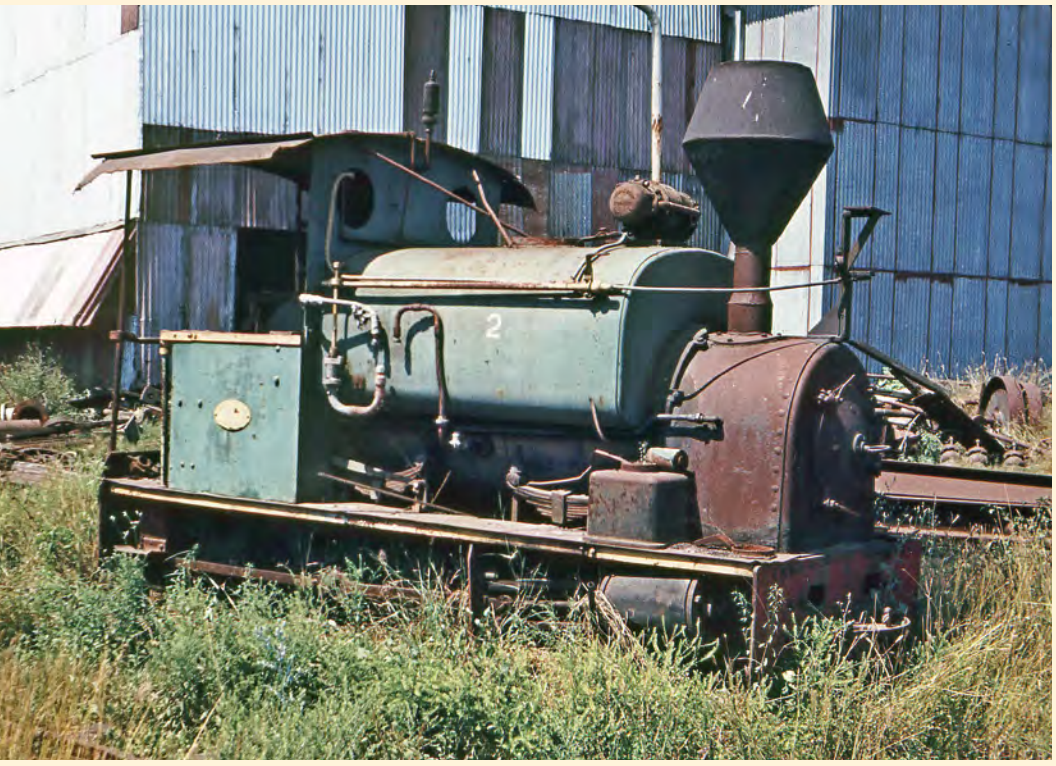
James Shugg

TASMANIAN TRANSPORT MUSEUM SOCIETY, Glenorchy

1067 mm and 610 mm gauges

The start of a new year has seen work commence on returning railcar DP26 to service. The first task undertaken has been to employ local contractors to remove asbestos sound proofing from beneath the floor of the car. The contractors provided an acceptable quote to undertake this work, which was funded by the sale money of Abt locomotive No. 2. Prior to the commencement of the works, the articulated car was split so that both halves could receive attention separately from the other half. The remediation work was undertaken during February at the inspection pit on road 1A, with the motor section having the asbestos removed first, followed by the trailer section. On completion, the undersides of the car, including the auxiliary equipment and bogies, were painted with a sealing black paint, and as a bonus, the contractors painted the walls and floor of the inspection pit. The Society has now received documentation that states that the asbestos remediation works have been completed to the required standard and it is now safe to work underneath DP26 and in the inspection pit. This is a great outcome for the future of DP26, as the asbestos had been an identified problem that needed professional help to overcome and it is fortunate that a feasible solution was found.

TTMS Newsletter, Summer 2022



Out to grass

Though the first main line diesel locomotives arrived amongst the sugar cane in 1935, it would take more than forty years before steam traction was finally replaced in the cane fields of Queensland – 1979 being the last year of regular steam at Qunaba Mill. From the early 1950s diesels started to make steady and inexorable inroads into the several hundred steam locomotives that moved the cane to the mills. Over the years many rail enthusiasts headed north to photograph the many and varied locomotives, with their long strings of cane trucks on around two thousand miles of mainly 2ft-gauge track. One who made the trip to Queensland was the late Weston Langford who spent a month visiting dozens of sugar mills in October and November 1966. A fair number of the 27 or so mills still used steam locomotives for all traffic, some mills had a mix of steam and diesel, whilst other mills were already dieselised. We have previously shown some of the working steam (and will do so again in the future), but this month we have a look at what had, already been "put out to grass". Of the three locomotives pictured, sadly, only one has been saved for preservation.

Top left: *Plane Creek Mill, Sarina. 0-6-0T+T built by J. A. Maffei, Munich. Loco b/n 3777 of 1912, 4-wheel tender b/n 3778. Known as 'Billy'. (Photo 2 Nov 1966)*

Centre left: *North Eton Mill. No.2 Built by Hudswell Clarke, b/n 853 of 1908 as an 0-4-0ST, later converted to an 0-6-0ST. In preservation and being restored to 0-4-0ST. (Photo 3 Nov 1966)*

Below left: *Farleigh Mill. Built by John Fowler b/n 10335 of 1905 as 0-6-0T. In 1940 converted to an 0-6-0 with separate tender made from the chassis of an 1893 Dick Kerr loco. (Photo 4 Nov 1966)*

Photos: courtesy www.westonlangford.com
Weston Langford image nos. 108201, 108234 and 108243.
General notes: Phil Rickard
Loco details: John Browning