#### RUMBER 153 ISN 0 727 8101 **INF 2000** S 5 . 95 Reconnected S 5 . 95 Recon

Australia's Magazine of Industrial & Narrow Gauge Railways

Light Railway Research Society of Australia Inc



#### LIGHT RAILWAYS

Australia's Magazine of Industrial and Narrow Gauge Railways

No 153 June 2000 ISSN 0 727 8101 PP 342588/00002

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GORDON AND GOTCH LIMITED. Printed by Courtney Colour Graphics.



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# Conversions:

1 inch (in)	25.40 millimetres
1 foot (ft)	0.30 metre
1 yard (yd)	0.91 metre
1 chain	20.11 metre
1 mile	1.60 kilometres
1 super foot	0.00236 cubic metre
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

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# Comment

We all love our little engines. The undeniable charm of industrial and narrowgauge motive power has, over the years, brought many of us under its spell.

For those so enchanted, this issue of *Light Railways* has much to offer; from Colin Harvey's look at the marvellous assortment of locos and paraphernalia that passed through the hands of Melbourne machinery merchant Miller & Co, to Ron Madden's intriguing turn-of-the-century puzzle, which centres around the movements of a mysterious contractors' locomotive.

We also revisit the launch of the Bundaberg Fowler cane loco, take a look at an interesting assignment for a tiny battery-electric machine and, in our main feature article, light railway legend Bruce Macdonald gives us a close, and well researched, look at the history of Krauss locomotives in Australia. Plus, of course, we have the usual informative round-up of News, Research and Letters. *Bruce Belbin* 

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 the forests.

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

**Front cover:** Back in the halcyon days of the now expired Goulburn Steam Museum, visitiors were sometimes treated to the sight of two, or even three, locomotives in steam. On 18 April 1976, John Browning recorded the impressive sight of STELLA (Krauss 3423 of 1897) and JACK (5945 of 1907) double-heading a two-car train on the museum's 2ft gauge railway. **Upper back cover:** Sometime in the 1920s, driver Thomas William Sewell is at the controls of one of Plane Creek mill's two Krauss 0-4-2Ts - either COMET (4722 of 1902) or KAISER (5679 of 1907). The loco is hauling wagons of bagged sugar from the mill, at Sarina, to the wharf on Louisa Creek, where the sugar will be transhipped to lighters, for loading onto coastal steamers. Photo: Courtesy Sharlene Foreman/Shirley Small. Lower back cover: On 24 October, 1999, Dick Smith held an Open Day at his country property, near Canberra, and 0-4-0T Freudenstein 217 of 1905 was in steam on the 2km long Bowylie Light Railway. During a break in the unfortunately wet weather, Graeme Belbin took time out from driving to photograph the diminutive locomotive and its bogie carriage beside the engine shed.



John Fowler 4668 of 1883 was purchased by Miller & Co. in 1924, and remained in their possession for over half a century. In 1976, it went to the Goulburn Steam Museum, in NSW, where it was restored to working order and operated on special occasions. It is seen here on one such occasion, in April 1977. In December that year it was purchased by the newly-formed Australian Sugar Museum at Mourilyan, North Queensland, where it now resides. Photo: Bruce Macdonald

# Miller and Co. (Machinery) Pty Ltd Records

# by Colin Harvey

Machinery merchant and ironmonger, J Miller and Co, evolved from the various suppliers of mining equipment that were established in the early years of mining at Ballarat, Victoria. In 1902 an injection of fresh capital, and incorporation as Miller and Company Pty Ltd, foreshadowed an expansion and relocation of the Company's main operations from premises at Dana and Armstrong Streets, Ballarat, to a newly acquired site in Queens Bridge Street, South Melbourne. In the first decade of the century Millers also had branches in Pitfield (then a major mining centre about 40km south-west of Ballarat), Bendigo and Sydney. The Ballarat branch of the business was sold in 1908 and the Company headquarters moved to South Melbourne.

As mining companies continually formed and disbanded, Millers increasingly turned to the purchase, reconditioning and resale of secondhand equipment and also to dealing in nonmining plant. At South Melbourne there were facilities for the repair and, so some extent, manufacture of equipment. As well as direct sale, hire-purchase arrangements were available for organizations with limited capital. In 1926, 77 per cent of Miller's £38,290 stock value was in 'hire and letting', including plant for Victorian sawmillers EAC Russell, PC Audas and E Smedley.

In July 1927, operation of the business was taken over by

a new company, Miller and Co. (Machinery) Pty Ltd. This company traded in South Melbourne until the late 1970s. The surviving records of this company are now held by the University of Melbourne Archives and consist of:

◆ A set of machinery record sheets for major items of plant acquired from 1905 to 1918, sequentially numbered from 1 to 2100.

◆ Two volumes of indexes to machinery bought and sold from about 1933.

• Objects, some quite bulky, such as wooden patterns for machinery, in particular for stamp batteries. Also included are patterns, and even castings, for skip wheels.

◆ 76 boxes of catalogues from equipment manufacturers and suppliers, with dates from the 1870s to the 1960s.

◆ A box of miscellaneous records including agreements; share certificates (the Company seems to have acquired interests in some mines, possibly as security or in lieu of payment); a small number of photographs of mines; and stock sheets as at the end of some financial years.

Unfortunately the collection covers only a small fraction of the Company's original records. For example stock sheets are only held for the years 1925, 1926, 1927 and 1929. Even so, the collection offers to fill in some gaps in our knowledge of industrial railways and is a valuable source for information on the machinery of related industries.

The machinery recorded is predominantly mining plant although contractors' and sawmilling plants are also well represented. The following items of particular light railway interest have been noted.



Bagnall 1801 (the most likely candidate for 'Item 900') went to South Australia in 1915, where it worked on the Glenelg breakwater project, then on the Cobdogla to Loveday light railway. Now in the hands of the Cobdogla Steam Friends Society, it is steamed regularly for open days at the Cobdogla Irrigation & Steam Museum (See Light Railways No. 145). Photo: Denis Wasley

# **Bagnall steam locomotives**

Included in the large quantity of plant acquired from the Long Tunnel Extended Mine at Walhalla in June 1912 were the two 2ft 6in gauge, 0-4-0ST, Bagnall locomotives (B/N 1729 and 1801) which had been used on that mine's firewood tramway. These are shown as items 897 and 900 in the Machinery Register. No customer is recorded for 897 but it undoubtedly went to Stone and Siddeley for their Geelong sewer contract; probably in the same month it was acquired by Millers.<sup>1</sup>

Item 900 was also sold to Stone and Siddeley, on 22 July 1912, following the auction of the remaining mine plant held at Walhalla on 18 and 19 July. This engine seems to have been in poorer condition than its sibling as a number of repairs, and the fitting of a whistle, were carried out by Millers over the next few months.

On 25 August 1917 one of the pair was repurchased from Stone and Siddeley, apparently at auction. This was recorded in Miller's register, as item 1928, in great detail; even the fact that the stanchion supporting the cab roof tapered from 1<sup>3</sup>/<sub>8</sub> inches diameter at the base to 1 inch at the top! The disposal of this locomotive is unclear. The register shows it as being transferred to Miller & Co., Sydney, on 25 October 1919 but there are also pencilled notes: 'Sold. Sydney advised 12 Dec 1919. Sent to Sydney...'. Since the movements of B/N 1801 are well documented, this locomotive must be B/N 1729.



Some of the surviving patterns and castings. Photo: Colin Harvey

#### Kerr Stuart steam Locomotive

The following locomotive was in Miller's Melbourne stock list, as at 30 June, in 1925 and 1926 but not 1927: plant number 3840 'Locomotive Cyls 7<sup>1</sup>/<sub>2</sub>" diam x 12" stroke, link reversing motion 36" rail gauge' acquired from Misima Gold Mines, Papua. This will be the Skylark-class 0-4-2T (B/N 797 of 1902) sold to EAC Russell for use at Gembrook, Victoria; but why had it been regauged to 3 ft as early as 1925?

#### Fowler steam locomotive

The stock sheets for 1925 record a 'Locomotive by John Fowler & Co, Leeds. Cylinders 6" diam x 9" stroke, link reversing motion' which had been acquired from Joseph Timms (Miller's number 3875). This is the patent-drive 0-4-2T, B/N 4668 of 1883, originally supplied to Mourilyan sugar mill, the history of which was recorded in *Light Railways* No.141. The locomotive is also recorded in the Machinery Indexes but with the item number of the engine described below.

# Arnold Jung steam locomotive

Also acquired from Joseph Timms and in stock in 1925 was a 'Locomotive by M Brenner, Magdeburg. Cylinders  $6^{1/2}$ " diam x 12" stroke, Link reversing motion'. An entry for this machine also appears in the stock sheets for 1926 and 1927 although the reference to M Brenner, Magdeburg, is not



One of the many light railway equipment catalogues in the Miller Machinery records. Photo: Colin Harvey

shown after 1926. Miller's plant number (3892) suggests that the Company acquired it about at about the same time as the Fowler locomotive.

This locomotive is presumed to be Arnold Jung B/N 690 of 1903 as Miller's record matches its history as recorded by Charles Small and Arnold Lockyer in ARHS *Bulletin* No.574, August 1985. If this identification is correct, the engine would have been sold to BHP in July 1927 for use at Whyalla, South Australia.

# **Electric locomotives**

At least four electric mining locomotives appear in Miller's records: three machines made by Ganz & Co. (items 1868 to 1870 in the machinery record sheets) and one or two by General Electric.

The Ganz locomotives were acquired from the Great Southern Consols gold mine at Rutherglen, Victoria, in June 1917 where they had been used for underground haulage of wash dirt.<sup>2</sup> All three were sold to the New Langi Logan mine on 12 May 1920. Locomotive 1868 was described as follows: *Electric Haulage Locomotive (Ganz & Co). Direct Current 10hp 240V 1000RPM, 2 axles 2'0" long by 2<sup>1</sup>/4" diam. Mounted with 4 wheels 16" diam x 2" Tread x 16" R.G. [rail gauge] Fitted with Brakes Complete. Overall dimensions 5' 9" long x 2' 10" wide.* 

The other two Ganz locomotives had an identical description except that the width was shown as two feet.

Item 510 in the record sheets is a 'Standard General Electric Locomotive. Weight 2.18.1.14' purchased from Duke United Gold Mining Company, Maryborough, Victoria, on 28 December 1909 and sold to the New Langi Logan Company on 3 October 1912. This will be the locomotive supplied to Duke United by the Australian General Electric Company in 1904.<sup>3</sup>

What is probably the same machine appears as item 3071 in the 1925 and 1926 stock sheets, valued at only £2 10s, and is described as: *Electric locomotive by General Electric Co with pair N.W.P. Railway Motors, Class*  $1^{1/2}$  Form A. 250 volts. Wheels 18" diam x 17 R.G.

#### Internal combustion locomotives

Machinery Index, Volume 1, records item 7085, a 'loco by IHC' received from S Armistead & Son. It was presumably on consignment as it was returned to Armistead on 29 June 1947. This will be the tractor used for logging at Armistead's sawmill at Kennett River in the Otway Ranges.<sup>4</sup> 'IHC' might indicate an International Harvester power unit.

Volume 2 includes a diesel locomotive acquired from civil engineers Prentice Bros & Minson and sold to Leighton Contractors 18 January 1972. This is probably Ruston & Hornsby B/N 285298 of 1949, purchased by Leighton's for construction of a sewer tunnel at Warriewood, NSW, as recorded in *Light Railway News*, No.8, February 1979.

#### Other tramway items

As well as the diesel locomotive, two Atlas Copco mine car loaders came from Prentice Bros and Minson. One was sold to the A1 Consolidated Mine in November 1961 and the other was returned unsold in March 1963.

Two other mine car loaders are recorded in the Index: a Joy, model HL20 from K Moloney of Port Fairy (with no disposal details) and an Atlas Copco from Green and McCahill which went to PML Mining Ltd in August 1965.

The stock sheets show that a considerable variety of skips, wheels and axles, and quantities of light rail and point material, were held at the Queens Bridge Street premises. The 1925 sheet reveals Millers as being the owner of the wooden tramway (probably the trestlework) at the New Moon Shaft of Bendigo A1 Gold Mining Co. but, by 1926, this has been reduced to 'timber from tramway' valued at only £1.



This Kerr Stuart Skylark-class locomotive (B/N 797 of 1902) was sold to EAC Russell for use on his timber tramway at Gembrook, Victoria, where it was fitted with new, enlarged side tanks. It is seen here lying derelict at Gembrook, circa 1950. Photo: LG Poole



A Ganz & Co. 10hp electric locomotive for underground haulage. From the Australian Mining Standard and Electrical Record, 5 May 1909. Courtesy Norm Houghton

# Things not found

The late Charles S Small, in a letter in ARHS *Bulletin* 340, February 1966, states that, in 1908, Krauss B/N 2591 of 1891 was sold by Mt Lyell Mining & Railway Company to Miller Machinery in Melbourne who resold it to Wadey & Company for use on the construction of the Heatherton Benevolent Asylum. Miller's plant records appear to be complete for the period 1905 to 1918 but no evidence was found of Millers having owned this locomotive. Perhaps, in this case, Millers acted only as agents.

# The catalogues

The catalogue collection covers the full range of engineering and contractors' supplies ranging in scale from power stations to pliers. Many machinery manufacturers and suppliers included light railway material in their product range. For example, suppliers of mining equipment, brick-making machinery or logging equipment frequently included a section on the railway material peculiar to their industry.

Notable railway equipment catalogues held include: W G Bagnall Ltd (1901); Bochumer Verein Steel Works (c.1909); Climax Patent Geared Locomotive (1912); Hunslet Engine Co Ltd (loco. specification sheets 1 to 175); F C Glaser & R Pflaum; Leipziger & Co; Lima Locomotive & Machine Company (Shay geared and rod locomotives); McLachlan & Co Ltd; Orenstein & Koppel - Arthur Koppel A.G. (goods wagons); and Railway Mine and Plantation Equipment Ltd (various drawings and specification sheets).

# Sources and acknowledgments

In addition to the material held by the University of Melbourne and the published sources noted, company records in series 932, 8268 and 8269 at the Public Record Office Victoria, have been consulted. The assistance of the ever-friendly staff of the University of Melbourne Archives in facilitating access to the collection is appreciated (and for conducting a Melbourne Cup sweepstakes with a most satisfactory outcome!).

#### End Notes:

1 A quantity of other plant from the Long Tunnel Extended was sold to Stone and Siddeley in that month.

2 See *Electric Traction*, September 1971, for a description of this operation. 3 *Electric Traction*, August 1971.

4 See page 83 of Sawdust and Steam by Norm Houghton.



The first Forster locomotive at work, circa early 1899. To date, we have no idea who built this intruiging little engine, nor whether it came to Forster from Narani, from elsewhere in Australia, or even from New Zealand. Photo: Bruce Macdonald collection

# The Narani-Forster-Ulverstone Locomotive Conundrum

by Ron Madden

# Introduction

Considerable debate has surrounded the identities of, and even the number of, locomotives that operated during the latter part of the 19th century at the Hudson Brothers' Narani sawmill on the Myall Lakes, adjacent to Bungwall Flat (now Bungwahl), on the NSW North Coast. One locomotive alleged to have operated at Narani (now Neranie) has been suspected by some of having originated from New Zealand. That particular locomotive was, at the turn of the century, photographed at Hungerford & Sons' breakwater construction tramway at Forster. The locomotive is also known to have been at that firm's harbour works at Ulverstone in northern Tasmania early this century.

Although a former worker on the Forster breakwater project stated in 1959 that he believed that both locomotives that worked at Forster came from Narani,<sup>1</sup> no solid evidence has been found to confirm that the unidentified locomotive that featured in the photograph taken at Forster, was ever at Narani. I have, however, unearthed convincing evidence concerning the identity of two locomotives that definitely operated at Narani. All three locomotives were of 3ft 6in gauge. As a more detailed history of the Hudson Brothers and their sawmilling and tramways operations at Narani is being prepared by Jim Longworth, this paper will only deal with the Narani operations, where they have significance in regard to the sequence, numbers and identities of the locomotives used there. *[Ed: Jim Longworth's article is scheduled for LR 155].* 

# The First Narani Locomotive

Two distinct tramways operated at Narani, one connecting Myall Lake and Smith Lake, the other running from Tarbuck Brush (now part of the Wallingat State Forest), to the western shore of Smith Lake. Local folklore tells us that when log hauling operations on the Hudson Brothers' tramway that ran between Smith Lake and the Narani sawmill on the northern shore of Myall Lake changed over from horse-drawn to steam powered, a "steam engine" [locomotive] with a vertical boiler was utilised.<sup>2</sup> The Bullahdelah correspondent of the Maitland Mercury reported in mid-April 1878 that "A steam locomotive is to be used to draw the timber from the lake [Smith Lake] to the mill, after it [the timber], has been punted over from the other side."<sup>3</sup>The same correspondent stated on 7 August 1878 that "The Steam locomotive, which is to run on Hudson's tramway to Smith's lake, arrived at the mill some days ago;..."<sup>4</sup>

The Mort's Dock & Engineering Company of Sydney received the order for the locomotive on 15 March 1878 from noted colonial consulting engineer Norman Selfe, who was acting on behalf of Hudson Brothers.<sup>5</sup> Whether Selfe, who though widely experienced, only commenced business in his own right as a consulting engineer on 1 June 1877, designed the locomotive or part of it, is unclear. The locomotive was the first of the five known narrow gauge industrial locomotives that were constructed by Mort's Dock & Engineering, over a six year period from 1878 to 1883.

One locomotive was recorded in early March 1879,<sup>6</sup> as having been at Narani. That locomotive would have been the Mort's Dock locomotive. According to local folklore, the locomotive was finally (after having proved extremely troublesome), replaced by a locomotive with a horizontal boiler.<sup>7</sup> The nexus of the conundrum surrounding the Narani locomotives hinges on just how literally the word "replaced" should be taken.

# **A Second Narani Locomotive**

In late November 1878, an 0-4-0ST Andrew Barclay locomotive (Builder's No. 211), ordered by Alexander Bros., London was "sent to Australia...".<sup>8</sup>

Alexander Bros., London and Hudson Bros. of Sydney were listed in June 1880 as joint proprietors of the patent in connestion with the launch of the Australian Non-Poisonous Paint Company.9 Upon their arrival at Liverpool (UK) some two-and-a-half years later, in June 1881, Henry Hudson (the eldest of the Hudson brothers) and his family were escorted on the train to London by WP Alexander. WP Alexander and his brother James Alexander were Scottish mechanical engineers who ran a consulting business (Alexander Bros.) in London, that acted as agent for the Hudson Brothers in the UK.<sup>10</sup> James Alexander accompanied the Hudson family on its return to Sydney and was appointed a director of Hudson Brothers Ltd., after its float in April 1882. There seems little doubt that Alexander Bros., London, was acting on behalf of the Hudson Brothers when it ordered AB211 and that the locomotive was bound for Narani. Although AB211 was dispatched from the works in late November 1878, given the normal delivery period prevailing at that time, it would not have been at Narani by early March 1879.

In December 1881, two locomotives were recorded in the Sydney press as being present at Narani.<sup>11</sup> In the absence of any report that a third locomotive had been dispatched to or had arrived at Narani, it seems that the two locomotives then at Narani were AB211 and the Mort's Dock locomotive, the latter perhaps relegated by the other to stand-by duties only. Two locomotives were again recorded at Narani in late 1886. No subsequent contemporaneous press references to locomotives at Narani have been found.

# The Narani Tramways

In view of the short one-and-a-half mile length of the Myall Lake to Smith Lake tramway, it may appear on the surface that a locomotive probably also operated on the Tarbuck Brush to Smith Lake tramway. However, although the presence of steel rails and locomotive operations on the Myall Lake to Smith Lake tramway are well documented,<sup>12</sup> to the author's knowledge no evidence has been found that steel rails were installed on the Tarbuck Brush to Smith Lake tramway, nor that a locomotive operated there. Local reports are quite specific that steel rails were only ever laid on the line between the two lakes.<sup>13</sup> Nevertheless, the Tarbuck Brush tramway was the much longer of the two, it having extended by August 1882 for some five miles.<sup>14</sup> Because no evidence has surfaced to give credence to the proposition that a locomotive operated on the Tarbuck Brush tramway, it appears likely that both locomotives only ever saw service on the Myall Lake to Smith Lake tramway.

As a result of the widespread depression in the NSW timber trade that took hold in the latter half of the 1880's (primarily caused by cheap imported timber from the US), Hudson Bros. Ltd. moved its city [Sydney] sawmilling and lumber operations, in 1888, from Redfern to a site adjacent to the firm's wharf at Pyrmont, where timber from Narani was landed. In its February 1889 half yearly report, the firm provided  $\pounds$ 1,528 special depreciation for its Narani buildings and plant, the Narani operation (apparently including the locomotive/s) having been hived off, probably to Henry Hudson.

Earlier in 1888, either the Company or Hudson family members apparently had sought to sell AB211 [and perhaps the Mort's Dock locomotive?]. Cab plates were prepared for AB211 reading "J T Stubbs, Sydney 1888."<sup>15</sup> It is not known if similar plates were prepared for any other locomotive. Stubbs may have been connected with and/or related to the then well-known Sydney auctioneer RF Stubbs of RF Stubbs & Company, before that firm's demise in 1886, and the death of its principal in 1887. The plates were probably affixed to the locomotive before a prospective purchaser's visit to Narani to inspect the locomotive sometime before late 1898.

However, whether Stubbs was in fact an agent, or he held some form of lien on AB211, or he actually only repaired AB211 (in situ or in Sydney) has not been determined. It seems likely that John T Stubbs, born in Sydney in 1852, was the individual concerned but, at this stage, nothing further regarding him is known.

In conjunction with an 1894 decision by Hudson Brothers Ltd. to withdraw from the timber industry, the Narani sawmill was closed. The mill re-opened in 1896 under new ownership. However, it has not been established whether locomotive operations resumed at Narani following the re-opening of the mill. No evidence has surfaced to indicate that AB211 was sold or left Narani before 1899-1900, whilst the Mort's Dock locomotive may well have 'died' there.

There are local claims that after the mill closed (at an unspecified date), an idle locomotive was for several years used by fishermen to run fish across from Smith Lake to Myall Lake.<sup>16</sup> The period referred to appears to correlate well with the closure of the Narani sawmill from 1894 to 1896. It is interesting that the story mentions only an idle locomotive. With the mill closed and the tramway not in use and perhaps unattended (or alternatively, a blind eye having been turned), it appears quite possible that fish caught in commercial quantities on Smith Lake for dispatch to the Smith's Lake Fish Canning Company near Newcastle, may have on occasions been hauled over the tramway between the lakes from 1894 to 1896. Locomotive operations actually related to the operation of the Narani sawmill, however, may have ceased altogether in 1894.

# Hungerford & Sons' Breakwater Construction Tramway - Forster

Hungerford & Sons' tender for the construction of a southern breakwater at Forster was accepted in August 1898 and by late that year, the firm had constructed a tramway from a nearby headland to the site of the breakwater. In early November 1898, locomotives (NB plural) were expected to be delivered to Forster within a week.<sup>17</sup> It appears that the expected locomotives were in fact the two locomotives still at Narani, i.e. AB211 and, presumably, the Mort's Dock locomotive. However, it seems that both locomotives at Narani proved at that particular point in time to be an unattractive proposition for Hungerford & Sons. Because the firm was looking to honour commitments that it had made concerning the prompt commencement of operations, the logistical problems and lengthy delay that would have been incurred in removing locomotives from Narani (on top of any concerns there may have been concerning the condition of the locomotives), apparently forced Hungerford & Sons as a matter of expendiency, to look elsewhere. After an unexplained delay and an accompanying discreet silence from the local press, Hungerford & Sons appears to have shipped in another 3ft 6in gauge locomotive. By mid-June 1899 that locomotive had proved to be unreliable, with a great deal of time having been lost due to its breaking down. As a result, the contractors were already signalling their intention to obtain a more powerful locomotive for the heavy haulage.<sup>18</sup> Soon afterwards, arrangements were being made ' to get a larger locomoteve" [AB211] "up" [from Narani].<sup>19</sup> Despite local claims that both the locomotives that worked at Forster were forwarded from Narani, it appears more likely that the "facts" concerning the first locomotive to arrive at Forster became distorted. Because two locomotives were originally expected from Narani, and the second locomotive was actually obtained from there, the story that both came from Narani gained currency over time. It is not known whether JT Stubbs was involved in Hungerford & Sons' purchase of AB211, but because JT Stubbs 1888 plates were still affixed to the locomotive post-Forster, they almost certainly remained on the locomotive during its stay there. It appears to be significant that cab plates are not visible in the photograph of the first Forster locomotive. The removal of AB211 from Narani in either late 1899 or early 1900, may not have marked the end of the presence of locomotives at Narani. The vertical-boilered Mort's Dock locomotive was presumably still there, (but if that was the case, for how much longer?). The original Forster locomotive could only have



TASMA HARDWOOD CO., TASMANIA ANDREW BARCLAY 211 OF 1879

been sourced from somewhere in Australasia, as the short time between the original expected arrival of the two Narani locomotives and the arrival of the first locomotive, appears to preclude it from having been forwarded from further afield.

In November 1901, Hungerford & Sons' then month-tomonth contract at Forster was cancelled, although the tramway and rolling stock remained in situ. Eventually in July 1903 the NSW Parliamentary Standing Committee on Public Works advised that it was not expedient for further works to be carried out at Forster.

# Ulverstone Harbour Works, Tasmania

Apparently having hedged its bets, Hungerford & Sons tendered for and won the contract for harbour works at Ulverstone. In early August 1903, Thomas Hungerford prepared the mothballed machinery and rolling stock at Forster for shipment to Tasmania. Both locomotives used at Forster were forwarded to Ulverstone, although AB211 arrived later via Devonport. According to David Beck<sup>20</sup>, AB211 was noted in Tasmanian boiler inspection records as having been overhauled and hydraulic tested by Hoskins in Sydney sometime before it was forwarded to Devonport. As a new whistle was stolen from AB211 during its stay at Devonport, it appears probable that it was overhauled immediately prior to its dispatch to Tasmania. Officials from the Office of the Inspector of Machinery & Boilers for Tasmania could not identify the other ex-Forster locomotive in 1904,<sup>21</sup> and it remains unidentified 96 years later.

Although a former Hungerford & Sons employee at both Forster and Ulverstone advised that the first Forster locomotive was not used at Ulverstone,<sup>22</sup> it was fitted up and then inspected and passed by boiler officials at Ulverstone by mid-January 1904.<sup>23</sup> If Hungerford and Sons used one of its own locomotives during the construction of the tramway from Ulverstone

railway yard to the breakwater construction site, then the first Forster locomotive was the only one then at hand, the result of it having been shipped direct to Ulverstone.

From early February 1904 the balance of the contractor's plant (which included AB211) was shipped to Devonport, from where it was subsequently delivered by rail to Ulverstone.<sup>24</sup> Following its fitting up and successful boiler inspection at Devonport, AB211 was delivered to Ulverstone by rail on 17 March 1904.<sup>25</sup>

With Hungerford & Sons' involvement at Ulverstone now having ceased, AB211 was transferred to the nearby Lobster Creek tramway (Hobbs) by August 1908. By March 1933, that tramway was being

operated by the Tasma Hardwood Company. AB211 remained in use there until circa 1946.<sup>26</sup>

The fate of the first Forster locomotive remains unknown, although it was still at Ulverstone in March 1914 when its boiler was inspected,<sup>27</sup> some six-and-a-half years after the rails of the breakwater tramway had been lifted, and six years after Thomas Hungerford's death. It is unclear why the boiler was inspected, or whether possibly there was a prospective buyer for the locomotive.

# The Identity of the Original Forster Locomotive?

The research into the identity of the first Forster locomotive should be focussed on a locomotive that was constructed prior to late 1898, (in fact, probably long before that date) and for which nothing is known of it post 1898 if not earlier. Candidates should have been built to 3ft 6in gauge and 0-4-0 configuration and may originally have had a saddle tank.

According to Tasmanian boiler records, the locomotive was 41/2 horsepower with a permitted boiler pressure of 100lbs/sq. in. Measurements were: Barrel 2ft 0in x 5ft 0in; firebox 1ft 9in x 2ft 0in; 36 tubes measuring 11/2in x 5ft 6in.28

Although it appears unlikely that the first Forster locomotive was ever at Narani, frustratingly we remain none the wiser concerning the identity of this well-documented locomotive. Until such time as its lineage is established, uncertainty will continue as to whether two or three locomotives actually saw service at Narani.

#### Acknowledgments

The generous assistance of Ken Milbourne, Jim Longworth, Bruce Macdonald, John Browning, Richard Horne, Mark Langdon, Bob McKillop, Gerald Petrie and the following libraries, archives and historical societies is greatly appreciated: Charles Sturt University Library, Wagga Wagga; State Library of NSW, Sydney; Riverina Archives, Wagga Wagga; Great Lakes Historical Society, Forster-Tuncurry.

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# Yarra River Pipe Laying, **Melbourne**

In 1961, the British Petroleum Company laid a series of pipes across the bed of the Yarra River at Newport. A trench was excavated in the river bottom to receive the pipe.

The pipe strings were assembled over light railway tracks, a single track for the west and east sections, and two parallel tracks for the centre section, to provide stability for the ends.

The pipe strings, mounted on bogies at 60ft centres, were

drawn down the launching tracks by a 5-ton winch operated by an air drill.

The pipe leading ends were assisted into the water by a small manual crane on the river bank. The crane also eased the trailing ends into the water.

Source: Contracting and Construction Equipment, December 1961



No. 2591 whilst in the employ of Wadey at the Heatherton Asylum project. Note the radiused top corners of the front plate. Also the 'Sunflower' top to the chimney, typical of the original equipment on these early locos, but which seemed to be discarded early. Photo: Bruce Macdonald collection

# Krauss Locomotives in Australia A close look at their characteristics and an overview of their migrations by Bruce Macdonald

At the time that Charlie Small and I embarked on the study of Krauss locomotives in Australia in 1961, it represented a ground-breaking approach wherein the entire Australian distribution of the products of one manufacturer was traced in detail. The results were published in the ARHS *Bulletin* No. 391 of May 1970. Since that time more information has come to hand which corrects and adds to that of thirty years ago. It was therefore considered appropriate that, as an addendum to Peter Evans' contribution on Krauss agencies (see LR 150) covering the Company's most productive period as far as Australian useage is concerned, our original study be revised and updated accordingly. It does not claim to be a definitive work because there are still a lot of uncertainties which may, in the future, be resolved. All constructive comments are invited.

Subsequent to the publication of the ARHS article, I was fortunate in obtaining photocopies of the Krauss order books through Dr Gerhard Nicolai, an engineer with Krauss-Maffei. These disclosed previously unknown details of the locomotives.

Krauss built locomotives of every conceivable gauge from 15 in to 5ft 6 in for all parts of the world. While they specialised in small industrial and light railway types they also built many main line engines.

The Krauss company amalgamated with J.A Maffei A G in 1931 to form Krauss-Maffei. A G. Maffei had built 5,896 locomotives at its Munich works during the period from 1831 to 1930. The new company exists today as a manufacturer of railway and heavy engineering products. The "Leopard" tanks used by the Australian Army were made by Krauss-Maffei. It has been found that Krauss adopted a sophisticated system of standard designs and parts and this system was used in the identification of individual locomotives or groups of locomotives. Types of locomotives having common characteristics would be manufactured with a identification using Roman numerals. Individual production groups would be identified by a sub group of letters in lower case. (e.g XIV ff). The latter would progress through the alphabet to reflect subsequent productions and would be repeated after zz.

A page of the order book is reproduced opposite, and it shows, in column order, the factory in which the loco was built, being either Sendling or Marsfeld in the Munich area or at Linz in Austria. The next columns show the serial number, class and subclass, gauge in mm, horsepower, number of axles, loco name and/or road number if given, customer, date ordered, date required for completion, date despatched, weight in kg, price and shipping point. With regard to the number of axles, if a four coupled loco had a bogie it was shown as 2/3 but there is no indication if it was a 2-4-0 or 0-4-2. It will be seen that above the 2584 there is a note telling that there are ten items in that production batch of 30-40 horsepower tank engines. It should be noted that on the Continent, tank engines are referred to as "tenderlokomotivs".

The majority of 0-4-0T locomotives for Australia were 30 horse power class IV. There is an anomaly here because in this quantity there are some which weigh 6.5 tons and have 160 mm diameter cylinders and others which weigh 7.5 tons with 180 mm diameter cylinders, so I cannot understand how they could be of equal horsepower. Even the boilers were different for each, although each had 175 psi pressure.

The ten-ton 0-4-0T's had 225mm diameter cylinders. A stroke of 300mm was common for all. Driving wheels were 600mm diameter disc type with two holes for access for oiling the axleboxes. Ten ton 0-4-0Ts and 6854 had spoked wheels. Another peculiarity is that the four-coupled engines had Alligator type cross-heads (two bars) but six-coupled engines had Laird type (single bar). I am unable to see a practical reason for this.

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Krauss were pioneers in the adaption of the main chassis to incorporate a water tank, known as a "well tank". This had the effect of lowering the centre of gravity of the loco and became a feature of small Continental built locos. A side effect of this was that it necessitated the use of "outside" valve motion which, in the case of Krauss, was of the "Stephenson" type. These features were typical on those locos supplied to Australia, except 6854 which had Walschaert valve gear. Our ten-ton 0-4-0Ts and 0-6-0Ts, except serial Nos. 3444, 6415 and 6416, had supplementary side tanks.

For the 0-4-0T type prior to No.2640 the throttle valve, attached to the front of the dome, had a flat, horizontal top cover. Subsequently this cover was domed and set at about 45 degrees. Prior to 2459 the rectangular front buffer plate had square corners. Subsequently they were radiused on the top corners. From 3267 all four corners were radiused. From 3423 to 4387 the safety valves were like buffalo horns on top of the dome. Prior and after, they were the Salter type with the vertical springs behind the dome. Prior to 4526 the cab windows were eliptical. Subsequently they were round. All 0-6-0Ts except 3444 had round windows. On class XIV the valve chest on the cylinders was placed towards the rear of the cylinder as opposed to the front. In all cases, the valve spindle had incorporated in it a turnbuckle with a left and right screwed thread, which allowed the easy adjustment of valve travel to provide the required "lap" and "lead".



No. 1824, in use at the Lancefield Goldmine, Beria, with Kalgoorlie Boulder Firewood Co., circa 1910. Photo: Adrian Gunzburg collection

Of course there are the inexplicable exceptions - 3263, 3266, 4722, 5679 and all the Mt.Lyell ten-ton locos had rectangular cab windows. 3267 & 4387 had a much "thicker" front "buffer beam" (illustrated on pages 5 and 8 of LR 150). The four locos at Burrenjuck had the dome centrally placed on the boiler instead of close to the smokebox.

In the following listing, the Krauss serial number is shown with the date, number of axles, gauge in mm, horsepower, class type and selling agency. Below this is a chronology of its ownerships. It must be understood that the dates should not be taken as specific in all cases due to the vagueness of some information. A year either side of the date given may apply. The reference figures show the source of the later information. Unreferenced entries are from the former work or the author's records.

I would like to acknowledge and thank those persons who have contributed their information to increase this common wealth of knowledge.

The following abbreviations denote the agent. SKA= Shadler, Koeniger & Aron, B= Bloomfield Bros, D= Diercks & Co., L= Lohmann & Co., AK= Arthur Koppel. The word "stored" or "St" means that the loco was out of regular use or possibly abandoned, The word "scrapped" or "Sc." is used to imply that it was dismantled to a point of being largely irretrievable. A question mark signifies an unknown or doubt. The code WA, SA, V, NSW, Q and T following the owners name denotes the Australian state in which the ownership existed, being Western Australia, South Australia, New South Wales, Queensland and Tasmania. In some cases the original owning Company changed name or ownership during the time of the loco's tenure and this is shown by following without wider spacing e.g. - J Smith (1922) Smith & Jones.- In some cases irrelevant changes are not shown.

For some engines or groups of engines a commentary on the data or lack of data helps clarify the situation. With regard to the seven 7.5 ton locos owned by Mt. Lyell, it has been difficult to trace specific locos through the boiler records because, the boiler inspection authority, having issued an official boiler number at the initial loco inspection, expected this boiler to remain with that loco. However, boilers could be swapped from loco to loco during overhauls, creating confusion both for the inspectors and researchers.

# KRAUSS LOCOMOTIVES IN AUSTRALIA Serial Table

# 1824 1888 2/2 600 20 IV h SKA

1888 - Displayed at Melbourne Centennial Exhibition (V).<sup>2</sup> 1889 - unknown buyer. 1900 - WA Builder's Lime & Stone Co. Perth. (WA).<sup>5</sup> 1905 - Briggs & Co. Perth (WA) Stored.<sup>5</sup> 1906 - J Haydon Perth (WA) stored.<sup>5</sup> 1908 - Kalgoolie & Boulder Firewood Co. Beria (WA). 1935 - Derelict at Beria c.1950 - Sc.<sup>5</sup>

# 2178 1889 2/2 610 30 IV qq SKA

1889 - J Robb for Victoria Dock Construction (V). 1892 -SA Water Supply, Happy Valley Reservoir Construction. 1896-1912 - unknown. c.1912 - Hassell Marion Bay Gypsum Co. (SA). 1925 - Victor Electric Plaster Mills Ltd. c.1928 - stored. c 1950 - Sc.<sup>4</sup>

# 2179 1889 2/2 610 30 IV qq SKA

1889 - J Robb for Victoria Dock Construction (V). 1892 -SA Water Supply Happy Valley Reservoir Construction. 1896-1910 - unknown, possible contract job in Victoria. 1910 - Norton Griffith contract for NSW Railways.<sup>7</sup> 1913 -NSW Public Works Dept. No.23.<sup>7</sup> 1917 - NSW Govt Rwys No. Lo 43.<sup>7</sup> 1936 - Newbold Silica & Firebrick Co. Pattimore quarry (NSW). 1938 - converted to petrol engined by adaption of "Leyland" truck engine. 1945 - transferred to Home Rule quarry. 1947 - Stored.<sup>7</sup> 1973 - donated to Illawarra Light Railway Museum Society (NSW).<sup>7</sup>

# 2180 1889 2/2 610 30 IV qq SKA.

1889 - J Robb for Victoria Dock Construction (V). 1892 -SA Water Supply, Happy Valley Reservoir Construction. 1896 - Tasmanian Govt Rwys No.H 1. c.1930 - Dismantled. c.1951 - Scrapped.<sup>3</sup>

# 2181 1889 2/2 610 30 IV qq SKA.

1889 - J Robb for Victoria Dock Construction (V). 1892 -SA Water Supply, Happy Valley Reservoir Construction. 1896-1903 - Unknown. 1903 - East Murchison United mine. (WA).<sup>5</sup> 1919 - Western Machinery Co., Kalgoorlie (WA).<sup>5</sup> 1963 - Aust. Rwy Historical Society (WA).<sup>5</sup> 1984-WA Lt Rwy Pres. Assoc., Caversham (WA)<sup>11</sup>



No.2178 working on the Happy Valley project. Note the flat top throttle chamber. Photo: Bruce Macdonald collection

# **2195 1889 2/2 610 30 IV ss SKA** 1889 - J Robb for Victoria Dock Construction (V). 1892 -

SA Water Supply, Happy Valley Reservoir Construction. 1897 - J Robb's Cudgen sugar mill.(NSW). 1912 - Colonial Sugar Refining Co. c.1923 - Transferred to CSR Condong Mill (NSW). c.1941 - Sc.

# 2196 1889 2/2 610 30 IV ss SKA

1889 - J Robb for Victoria Dock Construction (V). 1892 -SA Water Supply, Happy Valley Reservoir Construction. 1896-1900 - Unknown. 1900 - Stannary Hills Mines & Tramway Co. *POMPEY* (Q). 1912 - stored. 1912 - J Darling & Co. 1926 - It is uncertain if this loco was scrapped with the demolition of the mine or included with the tramway and stock purchased by the Queensland Government for use with the Irvinebank ore treatment works, remaining stored on site until that equipment was scrapped c.1941.<sup>14</sup>

Note re above locomotives: It is reasonably certain that the above six locomotives were ordered by Robb and that he used them on his consequent contracts. There is a photograph of a loco on the Happy Valley project numbered "6".

# 2437 1891 2/2 610 30 XIV t B

1891 - Bloomfield Bros for construction of Oceana tramway. (T).<sup>9</sup> 1892 - Oceana Silver Mining Co. (T).<sup>9</sup> 1893 - Western Silver Mining Co. *LITTLE WESTERN* (T).<sup>9</sup> c.1916 -Queensland Govt Rwys construction.<sup>9</sup> 1921 - State Rivers & Water Supply Commission (V). 1939 - Sc.<sup>10</sup>

# 2459 1891 2/2 610 30 IV yy

1891 - Owner unknown. 1899 - Tasmanian Govt Rwys "No. H 3" (T).<br/> $^3$  1906 - Victorian Public Works Dept, Coode Canal work.<br/> $^2$  1911 - Rubicon Timber & Tramway Co. (V). 1935 - <br/>stored. 1951 - Sc. $^1$ 

B

# 2589 1891 2/2 610 30 IV bc B

1891 - Owner unknown. 1898 - Tasmanian Govt Rwys "No. H 2" (T).<sup>3</sup> 1906 - Victorian Public Works Dept, Coode Canal work.<sup>2</sup> 1908 - Corrimal-Balgownie Coal Co.(NSW). 1933 - stored. 1955 - Dumped.<sup>7</sup> 1973 - Some parts recovered by R Hague for preservation.

Note regarding Nos. 2459 and 2589. Original owner unknown. One or possibly two Krauss locos were used at the Tarrawingee flux quarry near Broken Hill between 1892 and its closure in 1898. These two locos could have been available.

# 2591 1891 2/2 610 30 IV bc B

1891 - Owner unknown. 1895 - Mt Lyell Mining & Rwy Co. No.1 (T). 1908 - Wadey & Co. Heatherton Asylum construction *THE NANCY* (V). 1911 - Metrop. Abattoir Construction (SA).<sup>4</sup> 1912 - FA McCarthy, contractor *NANCY* (S.A).<sup>4</sup> 1913 - J Timms, contractor. (SA).<sup>4</sup> 1915 -HT Smith, railway contractor *NANCY* (SA).<sup>4</sup> 1917 -Australian Salt Co. Lochiel (SA).<sup>4</sup> 1919 - Rubicon Lumber & Twy Co.(V).<sup>4</sup> 1935 - stored. c.1955 - Sc.<sup>2</sup>

# 2640 1892 2/2 610 30 IV cd B

1893 - Zeehan Twy Co. (T).<sup>9</sup> 1908 - Dunkley Bros Tullah Twy *PUPPY* (T).<sup>9</sup> 1924 - Dunkley Bros Trowutta sawmill (T).<sup>9</sup> 1934 - Australian Commonwealth Carbide Co., Ida Bay quarry (T). 1938 - Sc.<sup>9</sup>

# 3263 1895 2/2 610 30 IV vw B

1896 - Plane Creek Central sugar mill *COFFEE POT* (Q).<sup>16</sup> 1911 - Aust. Estate & Mortgage Co. Palms sugar mill (Q). 1919 - became Amalgamated Sugar Mills P/L.<sup>11</sup> 1924 -ASMPL Pleystowe mill No.6. 1945 - stored. c.1947 - dumped on Pioneer River bank.<sup>16</sup>

# 3266 1895 2/2 610 30 IV vw B

1896 - Plane Creek Central sugar mill (Q).<sup>11</sup> 1907 - Markwick and Macdonald banana plantation (Q).<sup>11</sup> 1916 - Sth Johnstone Central sugar mill. No.6 (Q). 1945 - Stored. 1955 - Sc.<sup>11</sup>

# 3267 1895 2/2 610 30 IV vw B

1896 - Mt.Lyell Mining & Rwy Co.No.2.(T). 1908 - Wadey & Co. Heatherton Asylum construction *ELFREDA*. 1911 - Metrop. Abattoir construction. *ELFREDA* (SA). 1911 - The Mourilyan Syndicate Ltd, Mourilyan sugar mill. *FREDA* (Q). 1914 - became Aust. Sugar Co. Ltd. 1955 - dismantled. Frame used as transporter wagon for mill rollers.<sup>11</sup>

On the Krauss shipping list there is an intriguing notation bracketing the above three locomotives together and stating "North Eaton(sic) Central Mill.?" In different writing, this is followed by two short illegible words and, barely legible but beginning with what looks like "Tin———" (a word of 10 letters) followed by another of six letters and the date of "23.3.14".

# 3423 1897 3/3 610 55 XVIII II AK

1897 - Gin Gin Central Milling Co. sugar mill. *STELLA* (Q). 1967 - B Macdonald, Museum of Historic Engines, Goulburn. *STELLA* (NSW). 1971 - Goulburn City Council Marsden Museum of Historic Engines *STELLA*. 1974 - Goulburn Steam Museum Ltd. "Stella". 1987 - Goulburn City Council. *STELLA*. 1989 - Dismantled. 2000 - Echuca Steam Railway (V).



No.2437 whilst working on railway construction in Queensland. Note the square corners on the front plate, and the valve chest set towards the rear of the cylinder block. Photo: Bruce Macdonald collection



No.3444 shown working at the Lake George mine. Photo: Jim Longworth collection

**3444 1896 3/3 610 20 XIV ff D** 1897 - Lake George Mines Ltd. (NSW). 1902 - unknown. c.1920 - Victorian Govt Rwys quarry.<sup>19</sup> 19?? - Cameron & Sutherland (merchants). c.1930 - Wilson Lime Co. Mt Frome (NSW). c.1932 - dismantled. c.1940 - Sc.

According to a notation on the Krauss shipping list this loco was destined for Cairns (Q). The Mulgrave sugar mill ordered a loco through Diercks but refused to take delivery due to late arrival on 1/97. It is more than likely that 3444 was that loco.<sup>11</sup>

# 3549 1897 2/2 610 30 IV zd D

1897-Mt.Lyell Mining & R'y Co. No.3.(T).

There has been a contention that this loco.was destroyed in an accident in 1909. Evidence of this is lacking Entry No.2301 in Boiler Inspection records shows that a boiler made by Mt.Lyell shops was inspected in 1920 fitted to loco No.3. No other information is available. See also 3729.

# 3554 1897 2/2 610 30 IV zd D

1897 - Kauri Freehold Gold Estates, Opitonui, New Zealand.<sup>11</sup> 1906 - Drury Brick & Tile Co. Auckland (NZ).<sup>11</sup> 1918 - Mt. Torlesse Coal Co. (NZ). 1928 - stored. 1950's - sc.<sup>11</sup>

# 3644 1897 2/2 610 30 IV ze D

1897-Mt.Lyell Mining & Rwy Co. No.4 (T). 1911 - Aust. Estate & Mortgage Co. Palms sugar mill (Q). 1919 - became Amalgamated Sugar Mills Pty Ltd.<sup>11</sup> 1924 - ASMPL Pleystowe mill No.5.<sup>11</sup> 1953 - Farleigh Co-op. sugar mill *PAW PAW*.<sup>11</sup> 1957 - Cattle Creek Co-op. sugar mill *PAW PAW*. c1965 - stored. c.19?? - Sc.<sup>11</sup>



No.3423 shown working at the Goulburn Steam Museum Photo: Bruce Macdonald collection

# 3729 1897 2/2 610 30 IV zg D

1898 - Mt.Lyell Mining & Rwy Co. No.5 (T). c. 1933 - Great Boulder Gold Mining Co. No.1 (WA). 1953 - stored. 19?? -Scrapped.

In W.A. Boiler records there is a notation stating that the boiler was new in 1920. This raises the question of the identity of the G.B. loco. Is it M.L.3 or 5?

# 3941 1898 2/2 610 30 IV zk D

1899 - Zeehan Tramway Co. No.1 (T). 1919 - Dunkley Bros. Zeehan (T). 1932 - J Howard Zeehan. c1940 - stored. c.1950 - Deeded to Renison Assoc. Tin Mining as spare parts source. 1969 - scrapped.

# 4080 1899 2/2 610 30 IV zm D

1899 - Tasmanian Govt Rwys No.H4 (T). $^{9}$  1926 - Catamaran Collieries Ltd (T). 1935 - Parts used to repair 4526. 193? - Scrapped. $^{\rm 12}$ 



No.4087 in Rotary Park, Devonport, May 1982. Photo: Bruce Belbin

# 4087 1899 2/2 610 30 IV zm D

1900 - Nth Mt Lyell Copper Co. (T).<sup>6</sup> 1903 - Mt Lyell Mining & Rwy Co. No.6 (2nd) (T).<sup>3</sup> 1945 - Renison Assoc. Tin Mining Co. (T).<sup>9</sup> 1959 - Combined with parts of 5800. 1960 - Stored. 1965 - Rotary Park, Devonport (T). 1983 - West Coast Pioneers Memorial Museum Zeehan (T).<sup>9</sup>

There is evidence that this loco was No.6 in 1928<sup>18</sup> Its identification prior to this would be uncertain. No.4387 (first No.6) was sold in 1910.

# 4298 1900 3/3 610 55 XVIII ac A.K.

1900 - Proserpine Central sugar mill No.5 BONNIE JEAN. 1955 - Stored. c.1960 - Sc.  $^{\rm 11}$ 

# 4387 1900 2/2 610 30 IV zp D

1900 - Mt Lyell Mining & Rwy Co. No.6 (T).<sup>3</sup> 1910 - Wadey & Co. Metrop. Abbatoir Construction (SA).<sup>4</sup> 1912 - Hasell Marion Bay Gypsum Co. (SA).<sup>4</sup> 1925 - Rubicon Timber & Twy Co. (V). 1935 - stored. 1957 - Scrapped.<sup>1</sup>

# 4526 1901 2/2 610 30 IV zq D

1902 - Hendrickson & Knutson, Dunalley. (T).<sup>9</sup> 1906 - Sandfly Colliery. (T).<sup>9</sup> 1908 - Tasmanian Wallsend Colliery Co. (T). 1916 - Tasmanian Govt/Kingsborough Council (T).<sup>9</sup> 1922 - Catamaran Colliery Co.(T). 1935 - combined with parts of 4080. c.1940 - Sc.<sup>12</sup>



No.4722 spent all its life at Plane Creek mill. In its declining years, it was utilised for weed killing duties. Photo: Ken Rogers via George Bond

# 4687 1901 3/3 610 55 XVIII ah AK

This loco. was despatched from Bremen in November 1901 for Australia. A note shows it was to be a duplicate of 4298. A hypothesis is that it was intended to be a second loco for Proserpine sugar mill, but possible bad times caused a cancellation or repossession by Koppel or Granowski, the Queensland agent, who stored it awaitng future sale.

1905 - Moreton Central sugar mill Nambour *MORETON* (Q). 1967 - Currie Park Nambour *MORETON* (Q).<sup>11</sup> 1972 - G Simpson. *MORETON* (Q).<sup>11</sup> 1978 - Exhibition Grounds Herston *MORETON* (Q). 1988 - R Robertson Yandina (Q) restored in appearance. Driven by a diesel engine. For use at the Ginger Plantation railway, Yandina (Q.)

# 4722 1902 2/3 (0-4-2) 610 50 XXVI zx AK

1902 - Plane Creek Central sugar mill, No.15G *COMET* (Q). 1957 - Sc.<sup>11</sup>

# 5261 1905 3/3 610 55 XVIII at AK

1905 - Irvinebank Mining Co. *BETTY* (Q).<sup>11</sup> 1919 - State Treatment Works No.1 Irvinebank (Q).<sup>11</sup> 1922 - Qld Govt Rwys, Innisfail Twy No.7 (Q). 1927 - stored. 1941 - Sc.<sup>11</sup>

# 5479 1906 2/2 610 55 XVIII av L

1906 - Mt Lyell Mining & Rwy Co. No.7 (T). 1954 - Sc.

5480 1906 2/2 610 55 XVIII av L

1906 - Mt Lyell Mining & Rwy Co. No.8 (T). 1963 - West Coast Pioneers Memorial Museum, Zeehan (T).



No.5800, in its original form, as Zeehan Tramway Co. No.2. Photo: JL Southern

# 5530 1906 2/2 610 30 IV bl

1907 - Irvinebank Mining Co $BABY~(Q)^{14}$ 1919 - State Treatment Works, Irvinebank No.2 (Q). 1922 - stored. c.1941 - Sc.  $^{14}$ 

# 5671 1907 2/2 600 20 XIV af AK

1907 - Pacific Phosphate Co., Nauru.? This loco was despatched to Sydney. A photo exists of a Krauss loco

at Nauru showing it to be one of the rare XIV class. It also has round windows and an Arthur Koppel plate

The Krauss order book indicates it to be named NELLIE.

# 5679 1907 2/3(0-4-2) 610 50 XXVII av L

1907 - Plane Creek Central sugar mill, No.15F KAISER. 1956 - stored. 19? - Sc.<sup>11</sup>

# 5682 1907 2/3(2-4-0) 610 40 IV bn L

1907 - Sandfly Colliery Co. (T).<sup>9</sup> 1908 - Tasmanian Wallsend Colliery Co. 1916 - Tasmanian Government/Kingsborough Council.<sup>9</sup> 1922 - Carbide & Electro Products Co., Ida Bay quarry (T). c.1948 - dismantled.<sup>9</sup> 1962 - Boiler, tanks, cylinders & cab combined with frame etc. of 5800 by Tasmanian Steam Preservation Society.<sup>8</sup>

This locomotive was quite unique. It was not a "well tank" and had the driving wheels inside the frame. The wheelbase was very short and the cylinders were placed well back necessitating the throttle assembly to be placed on the rear of the dome. The reason for the purchase of such design features is incomprehensible, considering that orthodox 4526 was already working the line. The Krauss record gives no indication of the unusual features.



No.5682, in its original form, at the Lune River Quarry. Photo: F Lewis

# 5800 1907 2/2 610 40 IV bo L

1907 - Zeehan Tramway Co. No.2 (T). 1918 - Dunkley Bros Zeehan.<sup>12</sup> c.1935 - RJ Howard.<sup>9</sup> c.1952 - Renison Associated Tin Mines Ltd (T). 1959 - Boiler & parts used to recondition No.4087, remainder stored.<sup>9</sup> 1962 - Tasmanian Steam Preservation Society. Restored to working order using parts of 5682. Used on the Second River Tramway at Karoola, then on the Redwater Creek Tramway at Sheffield (T).<sup>8</sup>

# 5869 1907 2/2 610 55 XVIII bf L

1907 - NSW Dept of Public Works, Burrinjuck *DULCE*. 1913 - NSW Water Conservation & Irrigation Commission, Burrinjuck *DULCE*.<sup>13</sup> 1928 - E Sloman (merchant) Sydney.<sup>13</sup> 1929 - North Eton Co-op. sugar mill No.5. (Q). 1937 converted to 0-6-0T. 1964 - stored.<sup>11</sup> 1970 - R Aubrey, Forest Glen (Q).<sup>11</sup> 1972 - Seal Park, Tanawha (Q).<sup>11</sup> 1982 - E Morris, Kin Kin (Q).<sup>11</sup> 1988 - G Chapman, Kallangur (Q).

Translarion List of the Main Lelationships Verzeichnis der Hauptverhältnisse Zeichnung: SERIAL NUNIBER HORSER 200 connected 2/2 gehuppelten 55 PS Lokomotive Nr. 5945 Best. - Nr. OLDER Nº Jag der Ablieferung \_\_ 18. November 1907. DAY OF DELIVERY : Empfänger Lohmann & C RECEIVED BY Melbourne. Bestimmungsstation ..... bio mm Spuzweite (zwischen den Schienenköpfen) . GAUGE 225 DIA. OF STEAM (YL WIDE Durchmesser der Dampfsylinder. 300 Kolbenhub PISTON TRAVEL ,, 620 Durchmesser der Räder DIA. DF WHEELS 1200 AXLE SPACFNG Radstand . . 12 Atm. armospheres Dampferuck MAK STEAM PRESS. 22,0 qm) HEATING SURFACE Heizfläche Squre 0,4 metres GRATE SURFACE Rostfläche 755 l BOILER WATER (LITRES) Hesselwasser . . . . . . . . , - 1450 ... VOLUME OF FEEDER TANKS Raum für Speisewasser . . 400 + 1050 litres " " Brennmaterial, Holz, Hohlen . 500 FUEL STORAGE VOLUME 8820 hq TARE (without any fittings Secrependiat der Sokomotive ahne Ausrüslung) 11 610 " Dienstgewicht " ,,\*) GROSS ( IN SERVICE ) ohne Pozzate mit Vozzäten AXLE LCADINIE : I. Eldise kg 5840 kg II. 577C ,, Ш IV. V. .. ···· ,, ····· VI. EFFECTIVE PULL : 1470 1710. Sffektive Zugkraft . . . 60% . . . Bemerkungen: \*) gewogen mil 755 Kg. Kesselwasser, 1450 Kg Speisew: REMARKS : \* weighed with 355 Kg. Kohlon, 140 Kg Mannschaft, 90 Kg Ausrustung 1 755 Lg beiler waler 1450 ky teeder tank worker Americ F. F.Kamin, seill. Wasser Kästen, Westinghouse-Bremse 355 Kg coals Messingsiederöhren. 40 Kg crew 90 Kg fitti Fittings, Automotor F.F. Kamin water tatils on sides, Washinghesse brailes Brass heating pipes

A copy of the Specification Sheet for No. 5945, which bacame JACK on the Burrinjuck Dam construction railway. John Newland collection



No. 5945 at Goulburn Steam Museum.

# 5870 1907 2/2 610 55 XVIII bf L

1907 - NSW Dept of Public Works, Burrinjuck *ROBIN*. 1913 - NSW Water Conservation & Irrigation Commission, Burrinjuck *ROBIN*.<sup>13</sup> 1924 - NSW State Metal Quarries, Kiama, 1932 - stored. c.1938 - buried on site

In the Krauss order book these two locos are noted as being "Zwilling" or "twin" type. That is, they were semi-permanently coupled back to back, to be driven by one crew. They could also be used singly. It would appear that this was the original intention but altered during construction to become two separate locos. as the note is crossed out.

# 5945 1907 2/2 610 55 XVIII bf L

1908 - NSW Dept. of Public Works, Burrinjuck *JACK*. 1913 - NSW Water Conservation & Irrigation Commission, Burrinjuck *JACK*.<sup>13</sup> 1928 - E A Sloman (merchant) Sydney.<sup>13</sup> 1929 - Fairymead Sugar Co. No.7 (Q). 1963 - stored. 1965 - E Baldwin, (collector) Sydney. 1970 - On loan to B Macdonald, Museum of Historic Engines, Goulburn *JACK* (NSW). 1978 - Stored at Canberra (ACT). 1980 - Returned to Baldwin family. 1985 - NSW Dept of Water Resources, for proposed preservation at Burrinjuck.

# 5947 1908 2/2 610 55 XVIII bg L

1908 - Kalgoorlie & Goldfield Firewood Supply Co. KATE (WA). 1921 - stored. c.1940 - sc. $^{\scriptscriptstyle 5}$ 

A notation in the Krauss order book shows this loco was for Mt.Lyell and was to be identical to Nos 5479 & 5480. The reason for the diversion is unknown.

# 5988 1908 2/2 610 55 XVIII bi L

1908 - Mt.Lyell Mining & Rwy Co. No.9 (T). 1947 -Australian Commonwealth Carbide Co. Ida Bay Quarry (T).<sup>9</sup> 1949 - Mt. Farrell Mining Co. (T).<sup>9</sup> 1960 - stored. 1972 - Van Diemen Light Railway Society Devonport (T). 1993 - Wee Georgie Wood Steam Railway, Tullah (T).

# 6063 1908 2/2 610 55 XVIII bl L

1908 - NSW Dept of Public Works, Burrinjuck ARCHIE.

Photo: Bruce Macdonald collection

1913 - NSW Water Conservation & Irrigation Commission, Burrinjuck *ARCHIE*.<sup>13</sup> 1928 - EA Sloman (merchant) Sydney.<sup>13</sup> 1933 - Farleigh Co-op sugar mill. *ARCHIE* (Q). 1963 stored.<sup>11</sup> 1966 - NSW Rail Transport Museum *ARCHIE*.

# 6067 1910 2/2 610 55 XVIII bm L

1910 - Mt.Lyell Mining & Rwy Co. No. 10. (T). 1963 - stored 1966 - Queen Victoria Museum, Launceston (T). On loan to Tasmania Steam Preservation Society, Second River Tramway Karoola, then on the Redwater Creek Tramway, Sheffield (T).<sup>8</sup>

# 6415 1910 3/3 610 55 XXVII bn L

1911 - Goodwood Timber & Tramway Co Port Albert *MONA* (V).<sup>15</sup> 1920 - Cameron & Sutherland (merchant).<sup>15</sup> c.1924 -Nerang Hardwood Co. Mudgeeraba *KATHLEEN* (Q). 1926 - stored.<sup>11</sup> 1937 - Drysdale & Ridgway (merchants) Brisbane (Q).<sup>11</sup> 1939 - On approval to Gin Gin Co-op. sugar mill.(Q) rejected.<sup>11</sup> 1940 - Plane Creek Central sugar mill, Sarina No.15A *KOUMALA* (Q). 1958 - Sc.<sup>11</sup>



No. 5480 on dual gauge track at Queenstown, in 1963. Note the detail differences with classmate 5945, above. Photo: Peter Charrett



The locomotive which was produced by the amalgamation of parts of both 5682 and 5800, shown working on the Second River Tramway. Photo: Ralph Proctor

# 6416 1910 3/3 610 55 XXVII bn L

1910-1915 - unknown. 1915 - Hampton-Cloncurry Copper Mines Ltd McGregor Mine tramway. (Q). c.1918 - stored.<sup>11</sup> c.1925 - Aust. Estates Co Ltd Kalamia sugar mill.(Q) - later used as stationary boiler, Plantation Creek. 1949 - abandoned.11

# 6486 1912 3/3 760 80 XXXII ah L

1912 - Forester Timber & Tramway Co (T) EDIE. 1932 - H Jones & Co.Warrentina (T). 1950 - Sc.<sup>9</sup>

#### 6611 1913 2/2 610 40 IV bx L

1913 - Mount Bauple Central Mill Co. Ltd. (Q). 1928 - Mt Bauple Co-op. sugar mill (Q). 1950 - abandoned. 1972 -B Macdonald, Museum of Historic Engines, Goulburn (NSW). 1975 - R Hague, Sydney (NSW).

# 6854 1914 3/4 (0-6-2) 762 80 XXXV zv L

1914 - Maroochy Shire Council Buderim Tramway (Q). 1936 - Gauge converted to 2ft for Gibson & Howes Ltd, Bingera sugar mill KRAUSS (Q). 1967 - M Loveday, Mareeba (Q) -Storage with Aust. Narrow Gauge Railway Museum Society. 1992 - transferred to G Chapman's property, Kallangur (Q).<sup>17</sup>



No.6854, the largest of the imports, shown working on the Buderim Tramway, before its sale and conversion to 2ft gauge. Photo: Blakey

6927 1914 2/2 610 40 IV ca L 1914 - Corrimal-Balgownie Coal Co. (NSW). c.1944 stored. 1971 - Chassis to B Macdonald, Museum of Historic Engines, Goulburn (NSW). 1975 - R Hague, Sydney (NSW)



Krauss 6416 on the MacGregor tramway, 1925. Photo: ANU Archives of Business & Labour

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# Rocklands Tunnel

# Norm Houghton

The 1200m Rocklands tunnel in Victoria was constructed to allow water to flow from Rocklands Dam in Victoria along an outlet channel northwards through the Black Range to supply storages serving the Wimmera and Mallee districts. Construction of the tunnel was underway by September 1948, and it was stated to be approximately 2.4m wide and 3m high. The tunnel is lined in concrete for one third of its length and the remainder is unlined. It crosses beneath the Balmoral - Rocklands Reservoir road.

A 2ft gauge Greenwood & Batley 5hp battery-electric loco was photographed at the tunnel in 1950. It may well be 18-C-5,



A Greenbat 4wBE locomotive at the tunnel entrance; ventilating equipment can be seen to the right.



a locomotive that seems to have been at Rocklands by 1941, and was sold (without batteries) to the Department of Munitions in 1943 for use "in a magazine area". This locomotive was sold with an option to repurchase so it may well have been returned to Rocklands at the end of the war. It is understood that the locomotive was formerly with Bendigo Mines Ltd and is one of 1408, 1409, 1410 (of 1935), 1453 or 1454 (of 1936). These five locomotives were ordered through agents William Adams & Co Ltd, Melbourne, and were described as "Trammer" type. Following the end of the tunnelling work, the Rocklands loco was offered for sale at nearby Balmoral by the State Rivers & Water Supply Commission in February 1951.

# Reference

Commonwealth Engineer 1 September 1948 ♦ Rick Skelley (Wimmera Mallee Water) ♦ Colin Harvey from SR&WSC Correspondence Register, VPRS 6009/P, Unit 12

After the ceremony two schoolboys were given the honour of driving the engine on its ceremonial run. At the ceremony

The Bundaberg Foundry Company Ltd. entered in to an agreement

with Messrs. John Fowler & Co. (Leeds) Ltd., whereby we now have the

right to build any of their design steam locomotives for use in Australia

the General Manager of the foundry, Mr L. George, said:

# FROM THE ARCHIVES

# A Queensland-built 2 ft gauge Locomotive

(from ARHS Bulletin No. 179, September, 1952)\*

Bingera Plantation, 15 miles from Bundaberg, on 2 June last was the scene of the christening of the first Bundaberg-Fowler locomotive made by the Bundaberg Foundry Co. Ltd., and believed to be the first 2ft gauge locomotive ever built in Queensland.

The Bundaberg Foundry has being doing repair work for the Queensland Government Railways for many years but this is the first engine ever to be entirely constructed by them. The engine is the first of an order for eight, to be supplied to the following mills: Two to the Bingera Mill, Bundaberg and one each for Mulgrave Mill,

Gordonvale; Mossman Central Mill; Australian Sugar Co's Mourilyan Mill; Amalgamated Sugar Mills, Pleystowe; and Millaquin Sugar Co., Bundaberg. The eighth engine is unsold.

The locomotive is of the 0-6-2T wheel arrangement, with outside frames having 10in x 14in outside cylinders, activated by Walschaert's valve gear and weighs approximately 20 tons.



and the one which you now see before you is the first of a batch of eight which we are building. We completely revised Messrs. Fowler's drawings and made a number of alterations to make the locomotives more suitable for Queensland conditions. One of the major alterations was the fitting of roller bearings axle-boxes made by the British Timken Co. Ltd., and we are confident that this will be a major improvement in running and will cause greatly reduced maintenance. We also completely re-

designed the boiler to bring it into line with the Australian Boiler Code and to embody features which had been found most desirable in connection with the operating of boilers under Queensland conditions.

Appropriately enough, the christening ceremony was performed with a bottle of Bundaberg rum.

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# EDITORIAL

Thanks to the correspondent who recently raised a question about the editorial policy on the inclusion or exclusion of material in this section. What follows is not intended to start a debate, but is merely an attempt to clarify current practice.

The main point at issue is what should be included of the increasing numbers of "private operators" on what were once government railway systems, or who use ex-government railway locomotives at a variety of sites. The criteria used so far have been fairly straightforward. Included are sites that are effectively "private sidings" with "captive" locomotive power at mining and manufacturing plants (eg Manildra, Blue Circle Berrima, Mt Isa). By extension, private freight depots (eg Colin Rees, Specialized Container Transport, QRX) have also been included. "Private" railways (eg BHP's Illawarra coal lines and the Silverton Tramway) are another area of interest. The emphasis is still on "industrial railways" - it is just that as the economy changes, the use of railways in industry is changing, with service industries becoming more conspicuous.

Excluded are "private" operations on main line public access routes, either operators or motive power providers (eg Austrac, Freight Australia, West Coast Railway, Silverton) as well as "service" operators on these lines (eg Great Northern Rail Services, Rail Services Australia). Also excluded are former "private" operations now taken over by "main line" operators (eg Emu Bay, ex-BHP Whyalla), although the locomotives originally supplied to these lines will continue to be of interest.

I believe that this approach is in accord with that of our publications over the years and that it allows operations often neglected by other railway organisations to receive attention. Just as the rail industry is evolving, so does our coverage, hopefully in line with the preferences of our membership.

John Browning



Bushell's Hill tunnel on BHP's standard gauge Kemira line near Port Kembla, 18 March 2000.

Photo: Brad Peadon

# **NEW SOUTH WALES**

# BHP LTD, Newcastle

(see LR 152 p.18)

1435mm gauge

The Dorrigo Steam Railway & Museum have acquired steelworks bogie coal hopper wagon CXD 15, which was unloaded at Dorrigo on 25 February. As reported previously, the museum is also eager to obtain a TL "Treadwell" hot metal car. However, BHP is apparently hopeful of selling some commercially overseas, or forwarding more to other steelworks There is also the possibility of BHP preserving one themselves with talk of the company placing a display somewhere around the site as part of redevelopment. The line from the steelworks to the slag dump had been removed by the start of April.

On 21 April Goninan Bo-Bo BHP 50 (014 of 1961) was noted parked in its usual spot near Morandoo. There was no sign of any recent wagon scrappings.

Brad Peadon 4/00

# BHP LTD, Port Kembla

(see LR 152 p.18)

1435mm gauge

On 2 March 2000, English Electric (Aust.) Co-Co DE D34 (A.197 of 1969) and A E Goodwin Co-Co DE 103 (84179 of 1963) were noted parked in the Cringila exchange sidings, indicating that they were shortly to go to DELEC in Sydney for wheel lathe attention. They had returned to Port Kembla by 18 March. It is believed that this visit may have been the last, as apparently BHP will now forward one bogie at a time. There have been reports of the diesel fleet suffering from the effects of age. Apparently failed traction motors, brake gear and other faults have been becoming more regular of late.

Clyde 0-6-0ST *BRONZEWING* (457 of 1937) has recently passed a boiler inspection and was expected to next be used during May and June on trips for Australia's Industry World. Coal hopper BXLA179 was noted in mid March painted in a special Olympic Games livery. Brad Peadon 3/00, 4/00; Chris Stratton (Aus loco discussion mailing list) 3/00

# CARGILL AUSTRALIA LTD, Kooragang

(see LRN 118 p.5)

1435mm gauge Goodwin Co-Co DE CAR1 (83712 of 1960) normally works at the Cargill plant at Kooragang, but occasionally travels to the Freightcorp service centre at Morandoo for routine servicing. It

was seen there on 22 April.

Brad Peadon 4/00; Don Allitt (Aus loco discussion mailing list) 4/00

# THE MANILDRA GROUP

(see LR 144 p.19)

1435mm gauge

During March, Walkers B-B DH 7304 GEM OF THE WEST (702 of 1972) was noted engaged in shunting duties at the Manildra Mill while similarly named Clyde Co-Co DE MM01 (62-257 of 1962) was stabled, the reverse of normal arrangements.

Railway Digest 4/00 via Bob McKillop



**Top:** Two 45-year old Clyde Model DHI 2ft gauge locomotives at work at CSR's Macknade Mill. 16 (DHI.1 of 1954) has just uncoupled from 18 (DHI.5 of 1954) after giving it a hand on the pull up from the bridge over the Herbert River, 19 September 1999. **Centre:** A veteran originally supplied to Condong Mill in NSW, Macknade Mill's E M Baldwin 0-4-0DH 17 (6-1446-1-9-65 of 1965) in the dirt at the locoshed after breaking an axle, 14 August 1999. Photos: Chris Hart. **Above:** Already suffering from the effects of road grime, BHP Port Kembla's Olympic-liveried coal hopper BXLA179 at Unanderra, 15 March 2000. Photo: Brad Peadon

LIGHT RAILWAYS 153 JUNE 2000

# QUEENSLAND

# **BINGERA SUGAR LTD**

(see LR 151 p.21) 610mm gauge

E M Baldwin B-B DH *GIVELDA* (5800-2-6-75 of 1975) is being prepared for repainting in the Bundaberg Sugar corporate livery. Walkers B-B DH *KOLAN* (633 of 1969 rebuilt Bundaberg Foundry 1996) is having its wheels built up then reprofiled. Parts of the old Bucca line on the Bingera system are being upgraded to concrete sleepers. Lincoln Driver 4/00

# **BUNDABERG SUGAR LTD, Fairymead Mill** (see LR 151 p.21)

610mm gauge

During the week before Easter, E M Baldwin B-B DH 80 (8988-1-6-80) was used to convey new traffic officers over the system to assist them in becoming familiarised with the area. Bundaberg Foundry B-B DH 91 Bundaberg (001 of 1991) is being prepared for repainting in the Bundaberg Sugar corporate livery. Lincoln Driver 4/00

# MILLAQUIN SUGAR CO PTY LTD, Bundaberg (see LR 151 p.21)

610mm gauge

Bundaberg Foundry B-B DH ELLIOTT (002 of 1991) has been over at the Foundry having its wheels built up and reprofiled. The slack season overhaul of Com-Eng 0-6-0DH AH2967 of 1963 involves having its gearbox overhauled, the fitting of new front steps and a new light bracket on the front of the loco, as well as a repaint. At Simpsons Loop (the first loop after the mill yard) the main line is being upgraded to concrete sleepers and welded rail, with the rails removed from the main line used to upgrade the loop. The main line close to the mill between the Bottom Yard and Bargara Road is having one in every four sleepers replaced with concrete sleepers. This section may be laid in all concrete sleepers in the next slack. Lincoln Driver 3/00, 4/00

# MORETON SUGAR LTD, Nambour

(see LR 149 p.20) 610mm gauge

The Australian Narrow Gauge Railway Museum Society's Bundaberg Foundry 0-6-2T 5 (5 of 1952) will operate once again on cane haulage at the Nambour Sugar Festival from Monday 7 August until Saturday 12 August. The locomotive will head north from Nambour on Monday 14 August on its film assignment. David Mewes 4/00

# CSR PLANE CREEK PTY LTD, Sarina

(see LR 150 p.25) 610mm gauge Walkers B-B DH 1 *ALLAN PAGE* (594 of 1968 rebuilt Bundaberg Foundry 1995) has been at the Bundaberg Foundry for slack season work. The other three Walkers rebuilds were noted outside the loco shed at the mill on 21 April, so it may not have returned by then. E M Baldwin B-B DH D12 (6890-1-10-76 of 1976) was also noted outside the shed. It had its bogies removed and was supported under the headstocks on a pair of shop bogies. These have four axles each and have been constructed from steel cane bin chassis components. Lincoln Driver 3/00, 4/00: Editor 4/00

#### SOUTH JOHNSTONE MILL LTD

# (see LR 152 p.20)

610mm gauge

An extraordinary meeting of shareholders on 19 April was told that the mill might not be able to crush in the 2000 season. Cyclone and flood damage has depressed the local crop for the third year in succession. With a debt of \$18m, the Directors were in negotiation with the National Australia Bank to refinance the mill's loan. However, it seems that the bank were looking for some outside support as on 28 April, it was announced that a request for a contribution of \$4m from the growers to keep the mill afloat had been rejected by the local branch of Canegrowers, who were instead appealing to the State government for assistance. No work appears to have been done on the tramlines during the slack season.

If the mill does not crush, there may be some possibility of cane being diverted to Mourilyan and Tully Mills. Only about 200 of metres of the old Innisfail Tramway would have to be reinstated at Currajah for transfers to Mourilyan, but about two kilometres of track would be needed south of Silkwood to connect with the Tully system.

Rod Milne 4/00; ABC Rural News Online 20/4/00 & 28/4/00

# SOUTH AUSTRALIA

# BHP LTD, Whyalla

(see LR 151 p.22)

1067mm & 1435mm gauge

Ore haulage operations at the time of the Australia Southern Railroad takeover on 1 December were up to four 45-wagon narrow gauge trains scheduled on a daily basis (including week-ends), to the loading point at Iron Duke, and a trip to Iron Knob once a week at most. The narrow gauge iron ore shunt facility conveys pellets 5 km from the pellet-making plant to the blast furnaces. One locomotive and nine hopper wagons work 24 hours a day on this task. The lines that serve the two blast furnaces' molten output are standard gauge and one DE loco is used round the clock to shunt 16-axle Treadwell "torpedo ladles" between the furnaces and the steel-making plant. The loco on hot metal traffic duties is currently Clyde Bo-Bo DE DE1 (56-109 of 1956) with Walkers B-B DH DH.01 (573 of 1962) in reserve. Product handling requires one standard gauge loco and involves the transfer of finished products from the steelworks complex to the standard gauge yard at

Whyalla for dispatch by National Rail. The General Electric (Aust.) Co-Co DE locomotives MKA 5 and MKA 6 (A.213 of 1970 and A.225 of 1971), which were on hire to BHP until recently, have been returned to NREC-Alco at Whyalla. BHP has one remaining railways employee at Whyalla, all others having been transferred to ASR. His job is now to supervise the contract with ASR.

Railway Digest 4/00 via Bob McKillop

# VICTORIA

# SPECIALIZED CONTAINER TRANSPORT, Laverton

(see LR 152 p.20) 1435mm gauge

On 23 April ex-WAGR English Electric (Aust.) Bo-Bo DE H1 (A.081 of 1964) arrived at South Dynon off a train from Western Australia. The loco had a number of body panels missing and badly faded WAGR paintwork. It has been sent to Melbourne to provide spare parts for similar loco SCT101 (A.085 of 1964) which has had a major failure and is with Rail Technical Support at Dynon for repairs. A grey painted ex-WAGR H class, probably H2 (A.082 of 1964), which was already at RTS, has been sent to Laverton, while RTS also have English Electric (Aust.) Co-Co DE K207 (A.136 of 1966) on hand in working order. It seems that SCT also have ex-VR 4wDM RT32 at Laverton.

Graham Elliott 4/00; Peter J Sweetten 4/00; Michael Bray 4/00 (all Aus loco discussion mailing list)

# WESTERN AUSTRALIA

# HAMERSLEY IRON PTY LTD

(see LR 149 p.21)

1435mm gauge

Hamersley Iron's preserved ex-Great Western Railway 4-6-0 *PENDENNIS CASTLE* was to be loaded on board ship in Fremantle on Easter

# Industrial NEWS Railway

Sunday for return to England, having ben donated to the Great Western Society. This locomotive arrived in Australia in 1977 and was last used in 1994. It was stated that its use is now incompatible with the "technologically advanced Hamersley Iron rail system", but other speculation included the thought that its disposal might also be related to the legal action in which Hamersley successfully denied Robe River access to its tracks, arguing that the railway was required exclusively as part of a production process. It has been suggested that the diesel locomotives in the care of the Pilbara Railway Historical Society might also have been denied access to Hamersley's tracks.

Smorgon Steel Group has won a \$25 million contract to supply 240 iron ore rail wagons to Hamersley Iron. The wagons will be built by Smorgon's Bradken division at a rate of 14 per week, commencing in September.

Tim Draper 4/00; "Chris" 4/00 (both aus.rail mailing list); *The Age* 6/4/00 via Phil Rickard

# PEMBERTON TRAMWAY CO

(see LR 150 p.26)

1067mm gauge

Permission has been given to the Pemberton Tramway to use the track connecting its Lyall yard with Westrail's adjoining Lambert yard to store the fuel tank wagons acquired late last year. To this end the Annetts Lock at the PTCo end has been removed and a scotch block installed at the Westrail end, effectively creating several hundred metres of additional siding space. This will dramatically simplify operations at Lyall as these wagons had been standing in the loop making run-around movements very complicated.

Simon Mead 4/00



To the rescue in Clyde Road, Babinda, on 14 September 1999. Babinda Mill's 2ft gauge Com-Eng 0-6-0DH 7 MORRISON (AD1239 of 1960) is ready to assist Clyde 0-6-0DH twins 3 DARADGEE (56-90 of 1956) and 2 GOONDI (55-56 of 1955) to the mill with a full rake. GOONDI is receiving some anxious attention for a gearbox problem. Photo: Andrew Webb

# Recommended reading from the LRRSA Sales Department ....

NOTE: GST Prices apply to all orders processed after 30 June 2000

# Timber Tramways & Logging Railways:

# The Era of the Bush Tram in

New Zealand by Paul Mahoney

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#### Dear Sir,

#### "Made on the line" locomotives?

Whilst researching the history of NSW railway contractors Larkin & Wakeford, I came across information about a type of locomotive that apparently hitherto has not been documented in connection with railway construction in NSW.

By September 1863 work on contract No. 3 for the formation of part of the Southern extension between Picton and the Fitzroy Ironworks had come to a halt, the contract subsequently having been abandoned by Messrs Randle & Co., following that Company's failure. Tenders were promptly called for the completion of contract No. 3 and in early November the Government accepted that of Larkin & Wakeford. With the acceptance of that tender, Larkin & Wakeford became the contractors for the 2nd, 3rd & 4th contracts (some 24 miles), of the formation of the Southern extension. In August 1865 they were also awarded the contract for the laying of the entire permanent way from Picton to the Fitzroy Ironworks.

The earthworks required in contract No. 3 were of a very substantial nature and by December 1863, Larkin & Wakeford had "not yet made a commencement, some machinery being in the course of construction, for facilitating the works in the heavy rock cuttings." (Sydney Morning Herald, 21 December 1863). The machinery being constructed included two locomotives. By mid-February 1864 "the heaviest of the works have been started, and they will be pushed on rapidly upon the completion of four steam cranes, two locomotives, and other machinery which are now being made for the contractors....." (SMH, 20 February 1864).

By late April 1864 Larkin & Wakeford had been joined on contracts 3 & 4 by Messrs Murrin & Brown; "some of the heavier works on these contracts have been in abeyance waiting for some locomotives, steam cranes, steam engines and other machinery which have been made for the purpose and which are now on the road; after their arrival the works will make rapid progress." (SMH, 21 April 1864). One month later: "Four steam cranes and

One month later: "Four steam cranes and two locomotives have been made and are now at work. A locomotive has been ordered from England and is on the way out, intended for carrying the debris out of the Gibraltar tunnel." (*SMH*, 21 May 1864). Although only two small locomotives were reported at work in one of the cuttings in August 1864, by mid-February 1865: "Four steam cranes and three locomotive engines are employed to expedite the removal of the rock." (*SMH* 18 February 1865).

By mid-October 1865 however, whilst it was reported that Larkin & Wakeford were utilising locomotive engines to remove the spoil, it was also recorded that "Three engines had been made on the line." (SMH, 21 October 1865). Larkin & Wakeford had found it less expensive "to make them than to import them". (SMH, 21 October 1865). Although it appears that at least two of the three "made on the line" locomotives were not actually constructed on the line, they were probably assembled there. None-the-less, what happened to the locomotive that in May 1864 was recorded as having been ordered from England and actually on its way out, or had it in fact already arrived and was of the same design as the "made on the line" locomotives?

"By mid-November 1865 Larkin and Wakeford already had four locomotives in use and a fifth was in the course of construction." (*SMH*, 21 November 1865). A report from January 1866, that a small locomotive engine "made by the contractors," was being used for the conveyance of rails on the line (*SMH* 20 January 1866), appears to confirm that the "made on the line" locomotives were built to standard gauge specifications. A report from a visitor to the area in mid-June 1866 indicated that the contractors had a "ballast engine," it having been described as a small solidly constructed engine, (*SMH* 13 June 1866). The description apparently referred to a "made on the line," locomotive as Vale running concurrently for construction of part of the Western extension along with their Southern extension work, it appears reasonable to surmise that at least some of the "made on the line" locomotives also saw action "out West." The "made on the line" locomotives apparently took the place of a product that the contractors could have purchased (and may have actually purchased one from) overseas, presumably Great Britain. These locomotives may have had design elements in common with the "engineers locomotives" that were initially used on the Hobson's Bay Railway in Melbourne.

As to the question of the identity of the constructor of the "made on the line" locomotives, intriguingly, with two of the locomotives having arrived by late May 1864, a large quantity of ironwork for railway plant had then lately been made up for Larkin & Wakeford by the Fitzroy Ironworks (*SMH*, 21 April 1864).

#### Mellor's Meadowbank Manufacturing Company (LR 143, LR 150)

Further to my earlier letter on Mellor's "Meadowbank" Manufacturing Company, by early November 1898, JH Angus owned the Meadowbank Estate (and presumably also the Meadowbank Manufacturing Co.), (*Sydney Morning Herald*, 4 November 1898 p.3). Late the following month, M. Franckel, the Liquidator of the original ill-fated Mellor's "Meadowbank" Manufacturing Company, announced a meeting to be held on 27 January 1899 to receive the final accounts in connection with that firm's liquidation, (SMH 20 December 1898).

Ron Madden Wagga Wagga



& Lacy locomotive No.1 which was constructed for Larkin & Wakeford, was not completed until late 1866, (verbal advice from Bruce Macdonald).

It is clear however, that Larkin & Wakeford, whom we should perhaps now also regard as locomotive constructors, assembled and operated at least three, probably four and possibly five "made on the line" locomotives. Because the contractors also had major contracts

Dear Sir,

# "Where is it?" (LR 150, 151)

Further to the photo [of the Babinda accident] published in the February issue of *Light Railways*, please find enclosed this postcard, taken from a different angle.

I obtained the postcard at Nambour, Queensland, on my first trip to the area.

# Peter MacDonald

Bowraville, NSW

#### Dear Sir,

## "Where is it?" (LR 152)

I am writing in response to your request for information on the photo shown on page 26 of the April issue of *Light Railways*. The origin of this photo is most interesting, in that it came from the Nock collection, but its inclusion in 'Australian Railway Views' is very much a case of 'mis-filing'. It couldn't be further from Australia as it was in fact taken in Bolivia in South America!

This photo first appeared page 29 of the Railway Gazette - Second Special South American Railway Number dated 6th December 1926. It was taken by an RG staff photographer during an extensive tour of South American railways, and shows the railway wharf at Guaqui, on the southern shore of Lake Titicaca. The delightful little British built metre gauge 0-4-0ST is from the British owned Guaqui - La Paz Railway. The vessel shown alongside is the British built SS Coya, one of a number of steam powered passenger and cargo boats which plied Lake Titicaca between Peru and Bolivia (the lake lies across the border between these two countries). Readers who viewed the first edition of the BBC television series Great Railway Journeys of the World may remember the sequence filmed here and on the larger and later built lake steamer SS Ollanta.

The Guaqui - La Paz Railway, later known as the Ferrocarril de Guaqui a La Paz (FGP), started out in 1900 as a Bolivian government venture, was completed by the British owed Peruvian Corporation based in adjacent Peru, and was completed in 1906. The Peruvian Corp. leased the line in 1904 and bought it outright in 1910. It survived in private ownership (as it was Peruvian/British) through the 1962 Bolivian nationalisation of the privately owned railways, but in 1974 was taken over by the Empresa Nacional de Ferrocarriles de Bolivia (ENFE), and was fully integrated into the rest of the state owned rail network in 1986. Some of the lake steamers also ended up in Bolvian ownership as well.

The line is situated at an average altitude of 12,500ft, and ran for roughly 54 miles from Guaqui to El Alto, on reasonable grades, before making a steep 6 mile descent into La Paz on an average grade of 6%! The railway was part of a through rail and lake route between the sea port of Mollendo via Arequipa, to Puno on the standard gauge Southern Railway of Peru (FCS), followed by a lake journey across Titicaca, then by the FGP to La Paz. Both the FCS and FCG, as well as the lake steamers, were all originally owned by the Peruvian Corporation.

The route competed somewhat unsuccessfully for Bolivian traffic with the much shorter Arica-La Paz Railway (FCALP-which included quite a lengthy rack section no less!), and the well known British owned Antofagasta, Chile & Bolivia Railway (FCAB).

The FCG owned 10 steam locos in its life as an independent railway. The first three were Baldwin 2-6-0s, followed by an Alco 2-6-0, then the 0-4-ST which is the subject of the photo. This was followed by two Alco 2-8-0s, an Avonside 2-8-0 and lastly two Hunslet 2-8-0s. The latter three engines, are probably the best known of this fleet (as they still were operating when enthusiasts really started 'hitting' the area). This was a sort of 'standard' design, developed by Avonside and continued by Hunslet, which the Peruvian Corporation used on its metre gauge railways in Peru and on the FCG. It was actually a scaled down version of the Corporation's successful 'Andes' type standard gauge 2-8-0 which originated with Beyer Peacock.

In the British tradition, many of the FCG locos were named, and the little saddle tanker was No.5 named *Tunari*, built by Peckett, B/No. 1086. The 0-4-0ST frequently shunted the wharf at Guaqui, but could also be found at Viacha. The steam locos worked the section to El Alto, but the steep descent into La Paz was operated much like an American interurban system, with American built tramway type passenger cars and box cab motors! Quite a contrast!

Photos of the 0-4-0ST are somewhat rare - the only others I am aware of are on p.75 of Chris Walker's Railways of Latin America in Historic Postcards and in Ian Thompson's article on the FCG which appeared in the May 1991 issue of the magazine Locomotives International, the Railway Gazette special issue and Locomotive International article which provide further details of the railway and its motive power. And what became of 0-4-0ST No.5 Tunari you might ask? Well it is happily still with us. I am not sure when it was withdrawn, but it lurked in the back of Guaqui engine shed for many years (at least through the 1960s and 1970s), where it was virtually un-photographable (!), and is believed to have gone to Sucre in January 1991, along with one of the British 2-8-0s, for inclusion in the Bolivia's future railway museum. The two steam cranes used on the wharf at Guaqui were also British - built by Thos. Smith & Son, Rodley, Leeds.

The SS Coya, by the way, was also British built, as were all five Peruvian Corp. owned vessels on the lake, including the larger and later SS Ollanta, which is the best known member of the fleet. These vessels were built in the UK, and were either sailed complete, or shipped disassembled in parts, to Mollendo, and taken in 'bits' all the way to the lake by rail over th FCS, reassembled at Puno and launched on the lake! The fresh water of the lake ensured their longevity (like the famous SS Earnslaw on Lake Wakatipu on New Zealand's South Island). As you can see 'British built', 'British owned' etc. figures fairly prominently in the story - it all being a good example of British colonial enterprise!

I hope the above may be of interest to readers of LR. In the meantime, keep up the good work with LR. It is (in its new format) an excellent publication, which can hold its head high amongst the world's best!

Ray Ellis Chermside, Qld Dear Sir,

#### Charters Towers Water Board Tramway (LR 148)

The idea that the gauge of this line was ever two feet (LR 148, page 26) can be discounted.

When I visited the pumping station and remains on the north side of the Burdekin in January 1958, there was track on the south side, on which stood some trucks loaded with firewood. While I was measuring the gauge, I met the pumping station engineer, Mr Matthews, who had been in the Board's employ in 1914 (the water supply had long been transfered to the Charters Towers City Council). It was he who told me that the gauge was actually metric, 825mm.

He did not mention any change of gauge, either then, or in a subsequent letter in which he outlined the three routes the tramway followed on the north side of the river.

The Board's extant records make no mention of change of gauge, and they are reasonably complete for the couple of years up to 1901, when the locomotive (built to 825mm) was obtained. The locomotive remained in service until the pumping station was converted to electric operation in 1937. Having inside frames, it would have been impossible to convert to 2ft gauge. Gerry Verhoeven visited the pumping station in 1974, and confirmed the gauge.

I take it that Bruce Macdonald's (last para) source was builder's records. J Boyd was the Board's wood supply contractor for many years. The locomotive was therefore built for Boyd and exported. It is interesting that it was not built for the Board.

I have examined the records of the Board, and hope to write a fuller history of the line.

# John Knowles

New Maldon, UK

Dear Sir

# Mystery Locomotive (LR 152)

In LR 152, Bruce Ballment asked for information about the little loco at Halls Gap.

Back in 1986, I came across the Telopea Gardens Tea Rooms, near Halls Gap. In his back garden, the proprietor had built a 2 foot gauge railway, comprising a loop with some sidings, laid with a light weight rail (would have been less than 30 lbs per yard). From memory, the rolling stock consisted of an internal combustion loco dressed up to look like a steam engine, and various trolleys and wagons.

The owner told me that he had had problems with the loco derailing, which he discovered to be because of uneven wear on the wheels caused by the train running around the roughly circular track in the same direction.

I do not know if the little line is still in existence.

James Shugg Covent Garden London, UK



# RESEARCH

#### History of Australian Science and Technology Bibliography

The History of Australian Science and Technology Bibliography (HASB) recently been relaunched with many new entries and a new fully-searchable web interface. The bibliography has been compiled by the Australian Science and Technology Heritage Centre as part of Bright Sparcs, and contains details of nearly 5000 publications up to 1998 (with 1999 in preparation). It is based on a number of sources, particularly, Laurie Carlson's annual bibliographies published in Historical Records of Australian Science.

The coverage is broad and includes publications from related areas such as medicine, engineering and environmental history. The bibliography is primarily based on academic sources, but useful background material can be located on topics of interest to LRRSA researchers. For instance, there are currently 23 references listed under "forest history". HASB can be found at: http://barney.asap.unimelb.edu.au /hasb/hasb.php3

Tim Sherratt (ANU), via Colin Harvey

# Jarman Island, WA

Kevin Palassis Architects released the Jarman Island Light Station conservation plan in May 1999 for the Shire of Roebourne and the National Trust of Australia (WA). A lighthouse was built on Jarman Island (off the Pilbara coast from Cossack / Point Samson) in 1888-9. Quarters were erected and used until 1950 while the lighthouse was replaced by Cape Lambert lighthouse on the mainland in 1985. Among structures built on the island was a boathouse with a tramway for hauling boats into and out of the water.

The bulk of the tramway, apart from about 15 metres immediately

out of the boatshed site, still remains with rails going into the water to several metres depth at high tide. The conservation plan can be seen in the JS Battye Library, Perth, and further research conducted through State Records Office and the Battye Library where many government reports and plans have been deposited. *David Whiteford* 

# Middle Island, Recherche Archipelago, WA

An August 1989 report submitted to the WA Heritage Commission titled *Survey of the Eastern Group islands of the Recherche Archipelago* has just been received into the JS Battye Library. It includes some notes on salt tramway remains on Middle Island although it is unclear if a tramway was actually laid or whether material was stockpiled and not used. Two piles of very corroded rail and at least one set of tram wheels were recorded. *David Whiteford, March 2000.* 

# Newcastle Regional Museum

Further to the information in LR 152 [p.27], this Museum has an excellent Website with information about the collieries of the Greta Coal Measure. This was one of the most intensely worked coal-fields in Australia and at their peak in 1925, the collieries employed 10,915 staff and produced 5.49 million tons of high-quality ash coal. A total of 66 collieries operated on the field between 1861 and 1995. The Website provides individual mine histories, which are complemented, where possible, with historic images and plans that show the layout of each mine at the time of its closure. This is an excellent site for anyone interested in the history of Australia's collieries and their railbased transport systems. The home page address is:

www.amol.org.au/newcastle/greta John Browning

# Australian Rails to Trails

This organisation now has an Internet home page providing backgropund information on Railtrails, details of Railtrails by State - the Victorian section updates in the Railtrails of Victoria directory - and news reports on Railtrails developments around Australia. In Victoria in particular, a number of Railtrails use former timber industry logging tramways (see LR 153, p.23). The address is: www.railtrails.org.au

# Perry Engineering Locomotive Drawings

Perry Engineering Company Ltd of Gawler and Mile End, South Australia, built 36 industrial steam locomotives and four industrial electric locomotives between 1923 and 1954.

Inquiries by Peter Meyer regarding the drawings of these locomotives reveals that the Pichi Richi Railway Preservation Society at Quorn has drawings for nearly every locomotive available on microfilm. Prints are available on A2 sheets for about \$6 each.

Interested readers should contact Brian Homann (Ph. 08 8390 1925; fax 08 8390 1576; Email bhomann@camtech.net.au) giving the builders number or the loco owner and operating number. The original drawings have apparently been destroyed.

The Mortlock Library (Ph. 08 8207 7360) has a good collection of Perry records but no drawings. *Peter A Meyer* 

# Blackman Bay Tramway, TAS - 1999 Update

In his article on the Weilangata and Balckman Bay Tramways (in LR 52) David Beck remarked that "Today the route of the [Blackman Bay] tramway appears to be traceable - but the outer terminus has not yet been explored". During a bushwalk on Forestier Peninsula in November 1991, we stumbled upon a short length of moss-covered tramway a few metres from Richardsons Road. Realising that it was probably part of the Blackman Bay tram, we followed it southward for two hundred metres or so without undue difficulty, and resolved to follow it to the incline on a later trip. However, it was not until eight years later - twenty-four years after David's report, and sixty-one since the tram was abandoned - that I returned, with a different party. Unfortunately, I couldn't remember the exact location of the remnant, and we spent four hours in scrub and cutting-grass without success. On returning to the road, we searched around, only to find we'd left it about fifty metres east of the aforesaid 'remnant'.

# **Coming Events**

# JUNE 2000

 2 Puffing Billy Railway, Belgrave VIC. Jingle Bells in June - celebrate Christmas on the Night Train at the correct time of the year! Dine in style with a VIP trip on the railway. Also on 3, 9, 10, 16, 17 23, 24 and 30 June. Phone: (03) 9754 6800 for bookings.
4 Redcliffs Historical Steam Railway, VIC. Steam train operations; first Sunday of each month. Phone: (03) 5024 2262.

11 Cobdogla Irrigation & Steam Museum, SA. Steam running day, with Loveday Flyer trains and Humphrey Pump. Phone 08 8588 2323

11 Bennett Brook Railway, Whiteman Park, WA. Gala Day for inauguration of Subiaco station building restoration. Steam and diesel-hauled 610mm gauge trains from 11am. Phone (08) 9249 3861.

**11 Illawarra Light Railway Museum, Albion Park, NSW**. 610mm steam trains electric miners' tram and 184mm gauge miniature train rides, 1100-1630. Phone 02 4256 4627.

11-12 Richmond Vale Railway, Kurri Kurri, NSW. Coalfields Steam Weekend. Phone (02) 4937 5344.

#### JULY 2000

**1 Puffing Billy Railway, Belgrave VIC.** *Jingle Bells in July* - celebrate Christmas on the Night Train at the correct time of the year! Dine in style with a VIP trip on the railway. Also on 7, 8, 14, 15, 21 22, 28 and 29 July. Phone: (03) 9754 6800 for bookings. **15-23 Port Dock Station Railway Museum, SA**. *Friends of Thomas the Tank Engine* festival with lots of steam train rides, *The Fat Controller's story time*, children's games and stage shows; 10am to 5pm daily. Phone (08) 8341 1690.

16 Cobdogla Irrigation & Steam Museum, SA. Steam running day, with Loveday Flyer trains and vintage engines. Phone 08 8588 2323

#### AUGUST 2000

**7-12 Aust. NG Railway Museum Society, OLD.** Bundy's Last Great Adventure -Bundaberg Fowler 0-6-2T No.5 undertaking sugar haulage at Nambour and participating in Sugar Festival on 12/4. Phone: (07) 3202 6330.

11-13 Cobdogla Irrigation & Steam Museum, SA. Steam running day, with Loveday Flyer trains and vintage engines. Phone 08 8588 2323

14-18 Aust. NG Railway Museum Society, OLD. Bundy's Last Great Adventure -Bundaberg Fowler 0-6-2T No.5 operating over mill systems in Bundaberg district. Phone: (07) 3202 6330.

#### STOP PRESS:

ex-South Maitland Railways 2-8-2T No.30 was returned to steam after restoration by the Richmond Vale Railway on 7 April. Details in next issue.

With promise of better luck next time, I persuaded my companions to return six weeks later, in November 1999. We headed off southward on the bearing indicated by 'the remnant', but a fire since 1989 had destroyed all traces for the next two to three hundred metres. After casting around in wet scrub, we finally found three lengths of steel rail, and from there on the task was (comparatively) easy, except where clumps of cutting grass and fallen timber obscured the line. About a kilometre from the road we found an unusually extensive log storage and loading platform, and another kilometre further, one beam of the second bridge over the Blackman Rivulet. This latter spot was the only one along the tramway where there was a large enough gap in tree cover to permit a GPS 'fix', albeit of dubious accuracy. From here, the line swung westward, and very soon reached the base of the incline, most of which is trace-

able. In places vigorous regrowth, spurred on by a 1500mm annual rainfall, and fallen timber forced us up to thirty metres from the line. Somewhere approaching the top of the incline the tangle of vegetation was so thick that by unanimous consent we gave up the search. Perhaps a youger party (two of us are in our eighties) will profit from this report, and search for any remains of the 'headworks' at the upper end, and record their findings in a future issue of LR. Another month later (December 1999) we returned to the junction of Hylands and Richardsons Roads to locate, with respect to these roads, the site of the first bridge over the Blackman Rivulat, which I'd found in 1995, and the alignment of the tramway from there to 'the remnant'. We made some rough measurements and took sufficient compass bearings to fix the alignment of this length with

reasonable accuracy. The tramway

is traceable on the approaches to

the bridge site, one steel rail marks the bridge site, and there are enough bedlogs and sleepers to mark the route to within about 100 metres of the north-south 'lea' of Hylands Road. From here to 'the remnant' all traces have been obliterated by road works. The line re-enters the forest on the south side of Richardsons Road, about five metres west of a large gum, which may be identified by an old Forestry Commission 'blaze', now partly overgrown by new bark.

The fruits of our investigations are presented on the accompanying sketchmap. The route of the tram from the Blackman Bay jetty to the first bridge has been taken from the 1:63,360 Army Sorell map, Emergency Edition 1942, on which it is shown as a "track". The alignments of Hylands and Richardsons Roads, both of which were built decades after the closue of the tramway, are correct as at December 1999. Lindsay Whitham



At the site of Bridge No.2. The author is on the left

LIGHT RAILWAYS 153 JUNE 2000



# LRRSA NEWS

# **MEETINGS**

#### ADELAIDE: "Selected Videos"

A number of interesting videos will be shown, including one on the building of the infamous Burma Railway.

Location: 150 First Avenue, Royston Park.

Date: Thursday 1 June at 8.00 pm. Contact Arnold Lockyer (08) 8296 9488.

# BRISBANE:

"Members' Show and Tell Night"

Please bring along slides, and other items of interest. All members (and visitors) are invited to attend.

Location: BCC Library, Garden City Shopping Centre, Mount Gravatt.

After hours entrance opposite the Mega Theatre complex, next to Post Office.

Date: Friday 2 June at 7.30 pm. Entry from 7 pm. Contact Bob Dow (07) 3375 1475

#### **MELBOURNE:** "Auction Night"

The June meeting will be an auction night. A great opportunity to get rid of your valuable rubbish, and replace it with a new lot.

Location: Ashburton Uniting Church Hall, Ashburn Grove, Ashburton.

Date: Thursday, 13 June at 8.00 pm.

### SYDNEY:

AGM/ Members' Slide Night Bring a selection of slides (5-10) of your favourite light railway subject.

Location: The Woodstock Community Centre, Church Street, Burwood, (five minutes walk from Burwood railway station).

Date: Wednesday 28 June at 7.30 pm. Contact Jeff Moonie (02) 4753 6302.



# Heritage &Tourist

# Managing Industrial Railway Heritage

Readers will notice a change of photograph in our logo for this section. As reported in LR 151 (p. 29), the Marsden Steam Museum at Goulburn has closed and the heritage railway items there have been sold. While the site features some wonderful industrial heritage items, the management task of developing and selling a viable attraction at this location proved to be beyond the expertise of the small

group of enthusiasts who tried to keep the museum going in recent years. Hopefully, the subject of our new logo will be more resilient. Keen observers will have placed the new logo at the State Mine Railway Heritage Park and Railway, Lithgow. Here an enthusiastic and active group with strong leadership are rapidly developing a quality tourist railway and mining museum that will restore and retain one of the great industrial heritage sites of Australia. Much work remains to be done, but the strong management skills within this group have helped it establish the political support and volunteer base necessary for a successful operation. They have presented their case well and have obtained a number of grants to help fund the task.

# NEWS

# Queensland

#### DEE RIVER RAILWAY, Mt Morgan 1067mm gauge ARHS Old. Division

The ARHS Qld Division did not seek an extension of their license to operate the Dee River Railway, at Mount Morgan beyond 17 April 2000. Regrettably, there was insufficient local support both from ARHS members to form a committee of management and from volunteers to work on the railway. The local Shire Council had hoped the continued operation of the railway by a well-established group like the ARHS would attract more tourists to the area and encourage those who pass through the town on the inland highway to stay a night there. The reluctance of locals to get involved in projects that have the potential to help their districts is not confined to Central Queensland. The Brisbane ARHS Council are to be congratulated for their attempt to revive the railway in an area of very high unemployment and depressed business conditions.

Following this announcement, Mount Morgan Shire Council called a public meeting on 2 May to appoint a manager of the Dee River Railway and Tourist Information Centre. ARHS operations were extended past 17 April to run the trains on the May Day weekend. However, no trains operated over Easter due to construction.

A Council spokesman said the railway would remain and be operated under council control, with volunteers and a manager to be appointed to run the centre. Expressions of interest were to be called for a station manager and volunteers.

Brian Webber, 4/00; *The Weekend Bulletin* (Rockhampton) 22/04/00 via John Browning

#### DURUNDUR RAILWAY, Woodford 610mm gauge Aust. NG Railway Museum Soc. Inc.

Planning for ex-Pleystowe Mill's 0-6-2T No.5 (Bundaberg Foundry 5/1952) travels over the mill lines from Nambour to Mossman is proceeding smoothly. In addition to the \$30,000 Federal and State Government grants (LR 152, p.28), the producer of the documentary film, Bundy's Last Great Adventure, has secured a pre sale from the Seven Network and a distribution guarantee from Beyond International Distributors. No.5 will haul cane at Moreton Sugar Mill, Nambour, in the week 7-11 August and will lead the Sugar Festival procession on Saturday 12th. On 14 August No.5 will travel to Bundaberg for service on mill lines in that district. The operating schedule beyond

What has impressed me about the State Mine group is their sense of vision and recognition that a successful operation depends on cooperation and complementarity with other tourist attractions in their region. The Blue Mountains already has one of Australia's most successful heritage railways in the Zig Zag Railway. What the State Mine group set out to do was not to compete head on with Zig Zag, but to work with them. The aim is to expand the breadth and depth of attractions in the area so that visitors can gain an enhanced experience, with each attraction bringing their own clientele and offering them the opportunity to also see the other. The State Mine group has worked closely with Lithgow City Council, Blue Mountains Tourism and Zig Zag Railway to create a genuinely regional tourism product that links to and builds on the unique features of Lithgow's industrial and railway heritage. Unfortunately, this outward vision is not generally characteristic of railway preservation groups in Australia.

Too often inter-group rivalry and small town jealousies result in preservation groups competing with each other for a fickle tourist market. In a world where survival is dependent on linkages and cooperation to develop the managerial, financial, communication and technical skills of staff and volunteers, those heritage railways and museums that do not respond to the challenge are bound to "bite the dust". Bob McKillop

News items should be sent to the Editor, Bob McKillop, Facsimile (02) 9958 8687 or email, <u>rfm@enternet.com.au</u>; or by mail to PO Box 674, St Ives NSW 2075.

Bundaberg had not been finalised when this issue went to press. David Mewes, 4/00

# **New South Wales**

# **DORRIGO RAILWAY MUSEUM** 1435mm gauge

# Dorrigo Steam Railway & Museum Inc.

Ex-Commonwealth Portland Cement 0-6-0T No.3 (AB 1234/1911), which was featured on the cover of LR 146, is now located at this museum. It was purchased from the Central West Railway Preservation Society at Orange in 1997 and was subsequently transported to Dorrigo. It was painted in red primer at Orange and this has been retained, plus basic weatherproofing. It is stored on the future static display site. Trevor Edmonds, AusRail News Group, 3/00

# ILLAWARRA LIGHT RAILWAY MUSEUM, Albion Park 610mm gauge

By the time this issue of LR hits the stands the ILRMS will have held an Enthusiasts and Photographers Day and Evening on 27 May. The day featured operating passenger and demonstration freight trains on various types of consist. 0-4-0ST *BURRA* (H/Leslie 3574/1923) was scheduled to be the first steam loco out in service at noon, with the larger locos appearing on passenger trains later in the day.

In mid-afternoon a commissioning ceremony was held for the additional track of the "triangle". A feature of the day was photographer access the compound while lighting up, and to other normally restricted areas of the track (under supervision) while trains were running. After dark photo opportunities of steam train operations were provided at various locations. The schedule included four steam locomotives and six diesel locomotives, including the recently operational Drewry-Baguley 0-6-0DM LEICHHARDT. Proceeds will go to further museum restoration activities, including the construction of the A-class Shay locomotive [see LR 145, p.27-28]. The museum ran 0-4-0ST KIAMA (Davenport 1596 of 1916) from 11:00 am to 4:30 pm on 9 April. John Garaty, 4/00

#### VALLEY HEIGHTS STEAM TRAMWAY 1435mm gauge Steam Tram & Railway Preservation Society

Transfer of STARPS locomotives and rolling stock to the Valley Heights Locomotive Depot Heritage Museum has been completed [LRN 95, p.7]. On 26 February, some 60 members and visitors attended a ceremony at the museum for the official hand-over of the NSW Dept of Transport Accreditation certificate to the President of STARPS, Peter Stock. At the ceremony, Kerry Bartlett MHR spoke of the Federation Community Grants Scheme and the funding provided for the restoration of end-platform car CBI 1073, then handed over the grant cheque to the Society. Ex-Commonwealth Portland Cement 0-6-0ST No.2 STEVO (R Stephenson 2994/1899) was steamed for the day. Restoration work is proceeding on steam tram motor 103A (BLW 1891) and ex-NSWGR and PWD 0-4-0ST 1022 (Vulcan 2505/1916). The public was invited to inspect restoration work on STARPS exhibits at an Open Day held on 8 April. The Society plans to operate 103A and steam trailer car 93B on the depot sidings when restoration is complete.

Editor, 4/00; STARPS Home Page

# Victoria

# ALEXANDRA TIMBER **TRAMWAY & MUSEUM**

610mm gauge

The Easter 2000 Rally at Alexandra was successful with steady attendance over the three days, particularly on Sunday 23 April. On two of the days train running was extended past normal closing time to cater for additional visitors.

As usual the 0-6-0T Fowler (11885 of 1909) loco was in steam hauling passengers around the circle track and the 300 metre extension of the restored main tramway line towards Rubicon. Two Marshall portable engines and the Bartram (2085 of 1911) vertical boiler engine were in steam. The Buffalo Pitts traction engine (9587 of 1905) was only able to tick over with the assistance of a steam line from Marshall (47566 of 1907) due to the boiler tubes needing replacement.

Near the station, the 4wDM Simplex (10058 of 1948), 4wPM Malcolm Moore (1049 of 1943), 4wPM Cheetham Salt No. 1 and the ex SEC 4w trolley with an assortment of wagons were on display. The Kelly & Lewis loco (4271 of 1935) was on display for most of Saturday outside the loco shed. It was used to operate three trains on each of the days whilst the Fowler was being refueled and the steam crew had a break. The Malcolm Moore (1049 of 1943) spent time outside the goods shed and also time at the loco shed where it was used to assist the starting of the Kelly & Lewis loco. On Sunday, a special train cavalcade operated comprising a number of locos from the Museum. Departing at 3.35pm, the train consisted of the Kelly & Lewis loco, Fowler loco, large carriage (A), small carriage (B), Malcolm Moore loco, plus the Simplex and Waranga locos. The train, full of passengers in the two carriages, completed three circuits with this consist and arrived back in the platform with sufficient passen-

gers for a second trip at 3.50pm. All up the weekend was very successful and will no doubt be repeated next year. It is hoped that further visiting exhibitors will be able to attend. Those who may be interested in next years rally, should write to the Alexandra Timber Tramway PO Box 288, Alexandra, 3714. Peter Medlin 25/ 4/00

#### **BELLARINE PENINSULA RAILWAY, Queenscliff** 1067mm gauge

# **Geelong Steam Preservation** Society

Ex-Australian Portland Cement 0-4-2ST No.6 (Hudswell Clarke 646/1903) and ex-Pioneer Sugar Mill 0-4-2T KLONDYKE (Perry Eng. 271/1927) were among the five locomotives steamed for the Easter 2000 Steam and Railway Extravaganza. During this two-day event (22-23 April), eleven trains departed from Queenscliff for Drysdale or Lakers Siding each day. There were also trains operating on Good Friday (21 April)

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and Easter Monday (24 April). On the evening of Easter Monday, the Society hosted a tour group from the NSW Rail Transport Museum, which provided the opportunity for night running. The third stage of a Railtrail along the original VR branchline from Geelong to Queenscliffe was opened on 12 February 2000. It provides a high quality multi-purpose trail from the Geelong Showgrounds to the Ferry Terminal at Queenscliff. The last 16km between Drysdale and Queenscliff follows the BPR railway, so exhausted trail travellers now have the opportunity to complete their journey by steam train. GSPS Home Page, via John Browning 4/00; Aust. Rails to Trails No.22

#### PUFFING BILLY RAILWAY, Belgrave 762mm gauge **Emerald Tourist Railway Board** Restoration of 2-6-0+0-6-2 Garratt G42 (BP 6268/1925) has received a boost with a substantial donation to the cause. The Committee has allocated \$50,000 to fund a third

# SUNSHINE PLANTATION RAILWAY, Woombye, Qld

610mm gauge

Brian Webber reports on this operation which provides an interesting experience of a successful tourist railway operation. In this assessment of 'successful', Brian states that we should not just measure success of a railway by the number of passengers carried. Rather, success is related to what is meant to be achieved. In today's corporate language, that would be phrased as 'achievement of goals'.

The Sunshine Plantation Railway is operated by a company [ultimately Japanese owned] which has a series of attractions on a farm 'The BIG PINEAPPLE' near Woombye. The attractions have the theme of the crops and animals growing there with the public invited to pay to visit the various segments of the farm. One of the attractions is the cane train ride, a trip which involves travelling on the train around a continuous track of perhaps a kilometre which threads its way among the fields and animal pens and through a section



of forest. The farm is on the side of the hill as it once was a pineapple farm so the train travels slowly as it drops and climbs on the hillside. The BIG PINEAPPLE is very popular with many tour buses visiting and large numbers of tourists filling the extensive car parks. There is a large food outlet and souvenir shop on site. The train often runs full and does a circuit every half-hour or so, depending on demand. Passengers hear a recorded commentary on the crops, animals and plants to be seen as the train passes them. The train has few pretensions of authenticity with the locomotive only vaguely resembling a steam locomotive. However in its own way, the railway serves its purpose of providing an interesting diversion for passengers and a profitable venture for the owners. It is doubtful if the railway were made more authentic that it would attract or interest any more travellers. That is not to say that the railway is not educational; it is certainly not a merry-go-round or big dipper. The Sunshine Plantation Railway is at the opposite end of the authenticity spectrum to the heritage operations regularly reported in this section and probably attracts people with different expectations. However, it is well worth Brian Webber, 2/00 Photo: Brian Webber a visit and deserves its place on both the railway and tourism scenes.

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person to work on the locomotive for a period of 12 months. Work has commenced on the boiler at Jahco's workshop at Bayswater using ETRB staff. Swinburne College, Croydon has offered to make the cab doors using materials provided by the ETRB. In March, 2-6-2Ts 7A, 8A and 14A were in traffic, while 6A was being reassembled after restoration and 3A remained dismantled. The Board has initiated an advertising campaign for the PBR featuring 30-second commercials on country and metropolitan TV stations PBPS Members Newsletter, 4/00

# Tasmania

# BUSH MILL RAILWAY, Port Arthur 381mm gauge Bush Mill Steam Railway & Settlement

Tourism operators Alister and Caroline Matheson have put their steam railway and bush mill at Port Arthur on the market. They carved the award-winning tourist complex out of virgin waterfront bushland 21 years ago. The 381mm gauge railway is best known for the 1/2 scale replica of the world's first Garratt locomotive, the 0-4-0 +0-4-0 K1, which toured the United Kingdom in 1993 [LRN 95, p.15]. Mr Matheson said that after rebuilding the business in the three years since the Port Arthur massacre, it was now time for a change. In addition to the 2km railway and its two steam locomotives, the complex includes the steam sawmill and visitor centre, souvenir and gift shop, the Good Onya! Café, Matheson's Restaurant, an outdoor catering pavilion and five-bedroom house.

*Hobart Mercury*, 3 March 2000, via Lindsay Whitham

# MT LYELL ABT RAILWAY,

**Queenstown** 1067mm gauge Further to our report in LR 152 (p. 2-3), permanent way construction from the station to the workshops site at Queenstown has commenced. In April 2000, Hazel Bros were rebuilding Bridge No. 7 and were also working from Teepookana up to the Quarter Mile Bridge site. Ex-Mt Lyell Mining & Railway 0-4-2T Abt locomotives 1 and 3 are at Saunders Engineering in Hobart for rebuilding. This firm is also building the carriages for the new line. Rob Bushby, AusRail News Group, 9/4/00

# South Australia

PORT DOCK STATION RAILWAY MUSEUM various gauges A visit to the museum on 26 March found work underway on construction of six multi-gauge turnouts for the Commonwealth Railways Museum project. The Pichi Richi Railway Preservation Society was the successful tenderer for this contract. The dual standard/narrow gauge tracks between the existing pavilion and the new CR pavilion will demonstrate multi-gauge turnouts and will be operated by locomotives and rolling stock of different gauges. A number of industrial railway exhibits [see LR 141, p.26] are prominently displayed. Ex-ESTA 6wDH No.1 (Clyde 51-237 of 1961) is expected to be operational soon for standard gauge work, while ex-BHAS 0-6-0T PERONNE (AB 1545/1919) is available for narrow gauge operations. Ex-BHP Whyalla 4-6-0 No.4 (BLW 42142/1914) was displayed in the open near the workshop providing a good photographic vantage point, while ex-Silverton Tramway Company 2-6-0 Y12 (BP 3536/1893) located adjacent to the museum

entrance provided a suitable railway image to potential visitors. In the workshop, preparation of the ex-BHP Iron Knob Bo-Bo electric locomotive E1 (Metro Vickers 1928) for static display has commenced [see LR 149, p.31]. The Museum received Rail Safety Accreditation in February, facilitating the operation of its working locomotives and railcars. Editor, 3/00

# SEMAPHORE-FORT GRANVILLE TOURIST RAILWAY

# 457mm gauge

### Port Dock Station Railway Museum Inc.

This railway was enjoying good patronage on 26 March as an added attraction to a Kite Festival



Kelly & Lewis 0-6-0D 4271 of 1935 and Malcolm Moore 4wPM 1049 of 1943 outside the loco shed at Alexandra during the Easter 2000 Rally, 24 April 2000. Photo: Peter Medlin



Former BHP Whyalla 4-6-0 No.4 (Baldwin 41242 of 1914) on open air display at Port Dock Station Railway Museum, 26 March 2000. Photo: Bob McKillop



Murray Billett is one of the Port Dock Museum's most dedicated volunteers. Sunday 26 March, 2000 found him at the controls of 2-4-0 steam locomotive BILL on the Semaphore-Fort Granville Tourist Railway. Photo: Bob McKillop



Bennett Brook Railway: ex-WA PWD 4wD No.27 (Gemco 1964) on the inspection pit in the new workshop. Good facilities such as these are the hallmarks of the successful tourist railway. Photo: Lindsay Watson

at Semaphore. 2-4-0 BILL (Willis Eng. 43 of 1992) was handling trains and giving excellent performance. Owing to an extended hot spell in January, trains were unable to run for nine successive days due to the forecast 35°C temperatures in Adelaide, resulting in a tumble in Museum revenue. Some 4300 passengers were carried on the remaining 22 days in January and the total for the summer season was 11,000.

Editor, 3/00; Catchpoint 3/00

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# Western Australia

#### **BENNETT BROOK RAILWAY,** Whiteman Park 610mm gauge WA Light Railway Preservation Assoc. (Inc.)

The former Subiaco signal box was placed on its legs at its new home on Whiteman Village Junction station on 17 January 2000 and finishing touches are being made to this restoration project. The 'Dorman' 4wDH Planet locomotive previously used at the Boulder

Loopline Railway has been regauged to 610mm. However, the Society has experienced difficulty completing repair and maintenance work to return steam locomotives to service for the winter season. 0-4-2T BETTY THOMPSON (Perry 8967.39.1 of 1939) is receiving priority attention as it is in good condition, although corrosion in the water tanks remains a problem [see LR 150, p.39].

A costume theme party event, the 70s Something Night, held on 25

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March was most successful with over 300 people attending. The dance train decorated with party lights and headed by the John Fowler 0-6-0DH was crowded on every trip up to midnight.

BBR Newsletter, April 2000

# GOLDEN MILE LOOPLINE RAILWAY, Boulder 1067mm gauge

# Golden Mile Loopline Railway Society Inc.

While not strictly an industrial or narrow gauge operation, this tourist railway utilises the former WAGR suburban loopline that served the goldmines of Kalgoorlie and Boulder and provides an excellent vehicle for exploring the history of the Goldfields. Trains currently operate along a horseshoe section of the original loopline from Boulder station and out to the former township of Trafalgar, before returning to Boulder.

At a function on 30 March, the Loopline Restoration Project was launched and an agreement was signed between Kalgoorlie Consolidated Gold Mines Pty Ltd and the Golden Mile Loopline Railway Society. KCGM is to sponsor the reconstruction of the Loopline railway between Boulder and Hannan Street (Kalgoorlie), while the Society will allow the removal of most of the remaining southern portion of the railway between Boulder and Trafalgar, including the Kamballie station yard. A small section out of Boulder will be retained to a "Big Pit" lookout at the Chaffers power station site. Work on the new line is expected to commence in 2001, but restoration of the track to Chaffers may start in April or May 2000.

On 31 March, ex-WAGR Y-class Bo-Bo DE 1108 from Cohunu Koala Park near Perth was unloaded at Boulder Station to be the first 'big power' locomotive on the Loopline. 1108 is expected to be operational soon after delivery as apparently it does not need much overhauling. The society expects 2-6-0 G233 Leschenault Lady (Jas Martin 174/1898) to arrive later this year. Kalgoorlie Miner (various March/April issues), via David Whiteford.

