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Cover: Moreton Mills VALDORA, Dick Kerr 0-4-0TT No. 191, at the Maroochydore River exchange sidings in August 1963. Photo: Glen Johnston

CONTENTS

Rous Sugar Mill Tramway	. 3
Steam Locomotives of Naura and	
Ocean Island	10
The Man Who Rode the Powelltown Tram	14
Bennett Brook Railway	16
Book Reviews	17
Letters	18

EDITORIAL

Your editor recently had the opportunity to visit Perth and meet with railway enthusiast groups in the West. The optimism evident among the various railway groups there and the rapid achievements of their projects is most heartening.

The Western Australian Light Railway Preservation Association opened the first 1.2 km section of their 5 km 610 mm gauge loopline in Whiteman Park on 8 December 1984. Stage 2 will encompass an outer 11 km loopline. The small WALRPA group have made impressive progress toward a major tourist feature and we wish them well in their efforts. *Light Railway News* will keep us informed of progress with this project and it is to be hoped that closer contact with the WALRPA will result in more features from the West in the pages of *Light Railways*.

ROUS SUGAR MILL TRAMWAY

by John Browning

Introduction

The area of high land lying between Ballina and Lismore was explored by cedar-getters in the 1860s Known as "The Big Scrub" or "The Mountain" this area was a tableland with an average height of over 500 feet, thickly covered with vegetation. Rising above the swamps of the coastal area and of the valley of the Richmond River, it seemed to offer a healthy climate and although access was difficult, it would naturally be well drained.

The Big Scrub was cleared laboriously by generations of settlers. It was claimed that ten acres could be cleared in a year, but this would involve backbreaking labour for the whole family. The soil, although rich, was stony. However there was no shortage of land-hungry families to settle the area, and like their fellow settlers down in the river valleys, many tried sugar cane, the "wonder crop" of the time. During the early 1870s, a rash of small mills was erected by farmers, some of whom felt they might become successful millers of the cane crops of others as well as of their own cane.¹

Company Mills in the Big Scrub

The Colonial Sugar Refining Company moved into the Richmond district when they established

Broadwater Mill on the lower Richmond River in 1881. The era of the Company Mill soon came to the Big Scrub also, with the purchase of Robb's Mill at Alstonville by the Melbourne Sugar Company in 1882 and the purchase of Samuel Staines' Mill at Rous by the Richmond River Sugar Company in 1885. Both of these companies bought up estates and aimed to produce a large tonnage of cane for their own mills as well as purchasing cane from neighbouring farmers. Numbers of indentured Indian labourers (known locally as "Hindoos") were brought in to work the plantations at first. However, by 1887, the Richmond River Sugar Company was following the example of the Colonial Sugar Refining Company in selling land on easy terms to settlers who would undertake to supply their mill with cane, so developing the concept of "Central" mills.2

The Melbourne Company's Mill was situated on Maguires Creek at Alstonville. A new mill was constructed in 1884 costing some £30,000 and a network of tramlines, almost certainly 2ft gauge, was laid down to enable an assured supply of cane to be transported to the mill. Such tramlines would



This water damaged photo of Rous Mill shows the cane-carrier, served by bullock wagons and tramway. Photo: J. Check, courtesy Mrs Mary Hewetson

have utilised horses or bullocks for haulage, but nothing more is known about them at present, except that this network would seem to have become part of the later Rous Mill tramway.³

The Richmond River Company's Mill was on Youngman Creek at Rous. Two separate settlements were to develop, the one at the mill being known as Rous Mill while a mile to the east was Rous. The Richmond River Sugar Company persisted with the single crushing plant installed by Staines until 1889. Apparently there were no tramways, and much comment was made in the local press at the time about the terrible state of the roads over which the cane had to be brought to the mill by bullock cart. Any incoming supplies from the outside world, and the manufactured sugar, had to go the same way. Meanwhile, in 1887, the Melbourne Company appears to have collapsed and its mill and plantation at Alstonville were disposed of.4

Expansion at Rous Mill

It would appear that the Richmond River Sugar Company stepped in and purchased the Alstonville Mill in order to widen its operations over a larger area. In 1889, a period of expansion began at Rous Mill in order to increase its capacity, and a refinery was constructed. In 1891, a 2ft gauge tramline was opened, linking the Alstonville lands with Rous, and making continued operation of the Alstonville Mill unnecessary.⁵

Expansion at Rous Mill comprised a second milling plant, triple effect, two vacuum pans, three boilers, and refinery plant. This machinery was installed in 1889-90 and included the erection of an iron mill chimney 120 feet high.⁶

Tramway Construction and Opening

Plans had been made to build the tramline from Rous Mill to Alstonville by early 1890. Meetings were held to encourage farmers at Alstonville to increase their plantings of cane. In January 1891, the first tender was advertised for the construction of the line. The construction tenders were let in three sections and over the next few months the contracts went to Cochrane & Kirton for the first section, and Beard & Tilley (who had constructed line for the Queensland Government Railways) the second and third sections. Activity quickened in April with tramway materials starting to be landed at Wardell, and contracts were advertised for the haulage of 500 tons of material from Ballina and Wardell to Alstonville and Rous.⁷

The locomotive arrived at Wardell aboard SS Tomki on April 27th. Six miles of permanent line and eight lines of portable track had been ordered

from John Fowler & Company (Leeds) Ltd. in England, and the locomotive also came from their works: an 0-4-2ST, builder's number 6342 of 1891. With 8" x 12" cylinders, it was stated to be capable of hauling a load of 35 to 40 tons up a grade of 1 in 40, the maximum grade on the line. The locomotive appears to have been similar to other products of its maker at this time. A saddle tank was carried on its boiler and it was fitted with a spark arrester, Joy valve gear, and an open cab with a roof on iron supports the only protection for the locomotive crew. A small tender, probably with a wooden body, was fitted at some stage, and was used to carry wood or coal fuel. Within a few weeks, the locomotive was "fitted up on the rails" and by August, with construction work on the line completed, it was in use hauling cane to the mill. It is most likely that cane trucks were also supplied by John Fowler with the rest of the tramway plant. Certainly iron trucks similar to those supplied by Fowler were used on the line.8

On February 4th, 1892, the tramway was used to convey over 80 people from Rous Mill to Alstonville on the occasion of the Alstonville Show. The passengers rode on cane trucks and although they had to walk three-quarters of a mile from the terminus of the line to the Showground, they seemed more than happy to be travelling on what was in fact the first locomotive-hauled railway line on the north coast of the state.⁹



The best photo of the locomotive found to-date is this rather fuzzy "blow up" from an original print showing it outside the loco shed in 1895. Photo: J. Check,

courtesy of Richmond River Historical Society



5

Proposed Wyrallah Tramway

By June 1892, control of the Company was in the hands of Mr Alfred Bennett, a Sydney businessman with widespread interests throughout New South Wales. A newspaper report at this time reported that Mr Bennett was considering having a tramway constructed to link Rous Mill with Wyrallah, the nearest navigable water to the mill. This would have enabled the mill to dispense with the bullock and horse teams which were used to haul bagged sugar to Wardell (and machinery and other supplies in the reverse direction). This journey included a notorious section on the climb north of Meerschaum Vale where a total of 42 bullocks in three teams were needed to handle a nine-ton boiler being delivered to the mill in 1890. However, a glance at the map shows that the Wyrallah tramline was a most unlikely prospect. It would have had to cross very broken country and descend 430 feet down a steep escarpment to a swampy flood plain. Nevertheless, an indication that tramway expansion in some direction at least was being contemplated might be supported by a reference in the records of John Fowler, Their locomotive 7126 of 1893, an 0-0-4-0ST, was delivered to Bingera Mill near Bundaberg in Queensland, but a note in Fowler's list indicates "Ordered by Rous Sugar Mill -Cancelled".10

Tramway Operations

The tramway from Alstonville was clearly the only practicable way to move large tonnage of cane the five or so miles to the mill. Cane from other areas near to the mill had to be transported by bullock wagon, and the roads were poor with maintenance efforts often destroyed by rain or flooding. When a property near Alstonville was put up for auction in September 1893, the fact that the Company's tramline ran right through it was made into a major selling point.¹¹

Cane was hauled to the mill in the familiar fourwheeled cane trucks. Both iron and wooden cane trucks were used, each carrying about 30 cwt. Portable track was laid in the fields in those areas served by the tramway. Trucks were run off the main line onto the portable sections, probably using "jump points" which were placed over the running rails. Ouite possibly some of these "portable" lines

ran for some distance, and were in fact semipermanent in nature, with the truly "portable" track laid into the fields at the end of them. Having been placed in position in the field, the cane truck would be loaded by the cane cutters and then hauled back to the main line by horse or bullock team. The loaded trucks would then be picked up from the holding siding by the locomotive and hauled to the mill. The trucks were left some distance from the mill by the locomotive and were then hauled over the weighbridge and thence to the carrier by horse or bullocks.¹²

The locomotive shed was situated close to the mill. It was a small building with a high pitched roof and a vent for smoke. To its east ran lines for full and empty trucks. To its west, two lines ran onto spindly trestles over which trucks would be pushed by hand to bring wood to the boilers. It appears that light tramlines were laid into the settlement of Rous



Cane truck being loaded at Rous Mill Plantation, 1899. Photo: Agric. Gazette of NSW, courtesy W Ross Johnston



This 1895 photo of the mill shows full trucks, the loco shed and a large firewood heap served by an elevated tramline. Photo: J. Check, courtesy Richmond River Historical Society

Mill nearby.¹³

Tramway Route

The line ran from Rous Mill to Alstonville in a generally north-easterly direction. The formation can be followed for most of its length except for a section near Rous which was bulldozed when cane growing was reintroduced into the district in 1974.¹⁴ From the mill, the line climbed about 150 feet before dropping back by almost the same amount to Alstonville.¹⁵

The first mile and a half of the line followed Youngman Creek upstream and involved two crossings of the creek and one crossing of the Rous to Lismore Road. For the next three-quarters of a mile, the line climbed quite quickly to its summit at the crossing of Whites Lane above the Rous Cemetery. The last part of the climb is in a deep cutting and nearby is one of the few areas of untouched scrub in the vicinity - one wonders at the efforts which would have been required to clear this kind of country! For just over a mile, the line snaked across the tableland, over a succession of embankments and cuttings and crossing two more roads

before arriving at the headwaters of Maguires Creek. For about a mile and a half, the line descended the valley of Maguires Creek, following a circuitous route around each spur and across each side valley, where high embankments and sizeable bridges, long since collapsed, were required. About half a mile short of what is believed to be the site of the old Melbourne Company's Mill, remains on the ground become faint and confusing. It would seem that in this area, the tramway from Rous Mill connected with the old Alstonville Mill tramways, which would appear to have been more lightly constructed. It is the author's guess that a steep horse-worked line ran down to the old mill site. There was also a mile-long horse-worked branch which diverged from the main line further up the valley and crossed the creek to canefields on the other side of Alstonville from the old mill. There were probably other lines which remained from the old Alstonville Mill network, and possibly other branches of a semi-permanent nature along the main line from Rous Mill, but no definite evidence of their existence can now be pointed out.16

The Premier Rides the Tramway

An event of major importance in the life of the tramway took place on the 11th April 1896. The Premier of New South Wales, Mr GH Reid, visited the district and travelled from Alstonville to Rous Mill by special train. A "spring seat" was fitted up in the locomotive for the Premier's comfort. Unfortunately, rain delayed the start from Alstonville so that Mr Reid was unable to depart for Rous Mill until 3.30 pm. Arrival at Rous Mill was reportedly at 4.30 pm (hardly a speedy journey!). A triumphal arch of cane had been erected over the track at the mill for the Premier to pass through. The Premier was not a very popular man in the district. Elected under a platform of "Free Trade", he proposed a reduction in the protective tariff enjoyed by the sugar industry in New South Wales. The reaction of the locals was to predict that such a step would lead to the extinction of the industry in the district, but Mr Reid suggested that the farmers should turn to dairying.17

An Animal of Many Responsibilities

By 1899, the locomotive had attracted an unusual assistant. A dog described as "an animal of many responsibilities" had "voluntarily taken charge of the locomotive" and accompanied it on its journeys. Although apparently recognising the authority of the driver, this animal took a very strong interest in the welfare of its "iron charge", and made it its business to drive off the track any horse or cow which happened to get in the way of the engine. By this time, the locomotive had been fitted with a front sheet to the cab.¹⁸

Closure

By 1900, the mill was in the hands of The Union Bank (as mortgages). Rumour circulated that the mill would be closed. However, the mill did crush for the 1900 season, only for the closure decision to be announced the following March. There was no crush in 1901, and by September the mill was being demolished.¹⁹

The fate of the locomotive is unknown. Some accounts claim that the mill was removed to Bundaberg. However, at 1 am on February 14th, 1902, the brigantine *Prosperity* carrying 200 tons of mill machinery from Wardell to Mourilyan Harbour for The Union Bank, was wrecked off Point Lockout in Moreton Bay. The vessel broke up and the cargo was lost. So perhaps the little loco found a watery grave!²⁰

References

- Town & Country Journal (T&CJ), 23/7/1887; Agricultural Gazette of NSW (AG) Vol 10, 1899; The Sugar Industry of the Richmond River – Richmond River Historical Society (RRHS), 1978; Rous Public School Centenary Booklet (1881-1981).
- South Pacific Enterprise CSR Ltd, 1956; The Sugar Industry of the Richmond River; Notes on broadcast by WA Crawford, 11/1965 in



Locomotive and loaded trucks near the loco shed at Rous Mill, 1889. The loco's canine guardian is in attendance. Photo: courtesy W Ross Johnston



The remains of the tramway formation are still very apparent in some areas. This section of embankment is at the crossing of White's Lane. Photo: John Browning

RRHS papers; Notes extracted from diary of George Towner in RRHS papers; T&CJ 8/1/1887, 23/7/1887.

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- T&CJ 8/1/1887, 23/7/1887, 20/7/1889, 22/11/1890. Reminiscences of W Mallet in RRHS papers; Higman - op.cit.
- 5. T&CJ 20/7/1889, 22/11/1890.
- 6. T&CJ 20/7/1839, 22/11/1890.
- Northern Star (NS) 22/3/1890, 14/1/1891, 21/1/1891, 25/3/1891, 1/4/1891, 4/4/1891, 11/4/1891, 27/4/1891. T&CJ 22/11/1890.
- NS 29/4/1891, 2/5/1891, 13/5/1891; Notes from Towner Diary (RRHS); Notes from John Fowler records extracted by RT Horne; Photographic evidence (RRHS).
- Notes from Towner Diary (RRHS); NS 6/2/1892; Notes on Crawford Broadcast (RRHS).
- NS 9/4/1892, 18/6/1892; Reminiscences of W Mallet (RRHS); Notes from John Fowler records (RT Horne); Letter from Archivist of ANZ Banking Group, 19/7/1983.
- 11. NS 2/8/1893.
- 12. Photographic evidence (RRHS); AG Vol 10, 1899.
- 13. Photographic evidence (RRHS).
- Cane growing was reintroduced to the district in 1974 by Jack Clarke, whose forebears were the last to have run cane up on the heights, personal communication via B. Harley.
- 15. Personal observations, 1981-2.

- Notes on W.A. Crawford broadcast (RRHS); Interview with JF Crawford, 9/7/1981; Aerial Photograph, NSW Lands Department, 1966. Personal observations, 1981-2. The Melbourne Company mill site is to be the location of the new Alstonville High School scheduled for construction in 1985 (B. Harley).
- 17. Notes from Towner Diary (RRHS); NS 11/4/1896, 15/4/1896.
- 18. AG Vol 10, 1899.
- 19. NS 3/3/1900, 25/3/1900, 20/6/1900, 3/9/1901.
- 20. Higman op cit; NS 19/2/1902, 22/2/1902.

Acknowledgements

The author would like to express his thanks to all those who assisted with the preparation of this article including George Bond, Foreman Crawford (who as a small boy saw the tramway in operation), The Richmond River Historical Society especially Librarian Mrs E Tucker, Mrs Mary Hewetson, Anthony Weston, Richard Horne, Dr W Ross Johnston, The Australia & New Zealand Banking Group Ltd., and the *Northern Star*. Special thanks are due to my wife Anne for her forbearance and encouragement.

THE STEAM LOCOMOTIVE OF NAURU AND OCEAN ISLANDS by RF Ellis

Introduction

LR80, April 1983, contained brief references to the tramway operations of the British Phosphate Commission (BPC) on these islands which complemented an earlier article on Nauru which appeared in LR40, Winter 1972. The information of two BPC employees was used as a basis for information contained in these articles. Mr I Muir, the manager of Ocean Island provided data as at January 1955 to HJ Wright (NSW) and Mr WF Avery of the Engineering Dept on Nauru, provided data as at June 1965 to Charles Small (USA). Copies of both these documents were made available to the author by George Bond from his extensive files. Recent publication of a full Orenstein & Koppel locomotive list allows some of the pieces of the 'jigsaw' to be added to the story of these interesting tramway operations.

The Railway Gazette article mentioned in LR80 says Ocean Island operations commenced in 1900. The first locomotive so far identified for either island was built in 1905 so if a tramway existed



Loading phosphate on Nauru. Photo: G. Bond Collection

prior to this date it was probably animal or hand operated. The Nauru tramway opening date is not known, but again the earliest date locomotives are likely to have worked on it is in 1905. Phosphate mining on both islands was initially undertaken by the Pacific Phosphate Coy and the British Phosphate Commission did not come into being and assume operations until 1920.

The tramway gauge on both islands was 2ft until in 1937 the gauge on Nauru was changed, for some unexplained reason, to 3ft gauge. At this time all, or some of the 2ft equipment from Nauru was transferred to Ocean Island, although it is possible transfers of locomotives may have taken place prior to this date. The tramway on Ocean Island was closed in 1956 when the transporting of phosphate from the fields was taken over by road transport, whilst the system in Nauru was dieselised in the same year.

Nauru 2ft Gauge Locomotives

It is appropriate to start with Nauru as it seems to have been the first of the two tramways to employ locomotives. Available information from locomotive builder's records do not specify the island destination of the locos, but likely candidates are as follows, and should be considered in conjunction with the comments which follow:

- 0-4-0T Orenstein & Koppel 1688/1905 20hp (a)
- 0-4-0T Orenstein & Koppel 2621/1908 20hp (b)
- 0-4-0T Orenstein & Koppel 3047/1908 20hp (b)
- 0-4-0T Orenstein & Koppel 3300/1909 40hp (b)
- 0-4-0WT Krauss 5671-5673/1907 (c)
- (a) supplied to Pacific Phosphate Commission, Sydney
- (b) supplied to the agency of James Morrison & Co.
- (c) supplied to the agency of Arthur Koppel.

All the O&K locomotives were coal burners and Avery of BPC claims that three were affectionately known as *Emma*, *Anna* and *Gertrude*, though whether these names were painted onto the locomotives is not known. One also wonders from this comment whether only three O&K locomotives went to Nauru.

Charles Small (USA) located a photo of a Krauss XIV type 0-4-0WT which was known to have been taken on Nauru or Ocean Island, and he raises the question of the destination of the three locomotives in the *Industrial Railway Record No.*



Krauss type XIV 0-4-0WT locomotive on Nauru.

98 for February 1984, and includes the photo referred to above. There are two versions of the Krauss works list held by the Vienna Technical Museum and Mr Small obtained copies of both. One shows 5671/1907 as coming to Australia to the agency of Arthur Koppel, 5672/1907 to Arthur Koppel for Spain and 5673/1907 to Arthur Koppel for Italy, whilst the second version shows all three locomotives to Arthur Koppel for Australia! It should be noted that at the time Australia was headquarters for the Pacific Phosphate Co and a suitable transhipment point for an overseas vessel to the vessels trading to and from Nauru.

Nauru 3ft Gauge Locomotives

The 3ft gauge locomotives supplied to Nauru following the gauge change were all numbered and given a 'class' letter prefix. All were oil burners. Details are as follows:

A1 0-4-0T Orenstein & Koppel 12887/1937 A2 0-4-0T Orenstein & Koppel 12888/1937 A3 0-4-0T Hudswell Clarke 1710/1940 A4 0-6-0 Bagnall 1965/1913 B1 0-4-0T Orenstein & Koppel 12889/1937 B2 0-4-0T Orenstein & Koppel 12890/1937 B3 0-4-0T Orenstein & Koppel 12891/1937 Photo: SC Small Collection, courtesy G. Bond

The Orenstein & Koppel book published in 1978 claims that all five O&K locomotives were 160hp, but Avery of BPC claims the first two were 40hp and the latter three 50hp which would explain the class designations. A3 is one of two Hudswell Clarke locomotives ordered by BPC in August 1939, HC1710 and HC1711, both of which were completed in 1940. Hudswell Clarke shipping records show both as being despatched on the Blue Funnel Line vessel Idomeneus, though whether 1711 arrived in Australia is not known. Avery tells us that only 1710 arrived on Nauru, in 1946, and the fate of 1711 is a mystery at this stage, possibly lost at sea? The absence of 1711 probably explains why BPC purchased A4 which is the ex Powelltown Tramway locomotive Powellite which also arrived on Nauru in 1946. It is claimed that BPC purchased both Powellite and another Powelltown Tramway engine, 2-4-0 Little Yarra (Baldwin 37718/1912) through the agency of Cameron and Sutherland. Little Yarra apparently never made it to Nauru, Powellite was not popular and only saw limited service (probably as a result of its long wheelbase compared the four-coupled engines). It was out of use by August 1948, with its boiler in Australia for

major repairs and never worked again on Nauru.

Dieselisation of the tramway system on Nauru was first mooted in early 1955 and quotations for the supply of diesel locomotives were requested from such firms as Hunslet Engine Co, Orenstein & Koppel (their London office) and Clyde Engineering Co. The latter company was successful in obtaining the contract and supplied three of their DH1-71 series locomotives which arrived on the island early in November 1956 and went into service in December of the same year, thus ending steam operations on Nauru.

Ocean Island

The 2ft gauge tramway on Ocean Island would appear to have received the following locomotives. Though similar to Nauru, the original destination of these locomotives cannot be confirmed from available information.

10-4-051 Bagnall 18/0/1908	(a
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2 details unknown, possibly destroyed during the Japanese Occupation of the island from 1942 to 1945.

- 3 details as for No. 2
- 40-4-0T Orenstein & Koppel 11174/1926 (a)
- 50-4-0T Orenstein & Koppel 10474/1923 (b)
- 6 details as for No. 2
- 70-4-0T Orenstein & Koppel 12678/1935 (b)
- 80-4-0T Orenstein & Koppel 12737/1936 (b)
- 90-4-0T Orenstein & Koppel 11585/1928 (b)
- 100-4-0T Orenstein & Koppel 11291/1926 (b)
- 11 0-4-0T Orenstein & Koppel 9880/1922 (b)
- 12 0-4-0T Orenstein & Koppel 3300/1908 Ex Nauru, ? 1937 or later
- (a) supplied to the agency of James Morrison & Co. Named *Ella* on delivery.
- (b) supplied to the British Phosphate Commission.

The identities of Nos. 2, 3 and 6 have not been established although the following three locos supplied by O&K to the BPC are not accounted for so far:

- 0-4-0T Orenstein & Koppel 9729/1922
- 0-4-0T Orenstein & Koppel 1140/1927



Steam locomotives stored on Ocean Island in 1965. Note the Bagnall 0-4-0ST fourth from left. Photo: LG Poole, courtesy G. Bond



Ocean Island loco No. 7 (O&K 12678/1935) and a sister engine stored in 1965.

Photo: George Bond Collection

0-4-0T Orenstein & Koppel 11586/1927

As the building dates of all these locomotives do not follow running number order there is every liklihood that transfers to and from Nauru did take place, e.g. No. 12.

The quality of the water and, probably, the repair/maintenance facilities on Ocean Island appears to have been below standard as in the 1930s both Bagnall and O&K supplied no less than seven replacement boilers for the locomotives. Details of these are as follows:

Bagnall 3580/1937 for No. 1

Orenstein & Koppel 12399/1932; 12808-12810/ 1936; 13107-13108/1938

of which No. 4 had boiler 13108, No. 5 boiler 13107, No. 10 boiler 12808 and No. 12 boiler 12399, all noted as such in 1955. No. 11 by this time had the boiler from O&K 11440 which confirms its arrival on Ocean Island.

This information is basically the same as shown in LR80 although the identities of Nos. 3 and 6 are not shown in Muir's report, which presumably was used as the basis for the list in LR80. The withdrawal dates of Nos. 1 and 9 are as given in LR80 but Muir's report also shows No. 11 as withdrawn from service in January 1955. All the other locomotives were withdrawn by February 1956.

This article does not claim to solve the mystery surrounding the locomotives but is an effort to put down in one place all available information known to the author in the hope that someone may be able to solve the puzzle! If any reader has any further information regarding the tramway operations on either island, particularly in relation to the petrol, diesel and electric locomotives, the editor would be pleased to hear from them.

THE MAN WHO RODE THE POWELLTOWN TRAM

from David Burke

Richard Hughes, the famous Australian journalist, died in January 1984 at the age of 77. His death occurred in Hong Kong which had been his home for many years. The stories of this world foremost China Watcher were syndicated in leading dailies around the globe. The biography, The Man Who Read The East Wind recounts his remarkable life as a foreign correspondent: he warned pre-World War 2 governments of Japanese militarism; he broke the cover of the spies Burgess and MacClean in Moscow; he was a character prototype for figures in the novels of Ian Fleming and John Le Carre. Yet his career began in the Perishables Shed at Melbourne goods yard. Hughes' brilliance as a writer came to the notice of Harold Clapp, chairman of the Victorian Railways Commissioners, who appointed him to his newly formed public relations office.

From the mid 1920s one of Richard Hughes' main roles was to write for *The VR Magazine* — under his own name and a variety of pseudonyms. One of those pseudonyms was 'Hugh Richards' — the man who rode the Powelltown Tram and told of his journey in the *Magazine* of February, 1928... it is a unique piece of reporting that recalls first-hand the days when shrill steam whistles sounded



Richard Hughes.

through tall timber. Selections from Richard Hughes' article are republished here. The full text is reproduced as Appendix I of *Powelltown* by FE Stamford, EG Stuckey and GL Maynard (LRRSA, Melbourne, 1984).

A RIDE ON THE POWELLTOWN TRAM

by Hugh Richards

Powelltown swelters under a blazing summer sun. The gums on the slopes of the surrounding ranges are masses of bright, dry green, streaked with the slim, straight whiteness of the trunks. The big tin roof of the sawmill shimmers with reflected heat. Black smoke ascends sluggishly from the tall chimney stack. Dust — hot dust — lifts from your feet as you walk.

And eternally the drone of the sawmill rises and falls, monotonous and persistent as the heat.

Shunting trucks of timber from the sawmill platform, the squat little engine with the enormous stack whistles with the assurance of an A2. You disturb the swarm of flies enveloping you and study your watch. The young foreman beside you answers your thoughts.

"She'll be leaving inside half an hour," he says. "I suppose there'll be ten logs for her to bring in. About nine to ten miles out she goes. Climbs all the way there."

The log train is ready for its climb into the heart of the hills. The engine is drawn up at the head of a long row of low, open trolleys — each merely a bare framework on eight sturdy sheels. You perch yourself on the front of the leading trolley, shift your feet clear of the uncovered wheels and wave farewell to the foreman. Immediately in front of you is the stolid rear of the engine, topped by an immense stack of firewood.

The whistle shrieks. The train shakes itself into movement. The wheels beneath you bump forward. Couplings clank the whole length of the train. Grinding and jolting on the light, narrow-gauge rails, the train climbs and winds out of the yards, whistles as it labours across Powelltown's main street and determinedly sets its snorting nose at the steep ranges.

Fainter and fainter sounds the omnipresent whining drone of the sawmill ... Fainter and fainter



Shay locomotive at Powelltown. The schoolboy is Peter Duckett, who subsequently became well known as owner of Melbourne's Model Dockyard. Photo: David Burke

Rusty rail, wooden sleepers and rough tracks slither under the wheels of the engine and slide beneath your feet. Pungent smoke whisks around the blackened roof of the cab. It is a stiff climb and a hard pull for the little locomotive.

On either hand, the steep slopes of the ranges sweep to the blue, unclouded sky. Thousands of bare tree trunks stand like soldiers on parade. Foliage has not yet freshened all the ravages of the bushfires which, a year or so ago, ringed Powelltown in a circle of raging flames. But a young generation of green saplings is springing up.

Onward and Upward

Twisting across a high trestle bridge, the train turns to the left. A hundred feet or so below in the valley lie ugly-looking rocks. The line disappears between high, narrow banks, which almost brush the sides of the swaying engine.

Onward and upward . . . Clanking of piston rods . . . Grinding and bumping of wheels . . .

A bronzed giant in a flannel shirt, belted trousers and two days' growth of whiskers backs off the engine and swings himself on to the front of the trolley beside you.

"Slow enough, isn't it?" he says. "We'll show you some speed coming back, though. You see, we leave these trolleys with the other engine at the top, and pick up the logs which are waiting for us on the



Bagnall 0-6-0 locomotive POWELLITE (B/N 1965/1913) at Powelltown in July 1934. Photo: David Burke

trollevs we left there the other day. Follow me?

"Now, it's a run downhill all the way after we've topped the range coming back, so this engine just pushes the logs in front of it until we're on the slope and then gives us a shove off. My cobber and I there's only two of us travel on the logs - hang on to the moving trolleys and brake them as they gather speed. We get up to thirty miles an hour coming down. Coast right into the mill almost."

Through the Tunnel

"And here we are at the tunnel."

Cold air swirls out of a black, square opening in the mountainside, right ahead. Plunging into the gloom and coolness, the engine squeezes past the entrance to the tunnel, seeming to scrape the roof and sides. There is noise and tumult. Echoes are flung from rails to roof. Light dims and grows dimmer. Behind, the square which engulfed the train has changed to an eye of blinding sunshine glaring into the blackness. Further and further into the bowels of the mountain . . .

"Thousand feet long!" screams a voice in your ear.

Faintly the invisible engine begins to take shape once more. Light struggles round it and filters through the smoke beating against the low roof of the tunnel. Then abruptly the engine has burst into the open and the heat again.

There is a dip and a slope outside the tunnel. With increased speed the train rumbles around a curve and ventures over a gurgling creek which splashes between green ferns.

In a cool, wooden glade, the train halts, hesitatingly, doubtfully. You jump down and stretch your legs in the shade of a silent, towering gum. The sound of an axe meeting hard wood somewhere to the left is the only sound that issues from the dense jungle. There is a siding on the right of the log train, a siding loaded with ten huge logs on low trolleys and strung together heavily behind another locomotive.

The WA Minister of Town and Country Planning officiated at the opening of the WALRPA Bennett Brook Railway on 8 December 1984. On the 13th a special train was run for the Editor of Light Railways. The train is pictured at Central Station, which was the former WAGR East Perth (later Claisebrook) station of 1898 which has been re-erected at Whiteman Park. Photo: Bob McKillop

BENNETT BROOK RAILWAY



A HISTORY OF RAILWAYS AND TRAM-WAYS ON TASMANIA'S WEST COAST by Lou Rae. 212pp 210 x 295mm profusely illustrated plus maps and 3 appendices, with index. Published by the author (2nd edition August 1984) Hobart.

If this reviewer has any criticism of this substantial, well researched, interestingly written publication, it is the wish that the many exceedingly interesting illustrations — many never previously published — had not been printed offset on matt paper stock, to enhance the fascinating photographs.

The first edition, published in September 1983 in a limited number, sold out almost exclusively within Tasmania, so it was with keen anticipation that a reprinting was awaited. I was not disappointed. In its 12 chapters, Lou Rae — a hitherto unknown researcher - has gathered what must be the near definitive history of the mineral discoveries and their subsequent development following provision of railway or tramway access to the formerly isolated region. The rise and subsequent decline of these mostly short (lived) lines makes a fascinating story which should interest the general reader as much as the railway enthusiast, for the latter of whom this is required reading, as also the appendix detailing the history of the many and varied stock of locomotives employed thereon.

The soft colour printed cover edition is in this reviewer's opinion, well worth its price. A limited numbered and signed hard cover edition is available. The book will shortly be stocked by LRRSA Sales.

JLB

POWELLTOWN: A History of its Timber Mills and Tramways by FE Stamford, EG Stuckey and GL Maynard. Published by the Light Railway Research Society of Australia, Melbourne, 1984.

BOOK REVIEWS

Powelltown is the history of settlement in Victoria's Little Yarra Valley, some 50 miles east of Melbourne, and covers the development of the narrow-gauge tramways linking the forests and timber mills with the transhipment point to the VR at Yarra Junction.

The timber industry in the district dates from Harry Blakes mill of 1901. The book traces the linking of his unfinished tramway to Yarra Junction through the formation by local interests of the Gilderoy Tramway Company. This primitive horse-drawn public railway was to be overtaken with the setting-up of a large scale mill at Powelltown in 1913 and the construction of a steam-hauled 3 ft gauge tramway to Yarra Junction and into the bush for log extraction.

After the early corporate failures associated with the "Powellising" process came the emergence of the Victorian Hardwood Company, who were to operate the mill and tramway up until its closure in 1944. Chapters cover the various periods of operation of the line, the logging methods used as well as providing insight into social life in Powelltown and the surrounding bush camps.

After 10 years of promised and passed deadlines, the reviewer had built up high expectations of the book and was not in the least disappointed. The writing has that very rare feeling of being written by authors who hae consulted all sources and immersed themselves in their subject, an opinion supported by the extensive list of references.

The text is supported by a comprehensive photographic coverage, the area having attracted a number of gifted photographers over the years. Mike McCarthy's maps are also of a high standard.

If criticisms be made, two small ones might be offered. While the process of timber getting, milling and transport are explained, a wider view of the company's impact, if any, on the Victorian timber industry over the years was looked for but not found. Also the district map would have engendered less confusion had it been rendered in two or three colours.

However, the book is a must, and further publications on the district - a photographic album and

LETTERS

COOKTOWN QUARANTINE TRAMWAY: LR85 As an addendum to my article on the Cooktown Quarantine tramway I am enclosing copy of the tramway section in the hope that it can be published. While the section is not a spectacular one, it is rare, I think, to locate a section for a tramway and especially for such a remote one as this.

John Kerr St Lucia, Qld.



one on feeder tramways - will be eagerly awaited. Available from LRRSA Sales, PO Box 32, Mornington, Vic. 3931 at \$21, post paid (softcover). CLW/RFM



GEELONG MISCELLANY: LR.83 The "tractor" involved in the construction of King's Wharf, Geelong (pictured on p.5 of *Light Railways 83*), is in fact a Motor Rail 2ft gauge four-wheel *Simplex* diesel locomotive. This unit, builder's number 7351, was delivered in October 1938 to Diesel Locomotive Hirers Ltd (a Motor Rail subsidiary company). It was later sold to John Howard & Co. Ltd and was fitted with a new Dorman engine supplied through Motor Rail in 1950, quite possibly in preparation for the contract at Geelong. The locomotive was later acquired by Cheetham Salt Ltd and was used at their Geelong works. It is currently at Cheetham's Laverton works.

John Browning Mackay, Qld.

COCKATOO DOCKYARD ELECTRIC RAILWAY I enclose a photograph of an electric locomotive shunting at Cockatoo Dockyard, Sydney Harbour. RG Parker, in his interesting book *Cockatoo Island* (Thomas Nelson 1977) stated on page 19 ". . . In 1904 the New South Wales Government began to carry out a programme designed to increase resources and capacity of Cockatoo as an engineering and shipbuilding establishment. This was completed in 1908 . . ."

Part of this development included provision of an electric railway, a map of which appears on page 24 of the above mentioned book. The 1907 annual report for the NSW Department of Public Works featured the accompanying photo which shows the locomotive(s) to be a four wheel unit receiving power from twin overhead wires. Verbal information has suggested that the Cockatoo Dockyard railway was built to the 3ft 6in gauge, but the photograph suggests that the track gauge may have been narrower.

BELGRAVE BRIDGE CONSTRUCTION TRAMWAY The present overhead road bridge which crosses the transfer ramp of the 5ft 3in/2ft 6in gauges between the V Line and Puffing Billy stations at Belgrave replaced an earlier wooden structure in 1954. The accompanying photograph



Cockatoo Dockyard electric railway, c1907.

Photo: NSW PWD



Howard's Simplex locomotive at Belgrave, 1954

shows the 2ft gauge railway used to dump spoil for the bridge approaches. Tramway enthusiast Ben Parle is seen standing beside the *Simplex* locomotive used on the "Howards job" railway, while the 2ft 6in gauge Upper Ferntree Gully to Gembrook railway can be seen just beyond. The old Belgrave narrow gauge station is above the *Simplex* locomotive.

This photograph, taken on 17 January 1954, presents a striking contrast to the location today. The old station has been replaced with a much larger broad gauge platform while the electric railway terminus is situated just to the right of the 2ft gauge locomotive.

Ken McCarthy Keiraville, NSW

LOCOMOTIVE WESTERN: LR.83 The article featuring Black Hawthorn 0-4-2ST *Western* in *LR.83* has reminded me of a Black Hawthorn locomotive boiler which I discovered in the mid-1960s and which may have been that of *Western*.

The then disused relic was located in the boiler room of the Radio Corporation in South Melbourne and had previously been in service for factory heating. The make of the boiler was positively identified on an expired "Certificate of Inspection"

Photo: Ken McCarthy

which I was given (No. 2067 of 2 July 1958). The Black Hawthorn boiler (registration No. 4721) was certified to work at pressures below 120 psi until 30 June 1959. I can vaguely remember reporting its existence to the LRRSA and later taking its measurements which were reported in LR.24 (p.30).

Unfortunately the entire area in which the Radio Corporation and the boiler were located have been cleared for the West Gate Freeway, now under construction. I have no knowledge of the boiler's ultimate fate.

> John E Thompson Heathmont, Vic.

RE BALLARAT AND BULLAROOK RAILWAY COMPANY On pages 8 and 9 of Norm Houghton's excellent book *Timber and Gold*, reference is made to the 1866 proposal to build a railway to the State Forest at Bullarook. Recently, while searching through old drawings held by the City of Ballarat, I came across some plans and other documents relating to the proposal, copies of which appear to have been "deposited for public inspection" at several locations on or about the "twenty first day of January 1867". These documents disclose interesting differences when compared with details given in *Timber and Gold* (although I have not checked Mr. Houghton's references), and the following description of the line is gleaned from them. I have also enclosed a photocopy of part of the map published in that book, onto which I have plotted the proposed route of the railway.

Description of the Proposed Line

The line was to commence "by a junction with the Geelong and Ballarat line of railway . . . about ninety two miles and ten chaines from . . . Spencer Street". The plans show this to be the present site of Warrenheip station, which probably did not exist at that time, as the Gordon lien was not opened until 1879, and no reference to it is made anywhere in the plans or other documents.

Diverging from the existing railway, the route swung to the left around a 15 chain radius curve, turning through about 130° - almost back on itselfto head due north through the Township of Warrenheip for about half a mile, whereupon it rounded a curve of 32 chain radius to head in a north-easterly direction, crossing what is now the Western Highway near the Dunnstown Road intersection. It continued in this direction until, approaching the 3 mile, it crossed Pincots (sic) Creek and curved gently to the east, entering a Water Commission Reserve, which is followed for a further two miles.

Although the line climbed continuously, to this point (5 miles from Warrenheip) gradients were relatively easy and earthworks light, but it began to climb more steeply as it left the Water Commission Reserve on a 41 chain radius curve to head due north for about two miles. It then crossed Harry Beales Swamp and curved to the north-east to reach the 8 mile, where the Border Saw Mills were situated. (Although the mill is shown on the plans, the tramway serving it is not.)

From the mill the line climbed at 1 in 65 for half a mile, then steepened to 1 in 56 for a similar distance before the gradient eased and, shortly before the 10 mile, it crossed Devils Creek. A mile beyond this crossing it swung to an easterly direction and fell at 1 in 73 to cross a watercourse near the 12 mile, which the documents describe as "the river Moorabool" although it is not named on the plans.



APRIL 1985

From here the line climbed into the State Forest with over a mile of 1 in 53, rounding a series of 18 and 16 chain radius curves and passing through a lengthy cutting, which was up to 25 feet deep in places. While in this cutting, at a point near the 13 mile the route crossed the Dividing Range, and then fell at 1 in 50 in a north-easterly direction, easing to 1 in 88 as it approached the terminus which was to be 15 miles from Warrenheip.

The Gordon Railway

As already mentioned, the Warrenheip to Gordon railway was opened in 1879, construction having commenced the previous year. It is interesting to speculate what might have happened had the Bullarook railway been built. At first thought it would seem that Warrenheip would have become a three-way junction, but this may not have been the case. Unless political pressure from the residents of Dunnstown held sway, it would have been more likely that the Gordon line would have commenced from a point on the Bullarook line about 5 miles from Warrenheip, and less than a mile north-west of the present Bungaree station. This would have saved the construction of 6 miles of railway through Dunnstown, but the Victorian Railways would have had to either obtain running rights over the company's line or take it over completely. This section of the Bullarook line had generally easier gradients than the line actually constructed between Warrenheip and Bungaree, which has a number of sections of 1 in 50, but the 15 chain radius curve at Warrenheip may have caused some problems.

I trust that the above details will be of interest to your readers, and to Mr. Houghton in particular.

Ron Woods Ballarat, Vic.

YUNGABURRA SAWMILL, QLD I enclose a photograph of the tramway at the Yungaburra sawmill on the former QR branch line from Tolga to Millaa Millaa in North Queensland. The mill has a typical light trolley-way. The branch line carried extensive timber traffic until the area was logged out.

RB Smith Surrey Hills, Vic.



IDENTIFICATION WANTED



John Buckland is seeking information on the location and date of this photograph.

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