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Australia's Magazine of Industrial & Narrow Gauge Railways

LIGHT RAILWAYS



SPECIAL 40-PAGE ISSUE

Light Railway Research Society of Australia Inc.



LIGHT RAILWAYS

Australia's Magazine of Industrial and Narrow Gauge Railways

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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 metres
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

Welcome to Light Railways number 200. Almost 48 years have passed since issue number one appeared, under the then title of Quarterly Review.

As befits such a publishing milestone, this issue features contributions by three LR stalwarts. Firstly, by way of his late father's evocative colour slides, Phil Rickard takes us on a journey through some of the Society's early tours of the 60s and 70s. John Shoebridge tells the fascinating story of an early Australian-built locomotive and its operation on the Burwood Estate railways of Edward C Merewether. Then, *Light Railways*' original Editor (and LRRSA member No.2) Frank Stamford provides a wealth of new information on the subject of his grand obsession, the Powelltown Tramway's Baldwin 2-4-0 *LITTLE YARRA*. Plus, of course, LR wouldn't be LR without our regular News, Reviews, Letters and Research pages. Here's looking forward to LR number 250, and beyond. *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.

Light Railways is the official publication of the Society. All articles and illustrations in this publication remain the copyright of the author and publisher. Material submitted is subject to editing, and publication is at the discretion of the Editor.

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

Material is accepted for publication in *Light Railways* on the proviso 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: In 1974, inspired by his son's purchase of former Mourilyan Mill 0-4-2T number 7 (Perry 2714/51/1 of 1951), artist Phil Belbin produced two almost identical paintings depicting the loco in a typical North Queensland canefields setting. One painting remained within the family, the other was sold to Reader's Digest, who used it on the cover of their magazine in August of the following year, under the title 'Bringing in the Cane'. Although the scene was fictitious, with references coming from a number of sources, a former South Johnstone driver declared at the time that the countryside, the mill and the presence of a Perry 0-4-2T (of which his former mill had three) made the scene very evocative of South Johnstone in the 1950s. Upper Back Cover: The Water Wheel Creek Timber Heritage Experience, at Mawbanna in north-west Tasmania, features a working tractor locomotivehauled timber tramway (see LR 197, page 27). In November 2007, Mark Fry was on hand as the loco, trailing a load of logs, emerged from the forest and into the sunshine. Lower Back Cover: Bingera Mill's EM Baldwin B-B DH MIARA (8988.1 6.80 of 1980) makes smoke as it powers a rake of full cane bins from the old Gin Gin Mill area up to the underpass of the Wallaville-Bungadoo Road, 26 October 2007. This line is built on the formation of the former QGR Wallaville branch and was brought into cane railway use in 1975 following the closure of Gin Gin Mill. Photo: Lincoln Driver

Reminiscing Early VLRRS and LRRSA tours

Whilst it was in 1961 that the LRRSA in one of its earlier incarnations held its first tour (to Yallourn and Morwell to see the SECV's 90cm gauge electric railways), it was not until the society's first 'big expansion' years of 1967-70 that tours took place on a more regular basis.

Known at the time as the Victorian Light Railway Research Society, the first major tour was in May 1967 to see the SECV Rubicon and Royston hydro-electric scheme's 2ft-gauge tramways. Seven months later, on 2 December, a large group participated in the now-legendary 'Bump in a Bus' tour which visited sites associated with the Powelltown Tramway, in the Little Yarra Valley, east of Melbourne.

The following year, over the Easter long-weekend, a threeday hiking tour traversed the Ada River Valley, north of the Little Yarra Valley, inspecting sawmill and tramway remains. Two months later followed a visit to the private pleasure railway known as Whistlestop near Frankston. 1969 saw three tours -Cheetham's 2ft gauge saltworks' tramways at Moolap and Laverton plus the Truganina Explosives Reserve near Altona; the East Malvern Sewer tour; and in October, the State Rivers & Water Supply Commission's tramways at Tatura and Waranga, in the Goulburn Valley. 1970 brought with it five tours - another Yallourn and Morwell tour, a four-wheel drive tour east and north of Powelltown, a trip to the Lal Lal Iron Co's historic blast furnace and tramways (which hopefully helped develop members' interests in industrial archaeology and the place of railways in the wider scheme of things), the Sewer Tour No.2 and finally, in December, the first McIvor



Society members ponder the amount of fish and chips they would need in order to use this amount of salt. Moolap saltworks. 1 March 1969.

tour to look at remains of the McIvor Timber & Tramway Co's 5ft 3in gauge firewood lines in Central Victoria.

A keen particant on many of these early tours was the late Lionel Rickard, using an OlympusPen S Half-Frame camera with a Zuiko 30mm f2.8 lens, a handy small camera that did the job fairly adequately. Whilst half-frame slides were only half the size of normal slides the advantage was that you got twice the number for the same price! *Phil Rickard*



Cheetham Salt Ltd., Laverton saltworks. VLRRS el-cheapo do-it-yourself special train using one of Cheetham's Simplex diesel locos. The site of the former Laverton salt works is now the Sanctuary Lakes housing development at Point Cooke and there is very little sign of the once extensive salt works tramway system. 1 March 1969.





4

Above: Prior to visiting Cheetham's Moolap saltworks on 1 March1969, a call was made to the recently-formed Geelong Steam Preservation Society's railway at Belmont Common where a track had been laid using ex-Fyansford cement works equipment. Here we see a rather disreputable ex-Australian Portland Cement No.6, a 3ft 6in gauge 0-4-2ST built by Hudswell Clarke, their No. 646 of 1903. The GSPS later moved to Queenscliff and now operates the Bellarine Peninsula Railway, using the formation of the closed VR branch line. Left: 1 March 1969 Cheetham Salt's Laverton saltworks used low-lying ground close to the shores of Altona Bay, adjacent to Point Cook. The salt pans were extensive and parts were far from the works buildings. This interesting vehicle is thought to be Cheetham's version of a mobile dunny, this being the deluxe model with water trough attached. Readers' confirmation sought. This would make a delightful addition to any model railway. Below: Saturday, 1 March 1969, at the Cheetham Moolap saltworks. A Ruston & Hornsby locomotive hauls a long train of wooden box trucks to the works from the salt pans that skirt the southern shores of Stingaree Bay, the southern extension of Corio Bay, to the east of Geelong.





Top: Carbon and its carriage doing a VLRRS trip on the Whistlestop pleasure railway near Frankston, on the rather gloomy afternoon of 25 May 1968. Ex-West Melbourne gasworks 2ft 6in gauge locomotive Carbon was built by the Belgian firm of Hainault at Couillet. No.986 of 1889. Whistlestop comprised a lengthy track around a lake and through bushland - it is all under urban housing now! The loco is presently housed on the Puffing Billy Railway. Right: Powelltown sawmill 2 December 1967. Victorian Hardwood Co's 6-wheeled, chain-driven rail tractor with a Fordson kerosene engine. This machine is of indeterminate origin. Whilst it has Malcolm Moore counterweights at each end of the frame, it may be a Day's Engineering product, much-rebuilt. Retained by the VHC when all other locomotives were disposed of after the war, it shunted the mill yards until about 1965. It is now preserved at the Upper Yarra Valley Historical Society's museum in Yarra Junction. Below: The first McIvor tour. Bridge remains at Majors Creek just to the east of Triangle, about 13 miles north of McIvor Siding, 13 December 1967.







Above: At the Ada No.2 mill, one of the most venerated relics was found at rest. The classically-shaped saddle tank of the VHC's Andrew Barclay 311 of 1888, a diminutive 0-4-2ST locomotive known affectionately (or derogatively) as 'Squirt', seen here on 2 December 1967. A recent visitor to the site could not find it - any further information gratefully received. Top right: Wheels in Ada River. To cross the Ada River, from the bottom of the High Lead incline to the Ada No.2 mill, a lengthy bridge was constructed in the mid-1920s. From either end of this quarter-mile-long bridge, inclines rose to the north and to the south and it is not hard to imagine where any runaway trucks would come to rest! This set of wheels was one of several noted in the chilly waters of the Ada River, on 2 December 1967. Right: On the four-wheel drive tour to Powelltown and the Ada Valley, on 12 April 1970, a high trestle bridge was still intact on the Federal tramway near Starlings Gap. Below: On the same day, participants on the four-wheel drive tour to Powelltown and the Ada Valley inspect a winch to the north of Ada No.2 Mill.







Above left: On the four-wheel drive tour to Powelltown and the Ada Valley, on 12 April 1970, trouble was struck in the vicinity of Ada No. 1 Mill, but with many willing assistants we got through! Above right: Waranga Reservoir, 4 October 1969. Before OH&S and PLI nuined life and made people unfit, LRRSA members were an inventive lot and never needed much encouragement to conduct 'do-it-yourself' rail specials. Here we see a few members pushing a flat truck up to the main line (the high-level in the background) preparatory to a bit of brisk after-lunch exercise. Below: Waranga Reservoir, 4 October 1969. This small diesel locomotive numbered 18-C-25 was owned by the State Rivers & Water Supply Commission and used on the maintenance tramway at Waranga Basin Reservoir between 1959 and 1994. Superseding horse traction, the locomotive was constructed by George W Sewell of Footscray, and consisted of a skip frame with a petrol engine driving the axles via roller chains. The original engine was replaced by a Petter diesel in 1971-1972. It is now preserved at the Alexandra Timber Tramway & Museum. Here we see it outside its engine shed, below the dam wall.



A locomotive named BURWOOD

by JW Shoebridge

Introduction

For some 15 years, the author has been conducting research into the mines around Merewether, a suburb of Newcastle, New South Wales. In the process, a considerable amount of new information has come to light regarding the local industrial railway system, its locomotives and the environment in which they worked.¹

This, the first of two articles, sets out the little that is known regarding the locomotive named *BURWOOD* that holds pride of place as the first locomotive to be built in Newcastle. The subsequent article will cover the history of the locomotive named *NEWCASTLE* that worked on the same system, although under different ownership.²

The Burwood Estate inheritance

From 1835 onwards, Dr James Mitchell, a one-time British Army surgeon, purchased land to the south of Newcastle which he named the Burwood Estate. Eventually the estate, including leasehold lands, encompassed a total of 2300 acres (931 ha) and contained some 13 kilometres of railways, a copper smelter, coke ovens, numerous coal mines and brickworks as well as an experimental porcelain factory.³

For a time he exploited these assets by means of the Newcastle Coal and Copper Company (NC&C Coy) and the Burwood Coal Company, but by the time he died in 1869 most had failed and his estate was burdened by considerable debt.

Mitchell's widow, Maria, died in 1872 and the Burwood Estate eventually passed to their daughter, Mrs EC Merewether. Her husband, Edward C Merewether, was then able to assume effective control and set about restoring the property from virtual bankruptcy.⁴

EC Merewether ⁵

Edward Christopher Merewether was born in 1820 in London, where his father was prominent in the legal profession. He attended Oxford University, and then in 1841 followed one of his cousins to New South Wales where family connections obtained him the post of Aide-de-camp to the governor. Subsequently he occupied a number of public service posts before becoming Clerk to the Executive Council.

Merewether married Dr Mitchell's elder daughter, Augusta Maria, in 1860 and in the following year, he accepted the position as General Superintendent of the London-based Australian Agricultural Company (AA Coy). This necessitated a move to Newcastle where the couple built a home, *The Ridge*, which still stands on high ground overlooking the city.

In 1872, when Merewether took charge of the Estate, its industry was at a standstill. The principal coal mines had closed, the Victoria Tunnel in 1863 and Burwood Colliery in 1869. The recently-rebuilt smelter was idle, the coke ovens cold, and the porcelain factory abandoned as an expensive fiasco. Burwood Estate remained encumbered by mortgages totalling $\pounds 27,000$ with its only income derived from the rent of household plots and a few small brickyards.⁶ By fortunate chance, the same year, he was able to lease certain coal rights to his employer, which they worked via their new Hamilton Pit.⁷ With an income thus assured, Merewether resigned his employment in 1876 and continued negotiations with local business interests to let the mining rights beneath the remainder of the property. Eventually these came to fruition and in time three large collieries were established on his land.⁸ He moved to the Sydney suburb of Bondi leaving his Agent (and cousin) Robert Scott to attend to the day-to-day business at Burwood.⁹

Burwood Estate railways

For some twenty years, Edward C Merewether had absolute control of all land, mineral rights and improvements in an area extending south from the Lake Macquarie Road (the presentday Glebe Road) to Glenrock Lagoon and from the seafront, west to Adamstown (around present-day Bryant Street).

Except perhaps for John Brown, the author can not bring to mind any other instance in Australia, where an individual owned and operated his own private locomotive on his own railway system. Indeed, although operating rights were over the years leased to others, ownership of the railways themselves remained with the Merewether family until 1958.¹⁰

In 1872, the railways associated with the Burwood Estate, consisted of a main line, from The Junction into Newcastle, fed by two subsidiary lines, one from the Victoria Tunnel colliery in the Glebe Valley and the second coming from Burwood Colliery at Glenrock.¹¹ This latter line, referred to variously as the 'Red Head' or 'Coastal Railway', ran right along the seafront, passing through two timber-lined tunnels. In addition to Burwood Colliery, for a time it also served a bank of coke ovens and a copper smelter.

There had been two earlier 'tramroads' on the Estate, one from Donaldson's Tunnel, the second from J&A Browns' mine. Both led to The Junction, but by the time of Merewether's accession, they were long out of use and dismantled.

Rail traffic

Although no coal had been won from the Victoria Tunnel itself since 1863, the Glebe Railway remained open to allow access to the engine shed and workshops. There was still a small amount of traffic on this line from local brickyards, two of which had their own sidings, whilst on the Red Head Railway, one or two small coal mines generated spasmodic business. Such trains as were run were worked by the two Neilson 0-4-0ST



In 1841, the year of his arrival in Australia, young Edward Merewether posed for this watercolour & pencil drawing by artist William Nicholas. Mitchell Library, State Library of New South Wales



locomotives inherited from the defunct Newcastle Coal and Copper Company and driven by George Wardell, who had been with them since they first arrived in 1857.

As an interim measure Merewether let out both the Victoria and Burwood mines on tribute and by the end of 1872, he had also leased out the copper works and the coke kilns.¹² These activities generated a little more traffic, which at times the railway struggled to handle, hampered by the run-down state of the engines and rolling stock.

In 1875 he leased 700 acres of virgin coal rights to the newly formed, Newcastle Coal Mining Company (NCM Coy), which proceeded to establish a new mine at the head of the Glebe Valley, close to the venerable Victoria Tunnel. In June the following year he sold them the two Neilson locomotives along with some 120 coal wagons, previously owned by Mitchell's Burwood Coal Company.

Merewether still had to run and repair the Red Head Railway and for a time he was able to hire back one of the engines at £5 per month.¹⁴ Around this time, the Estate had commenced the commercial sale of sand and this traffic had also to be worked from the 'Sand Siding' near Merewether Beach, to The Junction.¹⁵

As part of their lease agreement, the NCM Coy had the rights to operate the Glebe Railway and the Burwood Tramroad. The combined line was now generally referred to as the Newcastle Coal Company's Railway and they ran their own trains over it from the mine to an exchange siding situated between Blane and Lower Church Streets in Newcastle.¹⁶ As production increased, the NCM Coy board made the decision that they required both locomotives:

...owing partially of the late breakdown of the No 1 Engine and to the deficient repairs of both, the Board is of the opinion that to ensure punctuality in the haulage of coal it is necessary to retain the two.¹⁷

Thus the No 2 Engine that had been on hire to the Burwood Estate, was recalled in May 1877.¹⁸

Proposal for a new locomotive

Having foreseen such a situation, Merewether had already taken steps to acquire his own motive power and in late 1876, he had called on James Rodgers, a Newcastle engineer, in answer to the following:

In the event of your deciding to get another Tank Locomotive Engine, may I ask the favour of being allowed to submit a tender to make and supply one similar in size and design to those in use on the Burwood Line or larger. I have just imported steel tyres to match them and if there was no immediate hurry, could send home by the next mail for the patterns and tracings from Neilson and Coy of Glasgow who are the makers. Kindly inform me if you come to any decision and oblige.¹⁹

The letter carries an annotation in Merewether's hand :-

Recd, 16th, Saw him same day and asked him to send in a Tender.' As requested, Rodgers submitted his quotation on 28 February 1877 and on June 20 he received an order to build a small,

four-wheeled saddle tank locomotive.²⁰ The agreed price was \pounds 1350 with an advance payment of \pounds 100 to accompany the order.²¹ Merewether had earlier approached the NSW Railways asking that one of their engineers be permitted to oversee the building of his locomotive.²² When this was not approved, it was arranged that 'young Alexander Brown' and Alexander Patrick, would jointly supervise the workmanship and progress.²³

JS Rodgers and the Newcastle Foundry

Archibald Rodgers, trained as a blacksmith, had set up an Iron Works and Foundry in Newcastle in 1854. His sons, James and Alexander, took over the business in 1869, trading as Rodgers Brothers. Their father continued as a consultant but died after a work accident in 1870.²⁴ Three years later the partnership was terminated and James carried on as sole proprietor, trading as 'JS Rodgers, The Newcastle Foundry'. Alexander continued to pursue similar business interests.²⁵ James Stuart Rodgers had served his time in the works of PN Russell and Company in Sydney and was for a time employed by the Australasian Steam Navigation Company's works at Pyrmont before joining his brother in the family firm. Rodgers constructed all types of mining, industrial and marine machinery including coal hopper wagons. They also repaired, brokered and hired locomotives, but as far as is know, this is the only one actually built by the firm.²⁶

The Newcastle Foundry was located fronting Lower Church Street (now King Street), eventually occupying the whole block between Burwood and Auckland Streets, with a portion extending through to Blane Street.²⁷ No close-up photograph of the exterior has come to light, but one of the firm's advertisements includes an engraving showing coal hoppers under construction, and the apparent course of a siding onto the Burwood line. Contemporary correspondence confirms the regular use of the Estate's railway: ²⁸

We respectfully make application to you to allow us to load four engine turntables and two boilers on the Burwood Line and allow us to run two wagons to the GN Railway on the same conditions as before; ie: not to interfere with the working of the line and to be responsible for damage done to same by us.²⁹

Before the order was even formalised, the first signs of cash-flow problems arose with Rodgers writing to Merewether:

I purpose sending home next mail a Cash Credit to enable my Agent to draw upon me for materials for the construction of your Locomotive. I have sent him $\pounds 100$ two mails ago. But this will not be sufficient. Will you one day early next week kindly appoint a day to close the contract and advance me the first deposit to enable me to do the above.³⁰

Merewether did as he was asked, and even added a further \pounds 150 to the deposit but by January 1878, it had become obvious that Rodgers had seriously underquoted on the job and there followed a series of (sometimes desperate) letters seeking progress payments to maintain liquidity:

I have been very much occupied during the last fortnight in pushing my men with the Locomotive and have made very considerable progress. If you could kindly see your way clear to let me have another $\pounds 100$ to enable me to meet wages on Saturday next I should feel extremely obliged. I think that the result of an inspection from your overseer in a day or so would amply justify you in so doing.³¹

Delivery

At last the locomotive was completed and was handed over in July 1878, with the event being described in the *Newcastle Morning Herald* as follows: ³²

New Locomotive

On Saturday last there was turned out from Newcastle Foundry a specimen of the capabilities of the firm in the shape of a locomotive tank engine, that is not only a credit to the engineering skill of Mr JS Rodgers, but an exemplification of what can be done here if sufficient inducement is offered.

This is the first locomotive engine that has been made outside of the metropolis, and was constructed to the order of EC Merewether Esq, for the purpose of removing the immense deposits of sand which have drifted from the sea shore on to that gentleman's estate.

The engine will be employed at present in running to Redhead, but will doubtless be made use of, and do good service should Mr Merewether decide on opening up his Redhead coal seams, which are known to be equal to any in the district.

The dimensions of the engine are as follows:- Diameter of cylinders: 12 inches, length of stroke: 18 inches, diameter of wheels: 3ft 6 ins, capacity of tank: 700 gallons

The boiler is constructed of the best Lowmoor (iron) boiler plates as are the axles and all the working parts, which are also case hardened. The firebox of the boiler is made of copper, and the tubes are of solid drawn brass. There are two injectors (colonial made) each of which is capable of supplying the boiler with water. All steam and feed pipes are also of copper and brass.

In fact all the materials are the very best of their respective kinds and the workmanship displayed is first class.

On her trial trip on Saturday, the engine worked smoothly and well and was immediately employed removing trucks full of sand, by Mr Merewether's engineer, Mr Patrick, under whose superintendence the locomotive has been constructed.

The final payment was not made until September 1878, with an additional sum of $\pounds 61$ 6s 1d being invoiced for the following extras: ³³

Large brass dome casing (in pencil: "not to exceed $\pounds 6$ ")

 $2 \times No 5$ injectors in place of $1 \times No 6$; with all cocks etc fitted. Cedar awning and iron posts above coal box. Hand rails on each side of tank.

1 headlight ("Bright Light") and brackets for same.

Bessemer Steel piston rods. Brass guide on slide rod. Cast steel "Tap" on sludge hole.

A ¼ in footplate fitted either side, stiffened with angle iron

From the context of surviving correspondence, it appears these changes were made without approval of the client, but with the principal aim of turning out a finished product of which Rodgers could be proud. They were eventually accepted by Mr Merewether who paid for them without demur.

Sandy Patrick

Alexander ('Sandy') Patrick, mentioned above, was Merewether's 'engineer', and jack-of-all-trades, a long-serving and trusted employee of the Burwood Estate. He was born in Lanarkshire, Scotland, a nephew of James and Alexander Brown the coal entrepreneurs.34 His family migrated to Victoria around 1854, later moving to Minmi where he and his brother John were employed at the colliery. Alex eventually became a locomotive driver and, after his marriage in 1860, lived in a company cottage on School Hill. He came to Merewether's service around 1872, succeeding George Wardell as the estate locomotive driver. Paid a wage of 10 shillings per day, his name regularly appears in correspondence related to the operation and maintenance of the railway.35 By 1879, now described on the pay sheet as 'overseer' on a salary of 11 shillings per day, he was living a comfortable lifestyle, rent-free in one of the former colliery cottages adjacent to Glenrock Lagoon. Allowed the upkeep of a horse, he grew fodder on an adjoining lot and in 1885 Mrs Patrick was permitted to open a small shop.36

Over the years we find Sandy working the trains, fixing the engines, timbering the tunnels, repairing the viaduct, examining underground workings, supervising railway repairs and road construction, sinking shafts and patrolling the property.

Patrick left the residence at the Lagoon in 1904 and moved to his own house near The Junction. Henceforth he supervised the gangs engaged in filling the swamps and constructing streets preparatory to land subdivision. He retired in 1917 on a small allowance from the Estate and died the following year.³⁷

BURWOOD commences work

Before the engine arrived, a supply of coal was ordered from Gulliver's Colliery, along with the necessary tallow, kerosene and 'artificial grease' from the same John Gulliver.³⁸ There were already a coal stage and water tanks at The Junction and a watering point at Glenrock.

The little locomotive was named BURWOOD, and as noted above, was straight away set to work removing the windblown drifts that were encroaching onto the line all along the ocean front. The sand was hand-filled into trucks and as the



This venerable builder's photograph is the only known image of BURWOOD.

Photo: ARHS nsw Railway Resource Centre

sleepers were thus uncovered, many were found to be in need of replacement. Supplies were ordered and this work was combined with the sand clearance program, the urgency of the task being emphasised on a number of occasions in Estate correspondence.

The sand, along with any clay or brick traffic offering, was handled in the Estate's own low-sided open trucks. Described in the office ledger as 'B' trucks, they had dumb buffers and a capacity of five tons.³⁹ So far neither the number of these vehicles nor their origin has been determined, although some appear to have been built on coal truck frames at the time when copper ore was being handled.⁴⁰

As noted above, the 120 coal hoppers inherited from the Burwood Coal Company had all been sold to the NCM Coy, so whenever coal was moved, one or two of them had to be borrowed back.⁴¹

Hire of *BURWOOD* to the Newcastle Coal Mining Company

Although the NCM Coy now owned two locomotives, both were in need of repair and in turn they were sent off for overhaul at Messrs Morisson and Bearby's Soho Foundry at Carrington.⁴² Stuart Keithley, the General Manager of the NCM Coy, accordingly wrote to Merewether in September 1878 seeking to hire *BURWOOD*:

In keeping with the verbal understanding between you and I arrived at on Saturday afternoon last that I should write to you officially respecting the loan to this Company of your Loco Engine in cases of emergency when it may be spared by you. I have now on behalf of this Company to offer you two pounds (£2) per day for every full day the Engine may be used and one pound (£1) any half day only the engine may be used by us. We to find the coals free of cost to you and you the driver free of additional cost to the Company.⁴³

Thus despite the urgency of sand clearance, on several occasions during the following twelve months, the little locomotive was away, filling-in during situations such as that described in the following letter from the NCM Coy's mine manager, Alexander Ross: 44

The fire box on our locomotive is leaking in one or two places at an old patch and also at another place where the iron has become very thin - this compels us to put her into Mr Rodgers' hands. I have again (to ask) if you will kindly allow your locomotive to do our running for a few days during the time the repairing is being done ie should trade demand it - it is thought there will be very little work this week so that your loco may not have much to do.⁴⁵

By this means the NCM Coy struggled on until the end of 1879 when their brand-new Beyer Peacock locomotive *NEWCASTLE* arrived from England allowing *BURWOOD* to return to full-time work on the line. The story of *NEWCASTLE* will be the subject of a subsequent article in *Light Railways*.

In 1883, the Newcastle Wallsend Coal Company sought to hire *BURWOOD* for three months to assist in the duplication of their main line.⁴⁶ Although he maintained a good relationship with the colliery manager, John Y Neilson, Merewether declined to permit it being away for such a long period and in the end the job was done using horse teams:

I don't see how we can let the engine to the Wallsend Coy, I want Patrick to get on with the blinding and now is the time to push the work... I have not heard from Binney but if he writes the reply is NO. Let them buy or hire the Newcastle Coal Coy's loco, it is for sale.⁴⁷

Hire of *BURWOOD* to the Burwood Coal Mining Company

Merewether continued his efforts to find a lessee for the remainder of his coal property, and by August 1883, he had succeeded in attracting a group of Sydney-based investors headed by the Cowlishaw brothers, notable for their extensive interest in mining properties near Newcastle. In August, he wrote to Scott: ⁴⁸

He (Cowlishaw) purposes taking some of those who are to join with him down to Newcastle next week and wants us to let him have the loco to take him and them out to the Lagoon The party apparently liked what they saw, even expressing their pleasure at the train ride along the sea front.⁴⁹

Shortly after, the Burwood Coal Mining Company Limited (BCM Coy) was formed to work coal beneath the remaining 1000 acres of Burwood Estate. It also agreed to rent 24 acres of surface land adjacent to the old Burwood Colliery and with it the operating rights over the 'coastal railway' between the mine and The Junction. Robert L Simpson came from Greta as their colliery manager to sink shafts down to the Borehole seam, at the same time overseeing repairs to the bridges and tunnels along the railway. The 260 or so tons of old rails were sold as scrap and the BCM Coy engaged a contractor to relay the track.

Realising that the speedy completion of this work would serve his own interests, Merewether now made no demur when asked to loan *BURWOOD* to assist.⁵⁰ Indeed, the hire rate was reduced to $\pounds 1$ per day. Patrick went with the engine, being strictly enjoined by his employer to see that it was not misused or overloaded. An additional charge of 12s per day was made for his services, whilst the BCM Coy agreed to provide the coal as well as the services of a cleaner and a 'stoker'.

Once coal production commenced in October 1884, haulage duties increased and so did the hire rate, with an agreement now reached permitting *BURWOOD* to continue on loan until the end of the year but with a charge of three pence now payable on each ton hauled. Although at times, this returned up to \pounds 35 per week, the additional workload led to conflict between Patrick and the irascible Simpson, a feud which simmered on until Simpson moved on to Victoria at the end of 1885, and leading Merewether at one time to exclaim in despair: "What on earth can Simpson and Patrick find to quarrel about now ?"⁵¹

February arrived with Patrick and *BURWOOD* hard at work on the coal traffic and still no indication that the BCM Coy had any intention of obtaining their own locomotive. Merewether became impatient and instructed Scott that all outstanding debts, including monies owed for locomotive hire, should be settled. He specially noted that the absence of Patrick and his charge had 'sadly interfered with work on the sand'

At long last, in June 1885, the BCM Coy negotiated to purchase the locomotive NEWCASTLE from its original owners and it now ran their coal trains. BURWOOD was occasionally sought after in emergencies but before long, however, relations between Merewether and the BCM Coy had become even more strained and the correspondence contains not only references to the hire of the locomotive, but also to its loan being denied:

In your letter of 23rd you say Pendleton wants to hire our Loco. I do not know whether you have promised it but if you have not and the application is still pending, you may tell him that I decline most positively to let it to the Coy on any terms nor will I depart one hair's-breadth from any of the conditions of the Lease until they have settled for all that they have had from us and are still owing for. I hope you have not promised the engine and I beg that henceforth you will concede nothing of any kind nor refer any such application to me. Refuse them at once and as shortly as words can do it.⁵²

These tactics appear to have achieved the desired result, with a later entry in the cash book confirming the receipt of back payment owing for 31 days of locomotive hire. At times, however, commercial reality intervened, although Merewether's feelings are clearly evident in a letter to his son in January 1891:³³

I do not half like letting the loco to the Burwood Co, no doubt it is a gain to get something out of it but I am afraid they will run it to death unless they are well looked after so Patrick must keep his eyes open upon them. If they make any demur to paying $\pounds 2$ per day close the offer forthwith.⁵⁴

On this occasion, the coal company made other arrangements and the matter was not pursued.

Engine shed

In 1879, the Burwood Estate architect had prepared plans for an 'engine house' to be built at Glenrock.⁵⁵ For some reason nothing was done, and so far there is no indication where *BURWOOD* was initially stabled.⁵⁶ With the coming of the BCM Coy, Merewether and Simpson proposed that they jointly share a two-road shed to house both their locomotives. The timber to build it and the bricks to line the ash pit were set aside from the derelict smelter buildings. A site was selected which Merewether offered, rent free until such time as he had no need to own a locomotive, and after that for a nominal sum.⁵⁷

The matter was put before the BCM Coy directors who rejected the proposal, considering that their locomotive should be housed closer to the colliery. However, in return for certain property concessions, they eventually agreed to build a separate shed for *BURWOOD* together with a small blacksmith's forge.⁵⁸ Tenders for both jobs were called, and at last, in 1885, a small loco shed was erected just outside the colliery yard, close to the Patrick residence.⁵⁹ Photographs indicate that there were doors at either end and that it was accessed via a single siding off the main line. The smithy appears to adjoin the southern side of the main building .

Trains for picnics and feasts

Dr Mitchell, through his Burwood Coal Company, had allowed the running of special trains to convey picnic parties from Newcastle to the Smelter Paddock and Glenrock Lagoon.⁶⁰ These excursions were popular with both church groups and the general community and Mr Merewether permitted the privilege to continue.⁶¹ A privilege it was, and permission was not to be taken for granted, however, with a written application required on each occasion.

It was a cheek in Mr Gregory asking for the trucks to have a pic-nic at Redhead. The enquiry reads as if he thought he had quite a right to go to Glenrock and only needed permission to use the trucks. Please refuse everybody any similar request and tell Patrick to do the same on the grounds that I decline to lend the trucks to anyone for such a purpose unless the application is made to me and in writing.⁶²

The Estate's four-wheeled open trucks were used on these excursions, fitted with temporary seating, and on most occasions, the use of the trucks was approved, but not the locomotive.

On one occasion in 1881, Patrick heard that arrangements had been made to hold a picnic at Glenrock with the church assuming, without formal application, that permission to use the train would be forthcoming. This information was passed to Scott, who wrote to Merewether.

I hear today that St John's Sunday School class say that they are going to have their picnic out at Glenrock and not only that but that they are going out in the Engine and trucks. As that was the first that I had heard of the matter I told Patrick not to let them have the trucks and if they walked out to Glenrock, then to send them out of the paddock unless they produced an order from you giving them permission. I heard that they had applied to you but I doubt it .⁶³

The letter continued to the effect that some persons had stated that if permission was refused, they would be happy to go to Waratah instead where there was a public house nearby. Four days later Rev Corlette sent a last-minute letter.

The teachers of St John Sunday School have requested I ask your permission to hold their Feast next week at Glenrock and whether you could kindly allow your engine and trucks (they could procure additional trucks from the railway authorities) to take the children there and back ⁶⁴

After consideration, Merewether replied, enclosing a cheque for two guineas and confirming

I have written to Arthur Corlette saying that they may hold the Feast in Glenrock Paddock and have the use of the trucks if they employ

Horse Traction but that I decline to lend the Engine on account of the risk of accident that the use of it entails. I have alluded to the damage and mischief at the place done by a previous picnic party and begged that he will see that nothing of the kind occurs on this occasion.⁶⁵

Again, on another occasion

So as to Bowtell's pic-nic, you do not say whether you allowed him the Engine or merely gave him permission to pic-nic in the paddock. If the latter it is all right and I am content, but it is a dangerous thing to lend the Engine especially as money appears to have been paid, and you had better, if any similar request is made in future to say "NO" absolutely... we might get into much trouble if any accident happened. Give them leave to use the paddock but refuse the Engine. Patrick can keep the $\pounds 2$ and welcome but I would rather not have it get abroad that such use could be had for money, it must be granted as a pure matter of grace and favour without charge.⁶⁶

This generous policy appears to have been maintained and over the years there is no evidence in the Estate accounts that a charge was ever levied for the running of trains for schools or churches. Some of these excursions were indeed large affairs. In March 1881, the local school picnic at The Smelters required three train trips each way to handle the 800 or so people who attended. Merewether later noted with some astonishment

Patrick at it all day... yet not one of the youngsters was killed or injured.⁶⁷

At times, a degree of subterfuge was necessary to maintain consistency. Thus whilst the Junction Independent Cricket Club was freely permitted to hire two trucks to convey their bats, balls and bails to a picnic at the Smelter paddock, a request from the Clan McDonald Caledonian Society seeking the use of the engine and two trucks to take them, cabers, bagpipes, haggis and all, to Glenrock was refused. However a marginal note on their letter in Merewether's hand reads

Will not hire loco but Patrick & George may use and invite friends.⁶⁸ On many occasions the use of the engine was left for Patrick to decide, so long as it did not take him from his duties.

Eventually, in 1889, Merewether's apprehensions were proved correct when a picnic outing was marred by a fatality. On Saturday, 23 February, David Read aged 51, left his home in Merewether to look for work at the new mines being opened around Dudley. Walking home that evening he joined up with a picnic party returning from a day out in the Smelter Paddock. Their train comprised two open trucks propelled by the locomotive. Read perched himself on the rear end of the leading truck, and as the train moved off, he overbalanced and fell backwards between the vehicles. Several ladies screamed and the train was stopped 'almost immediately'. The driver (unnamed, but presumably Patrick) found Read between the rails and apparently dead. The body was taken on to The Junction where a doctor certified death from a fractured skull and lacerations to the throat. A verdict of accidental death was later returned.69

Day to day working

The lease signed with the BCM Coy allowed Merewether to run his locomotive between Burwood Colliery and The Junction as and when he pleased. How any degree of safe working was maintained remains a mystery but there are no surviving records of *BURWOOD* being involved in any accidents or confrontations.

Merewether also appears to have retained running rights on the NCM Coy's main line right into Newcastle. At times this involved delays to coal traffic and the correspondence files contain several references to the problem. Consequently from 1882 onwards, would-be hirers were advised that the Estate trains would not go north of The Junction.⁷⁰ This rule was not hard and fast. In June 1884 the Burwood United Cricket Club advertised that their picnic train would commence in Newcastle, at Tattersall's Corner (now the corner of Hunter and Darby Streets), and pick up passengers 'all the way to Glenrock'. As it so happened the outing was cancelled due to rain. Held the following weekend in Riley's Paddock, it was voted a huge success with some 150 persons attending.⁷¹ On Easter Monday in 1887, the same club ran a similar train, and the surviving correspondence confirms that on this occasion, a personal approach had been made to Mr EA Merewether and to the managers of the NCM Coy and the BCM Coy.⁷²

Less well documented is the use made of the locomotive to convey the residents from the small settlement at Glenrock to The Junction. On the southern shore of the Lagoon there were four substantial brick cottages, together with several smaller houses on the northern bank.⁷³ One of the former was occupied by the Patrick family, the other three by colliery employees. According to anecdotal accounts, residents were taken shopping, and schoolchildren were run to and from the Junction School each day on the footplate.⁷⁴

Sandy Patrick similarly travelled to his work most days on the engine and Mr Merewether made regular inspection trips and at times 'engined out' with visitors to the mine. On one such occasion he wrote to Scott⁷⁵

I will go [from the ship] straight to the Great Northern [Hotel] and leave my traps and be at the office by 10am and will go out with you to Flaggy. Will you warn Patrick to have the Engine at the office at that hour.⁷⁶

It appears that Patrick himself maintained the locomotive using the small workshop beside the engine shed. Blacksmith Jonathon Rees assisted with forge work and for heavy jobs, one of Rodger's fitters was hired by the day. Given the proximity of the Newcastle Foundry, visits were made there as required and the Estate accounts contain a number of references to payment to Rodgers for repairs to the locomotive and trucks. On one occasion there was a hint of dissatisfaction with the workmanship:

Patrick must do what is necessary to the engine but Rodgers must not pile it up too heavily as it appears his men broke the cylinder top.⁷⁷

Of interest is a mention in the ledger regarding the fitting of three funnels to the engine within two years which no doubt has something to say regarding the state of the roof timbers in the coastal tunnels! 78

Miscreants

Throughout the years, Merewether and his employees fought a running battle with those who would steal his soil and timber and graze their animals on his land. This gave rise to a deal of local animosity, especially towards Sandy Patrick. By 1881 the problem had escalated to the extent that he was issued with a revolver and ammunition to carry whilst working alone.⁷⁹ At times the railway became involved in the ensuing 'guerilla' warfare.

In January 1881, Patrick and his wife were returning to Glenrock on the locomotive when they encountered a portion of a sleeper laid on the rail near 'the dark turn in the Big Tunnel'.⁸⁰ Patrick had previously found a rail chair keyed upside down atop the rail in the same place, and thus was proceeding slowly. Although *BURWOOD* was not derailed, it 'gave a great jerk' and gave Mrs Patrick such a fright that 'she has not been well since'.⁸¹ Robert Scott placed an advertisement in the newspaper offering a ± 5 reward for information. When the incident was reported to Merewether, he considered the matter sufficiently serious to increase this to ± 50 .⁸² Even this very considerable sum failed to reveal the culprits, although Merewether made clear he had a fair idea who they were.⁸³ The same month 'larrikins' emptied the water cask belonging to the 'small engine' at Glenrock, stole the copper waste pipes from the cylinders and 'did other small mischiefs'. At Scott's request, Constable Porter, the local policeman, investigated, but to no avail.⁸⁴

In another incident in January 1883, Patrick was taking the engine down the 'main road in the Sand Paddock' and as it was rounding the curve 'just where the Beach Siding turns off', he noticed that the keys had been taken from one rail and thrown onto the beach, 'evidently for the purpose of throwing the engine off the road'.⁸⁵ In this case, Patrick was able to stop in time. With no damage done and commenting that 'the brutes always hang together', Merewether decided no reward should be posted. Some time later, in the same vicinity, trespassers ran several trucks off the line and otherwise damaged the machinery. This time Scott did offer a reward, but again, apparently to no avail.⁸⁶

Special constables ('rangers') were employed: initially Sullivan, then Caldwell in 1881 and later Thompson. They patrolled the railway, impounded straying cattle, herded errant pigs and shot the goats.⁸⁷ They also collected rents and in their spare time cut up fallen timber for sale as firewood.

Tunnel fatality⁸⁸

The railway to Glenrock ran through two timber-lined tunnels, the first to be driven in New South Wales. The shorter No. 2 tunnel, gave few problems but the No. 1 or 'Long Tunnel', some 500 metres in length, was a constricted, dark and dangerous place, requiring constant maintenance. It was the scene of several fatal accidents.

The victim in one of these was George Brightmore, who lived alone in a shanty near Glenrock. One afternoon in August 1879, returning home somewhat the worse for drink, he followed his accustomed route along the railway and into the tunnel. It was a cold wet evening and, safely out of the rain, he sat down for a rest and fell asleep.

At the inquest Patrick gave evidence that he and George Lindsay were coming from their work on *BURWOOD* around five o'clock. Before entering the tunnel, he sounded the whistle and 'leaned over the engine as far as he could' to look ahead.⁸⁹ He saw something by the track but, as he had previously noted a small fall of stones at this spot, he continued, assuming that it was the same obstruction. Feeling a bump, he stopped the engine, lit the lamp and went back to see what had happened. Lindsay confirmed Patrick's statement, adding that he felt the engine lurch then heard cries and curses.

The two men took Brightmore on the engine back to The Junction and sent for Mr Merewether who had the victim placed in his own carriage, then accompanied him to Newcastle Hospital. Here he was admitted to the care of Dr Knaggs, but despite (or perhaps because of) the amputation of both his mangled feet, he died two days later.

Sale of BURWOOD

Towards the end of 1889, Merewether realised there was little need to have his own engine and accordingly it was advertised for sale during November, as follows:

FOR SALE BY TENDER: Small LOCOMOTIVE ENGINE. Stroke 18 in. Piston 12 in, Wheels 3ft 6in. Fitted up with injector, copper firebox and stays.

For details: Edw. A. M. MEREWETHER

Burwood Office Frederick Street Merewether.

For a time there were no takers and things appear to have remained as they were, with *BURWOOD* making the daily school and shopping trips and moving a little fill or chitter to reinforce the embankments or cover the sand hills. Six years on, in August 1895, the 'Machinery' column of the Sydney Morning Herald carried an advertisement inserted by Messrs RG Watkins and Company of Kent Street Sydney who sought to purchase a 'small four-wheeled tank locomotive'.⁹¹

By now, Edward C Merewether was dead and his eldest son, Edward A M Merewether, had full control of the Estate. Shortly afterwards the locomotive was sold for $\pounds 380$ to Watkins and Coy, with the actual transaction in the ledger reading $\pounds 400$ less 5 per cent commission as agreed.^{'92}

BURWOOD left Newcastle by ship, with the Government Railways rendering an account headed 'Charges for taking the locomotive to the Dyke.' The payment of $\pounds 3$ 8s 9d was duly approved and a cheque forwarded in settlement, and so without ceremony, Merewether's little engine departed the scene. The loco shed at Glenrock remained intact for some years, its eventual fate unknown.⁹³

With the locomotive gone, the Glenrock residents reverted to their horse-drawn trolleys to travel to town, with the (now) Merewether Estate hiring Tom Stewart's horse as required to move the small amount of traffic to and from the sand siding.⁹⁴ By 1905, Tom Howley's 'Coffee Pot' locomotive was handling this work with the Estate billed accordingly.⁹⁵

Subsequent history

The ledger entry noted above would indicate that Watkins and Coy were buying on commission for another party, possibly Messrs Wilcocks & Firth, who were at that time engaged as contractors on the Lismore-Tweed railway.⁹⁶

BURWOOD was recorded in use by G Wilcocks on breakwater construction at Harrington during 1899.⁹⁷ Wilcocks had taken over the contract after Granter & Coy abandoned the job. He fared little better and defaulted in 1900. His plant was acquired by the NSW Harbours and Rivers Branch of the Public Works Department (PWD) and, between 1904 and 1908, the little engine was back near Newcastle, working on the Swansea training walls at Reid's Mistake.⁹⁸

After this job was completed the trail grows cold, although *BURWOOD* is believed to have been included in the PWD plant register and allocated the number 20.⁹⁹ Railway historian JLN Southern suggested it was cut up for scrap around 1914.

Conclusion

These notes contain all that has at present been unearthed regarding this most enigmatic locomotive. There were rumours that some plans had survived amongst Rodgers Bros files but these have not been located. Similarly, despite a search of Local History, Mines Department and Merewether family records, the only known photograph of *BURWOOD* is that taken when the engine was delivered.

In a following article the history of the engine named NEWCASTLE will be examined in detail.

Acknowledgments

Assistance from my friends, Brian Andrews, John Browning, David Campbell, Dennis Hinchcliffe, Bruce Macdonald, Ron Madden, John Merewether and John Rodgers in the preparation of this article, has as always, been readily forthcoming, and is most gratefully acknowledged.

Dedication

Mr EJ Merewether died whilst this article was in preparation, and I respectfully dedicate it to the memory of our friendship and to his considerable interest in, and assistance with, my researches.

Notes and References

1. Today, Merewether is a beachside residential suburb of Newcastle, along with The Junction, and (the) Glebe. In earlier times the locality also included such areas

as Burwood, Racecourse, Potteries, Sandhills and Smeltings. 2. Drawn from Shoebridge, JW, 'Dr Mitchell's Coalfield', unpublished

Drawn from Snotentage, J.w., Dr. Witchell's Controlst, unprovided manuscript (in progress).
 The name 'Burwood' came from Mrs Mitchell's family home in England, of which the house still exists (2007) as an old peoples' home near Heathrow Airport.
 As NSW Law then stood, a married woman could not control real property.
 Information on Merewether from Smith CE, "Dr James Mitchell". Newcastle

City Council 1966.

6. Equivalent in today's terms (2008) to around \$3million .

Equivalent in today's terms (2008) to around \$5million.
 The AA Company built a short extension from their Borehole No.2 Pit railway to serve the Hamilton (or 'H') Pit.
 These were the Newcastle Coal Mining Coy's "A" and "B" Pits and the Burwood Coal Mining Coy's Burwood Colliery.
 Much of the correspondence quoted in this account is addressed to, or originates from Content.

from, Scott

10.Via the Merewether Estate, which in 2007 still exists as a legal entity. 11. In legal terms these were the 'Newcastle-Burwood Tramroad', the 'Glebe

Railway' and the 'Red Head Railway'.

12. The revival did not last long. The copper smelter closed in 1873, Burwood colliery in 1874 and the coke works in 1875.
13. This was the NCM Coy's 'A' Pit.

14. Burwood Estate cash book: Sep 1876; Newcastle Library, Regional History collection.

15. This sand pit (aka 'The Sand Hills') occupied the present-day site of the Dixon Park subdivision.

16. Newcastle Morning Herald, 3 May 1877. Blane Street was the former name of Hunter Street and there was a second siding here for landsale coal.

17. Burwood Estate inward correspondence 23 April 1877. Newcastle Library, Regional History collection.

18. Burwood Estate inward correspondence 23 April 1877. Newcastle Library,

 Burwood Estate inward correspondence 14 Sept 1876. Newcastle Library, 19. Burwood Estate inward correspondence 14 Sept 1876. Newcastle Library, Regional History collection. This letter sheds a new light on the design of *BURWOOD*.
 Burwood Estate outward correspondence 20 June 1877. Newcastle Library. Regional History collection.

21. Burwood Estate cash book Jun 1877. Newcastle Library. Regional History collection.

22. Burwood Estate inward correspondence 8 Mar 1877, Newcastle Library, Regional History collection. The gentlemen nominated was Mr J Boag, then GNR Locomotive Foreman at Honeysuckle. 23. 'Young' Alexander Brown, trained by the AA Coy, was formerly the C&C

Coy's foreman mechanic at Victoria Tunnel where he would have had supervision over their two Neilson locomotives. He subsequently joined his father as partner in the City Ironworks in Sydney. Alexander Patrick was the Burwood Estate engineer and overseer.

24. He contracted tetanus after his hand was crushed by a section of bridge caisson. 25. The very successful Acme marine oil engine was for many years built by Rodgers Bros in Newcastle. The family firm still operates (2007) in the district as a machinery hire supplier.

26. AA Coy outward correspondence 1 Jan 1878.

27. The postal address was Blane Street. A portion of the site was acquired in 1927 It is not clear if the siding was permanently connected or perhaps there were

some form of 'jockey points'

29. Burwood Estate inward correspondence 11 Aug 1875, Newcastle Library, Regional History collection.

30. Burwood Estate inwards correspondence 10 May 1877. Newcastle Library, Regional History collection. Merewether agreed and added an additional £150 to his deposit.

31. Burwood Estate inward correspondence 29 April 1878. Newcastle Library, Regional History collection.

32. Newcastle Morning Herald 17 July 1878.

33. The delay appears to relate to a 'guarantee' period. 34. Patrick's mother, the eldest of the Brown girls, had remained in Scotland with her husband, when the rest of the family emigrated to Newcastle. 35. Burwood Estate cash book: Dec 1872. Previously (Aug) he is noted: 'repairing

 Burwood Estate outward correspondence 8 Jan 1885. Newcastle Library, Regional History collection. Glenrock Lagoon had become a popular local picmc spot. 37. Newcastle Morning Herald: 27 May 1918. (Obituary)

38. As well as owning a small colliery and a brickyard in the Glebe Valley, John Gulliver had a general store in Lake Macquarie Road. He was generally in arrears

with his rent which may be why these items were purchased from him. 39. Burwood Estate cash book February 1887. Newcastle Library, Regional History collection.

40. It is my belief that there were only five or six of them.

41. Burwood Estate inward correspondence 6 September 1884. Newcastle Library, Regional History collection. For short time, to maintain lease conditions, Merewether operated his own coal mine ('Patrick's Tunnel') on the northern

shore of the lagoon. 42. Newcastle Coal Mining Coy Bi-Annual Report: June 1877. Newcastle Library, Regional History collection.

43. Burwood Estate inward correspondence 26 Sept 1878. Newcastle Library, Regional History collection.

44. Burwood Estate cash book Nov 1878. Newcastle Library, Regional History collection. 45. Burwood Estate inward correspondence 21 October 1879. Newcastle Library,

Regional History collection. 46. Burwood Estate inwards correspondence 13 March 1883 Newcastle Library,

Regional History collection.

47. EC Merewether private correspondence 20 Mar 1883. Newcastle Library, Regional History collection. Binney was the Secretary of the Newcastle Wallsend Coal Coy. 'Blinding' means 'Ballasting'.

48. EC Merewether private correspondence 9 Aug 1884. Newcastle Library, Regional History collection. 49. With which Merewether disagreed, quoting the deteriorated the state of the

track around the headland. 50. Burwood Estate outward correspondence 16 Aug 1884. Newcastle Library,

Regional History collection. 51. Burwood Estate outward correspondence 6 Mar 1885. Newcastle Library,

Regional History collection. 52. EC Merewether private correspondence 29 Dec 1886. Newcastle Library, Regional History collection. Pendleton was by now the colliery manager of

Burwood Colliery and the BCM Coy were well behind in royalty and rental payments. 53. Merewether's Agent, Robert Scott, died in November 1890, and his eldest son,

Edward AM Merewether was now in charge of the Burwood Estate.

54. EC Merewether private correspondence 12 Jan 1891. 55. The architect was Fredrick Reuss Jnr and the plan survives in the Merewether Estate Archives in the Newcastle City Library.

56. Burwood Estate outward correspondence 2 Oct 1884.. Newcastle Library, Regional History collection. Merewether states he proposes to build an engine shed and pit but makes no mention of any temporary arrangements. One plan shows an uncaptioned siding near the lagoon viaduct and I suspect this may have been a

possible location. 57. Burwood Estate outward correspondence 8 Nov 1884. Newcastle Library, Regional History collection.

58. In correspondence this is referred to a various times as a 'blacksmith's shop', a workshop' and a 'store room'

59. Newcastle Morning Herald 21 Mar 1885.

60. It is suspected but not confirmed that the Coal and Copper Coy initiated this practice. They certainly ran passenger trains to bring their employees to town on pay days and to church on Sundays.

61. Thomas Howley similarly allowed the tradition to continue and such trains ran until the late 1930s.

62. EC Merewether private correspondence 3 Jan 1879, Newcastle Library, Regional History collection.

63. Burwood Estate outward correspondence 10 Oct 1881. Newcastle Library, Regional History collection.

64. This is one of several references to Government trucks running on the line. Also they appear in some later photos. 65. EC Merewether's private correspondence 14 Oct 1881. Newcastle Library,

Regional History collection.

66. EC Merewether's private correspondence 8 Jan 1886. Newcastle Library, Regional History collection.

67. For many years there was still a public hall at this location. Also BURWOOD and train could be stowed on the old works siding, clear of coal traffic. 68. Burwood Estate inward correspondence 11 June & 18 Oct 1878. Newcastle

Neurastle Morning Hendl 25 Feb 1889, quoting Coroner's Court proceedings.
 Surprisingly I can find no mention of the accident in the Estate correspondence.

70. Burwood Estate outward correspondence 28 Aug 1882. Newcastle Library,

70. Burwood Estate Ollection.
71. Newcastle Morring Herald 7-9 Jun 1884.
72. Burwood Estate inward correspondence 15 Mar 1887. Newcastle Library, Regional History collection. The Merewethers', father and son, were keen cricket

supporters. 73. One of the brick buildings, much altered, still remains as part of the Scout Association complex.(2007).

74. Mr A Kembry from Telarah, writing to the Newcastle Morning Herald in 1939 (reference misplaced).

75. Mr Merewether's own expression!

76. EC Merewether's private correspondence 20 Mar 1881. Newcastle Library, Regional History collection.
77. EC Merewether's private correspondence 23 Nov 1883. Newcastle Library,

Regional History collection.
78. In 1884 and again in 1885.
79. EC Merewether private correspondence 9 June 1881. Newcastle Library, Regional History collection.
80. Alternative correspondence 9 June 1881. Newcastle Library, 80. Alternative correspondence 9 June 1881. Newcastle Library,

80. Although the tunnel was originally driven in a straight line, earth movement and subsequent re-timbering over the years had led the bore to take a pronounced curve. 81. Burwood Estate outward correspondence 19 Jan 1881. Newcastle Library,

Regional History collection. 82. A considerable sum indeed, equivalent to around \$5000 in today's terms!

83. Although Merewether now resided in Sydney, he had lived among his tenants for many years and retained a most amazing knowledge of their individual

foibles. 84. Constable Porter was a regular recipient of an annual gratuity from the Estate

for his diligence. 85. Burwood Estate outward correspondence 15 Jan 1883. Newcastle Library,

Regional History collection.

 Newcastle Morning Herald 14 Aug 1885.
 Burwood Estate cash book Oct 1883. Newcastle Library, Regional History collection. Goats were a special problem, denuding the stabilising vegetation on the sand dunes.

88. Neucastle Morning Herald 21 Aug 1879.

Neukastle Morning Herala 21 Aug 1879.
89. This would imply the engine was travelling funnel-first.
90. Neukastle Morning Herala and Sydney Morning Herald 9 Nov 1889.
91. Sydney Morning Herald 1 Aug 1895, Placed by RG Watkins & Co. Machinery and Metal Merchants, 8 York Street Sydney.
92. Confirming that Watkins and Co were buying on commission for a third party.

93. It is visible in one photo said to be taken in 1914. 94. Merewether Estate cash book Mar 1896. Newcastle Library, Regional History collection.

95. By now known as the Merewether Estate.

96. R Madden Personal communication. 97. Also spelt 'Wilcox' in some references

98. J Webber, railway historian, unpublished notes, Newcastle Library, Regional History collection. 99. JLN Southern, railway historian, unpublished notes, Mitchell Library, Sydney



The Baldwin catalogue illustration of LITTLE YARRA.

Photo: Frank Stamford collection

LITTLE YARRA

by Frank Stamford

Recently thanks to the efforts of early-US locomotive enthusiast and researcher David Fletcher, a number of new facts have emerged about the locomotive *LITTLE YARRA*, which add to and correct many of the details given in the book *Powelltown* (pages 97 and 139). Amongst other things, David has been able to find the original builder's specification, but unfortunately so far all efforts to find a general arrangement drawing, or any other form of overall scale drawing have proved fruitless.

LITTLE YARRA was a 3ft gauge 2-4-0 tender locomotive built for the Victorian Powell Wood Process Ltd for use on the Company's Yarra Junction – Powelltown Tramway, 65km east of Melbourne. It was built by the Baldwin Locomotive Works, Philadelphia USA, having their builder's number 37718 of 1912. In the book *Powelltown* it was said that *LITTLE* YARRA did not appear to be a stock type, but was designed for the Company's requirements. This is not correct. It was a standard design, which appeared in Baldwin's catalogues over a period of years, the 6-14C class. The catalogue listed a range of 2-4-0 tender locomotives available for either 3ft or one metre gauge, with tractive efforts ranging from 3480lbs to 11,590lbs. The 6-14C was about the middle of the range, with a tractive effort of 5880lbs.

Baldwin catalogues list a wide range of classes of locomotives as being available, but that does not mean that many examples were actually built. In the case of the 6–14C class, only 12 were built, and this over the period 1874 to 1929, with various gauges from 5ft to 2ft 6in.

The appearance of a Baldwin locomotive was largely defined by its Drawing Number. The Drawing Number in effect referred to the standard General Arrangement drawing to be used for the locomotive. On the side of the drawing would be a schedule, listing 20 to 30 cards, which referred to common components, such as cylinders, stacks, wheels, cabs, etc. This arrangement of standard drawings, cards, and components enabled Baldwin to build what were seemingly 'one-off' locomotives very quickly. With *LITTLE YARRA* the order was placed in April 1912, the locomotive completed two months later, and delivered to Yarra Junction ready to run early in October 1912.

In the case of the 12 examples of the 6-14C class, six different drawing numbers were used (see list). Baldwin uniquely identified every locomotive within a class by a Serial Number following the Class Number. *LITTLE YARRA's* Serial Number was 8, hence it was uniquely identified as 6-14C 8. It had a second unique identifying number, the Builder's Number, or Construction Number 37718. Baldwin's lists of locomotives built within classes survive, and show the purchaser of the locomotive, but they are handwritten and often indecipherable. Unfortunately these lists do not show the Builder's Number, but by cross-checking with the complete Baldwin construction list it is possible to deduce the builder's number.

LITTLE YARRA was built to Drawing Number 5. Only one other 6-14C class was built to this drawing. It was builder's number 37693, a 3ft gauge locomotive for the United Fruit Company of Cuba. However this order must have been cancelled, and the locomotive was changed to metre gauge and supplied to Brazilian agents Alencar Lima & Co. in April 1912. The locomotive eventually became No.7 of the Viação Ferrea Federal l'Este Brasileiro (VFFLB). This railway, which operated in the Brazilian state of Bahia, was previously known as Cia. Chemins de Fer Federaux du L'Est Brésilien - a Frenchowned company¹, before becoming the VFFLB in June 1934 when it was taken over by the state. At that time the VFFLB had about 1866 km of track and 138 steam locomotives, including seven Baldwin 2-4-0 locomotives of varying sizes. Unfortunately the VFFLB is not widely known, even by railway enthusiasts in Brazil, and I have not been able to find any photographs of No.7 in service, nor its ultimate fate, but it does not appear amongst the lists of known surviving Brazilian steam locomotives.

So LITTLE YARRA was not unique, there was one other loco that was almost identical. The differences were that 37693 had a Radley & Hunter spark arrestor stack (as on Puffing Billy's Climax 1694), a larger firebox grate area, MCB knuckle couplings instead of the Norwegian choppers fitted to *LITTLE YARRA*, and a much larger eight-wheel tender with twice the water capacity of *LITTLE YARRA* (1600 gallons compared to 800). The livery of 37693 was a standard Baldwin livery of the time (style No.285), basically Ivy Green (including the wheels and frames) with gold lining, with an unpainted 'planished iron' boiler jacket. Planished iron was a heat and pressure treated iron in the natural colour of shiny gun-metal grey. As we shall see, *LITTLE YARRA's* livery was very different.

LITTLE YARRA and 37693 were probably built in parallel. Design and specification work on 37693 started on 27 March 1912, and on LITTLE YARRA only five days later.

One other locomotive was very similar to *LITTLE YARRA* but was built to Drawing Number 6, a more modern design with steel cab and Walschaert valve gear. It was metre gauge and built for Recreio, Cia Minas, of Porto Alegre, Brazil in 1929. The three other 3ft or metre gauge 6-14C class locos were built from 1887 and 1891, to Drawing Number 2, and no doubt displayed a more 19th-century appearance. Drawing Number 4 was a 2ft 6in gauge version of the 6-14C class, four examples of which were built between 1911 and 1916. They went to Cuba and San Domingo (now the Dominican Republic). I surmise that they were an outside-framed version of *LITTLE YARRA*.

The only other 6-14C class were genuine one-offs, a 5 ft gauge example built to Drawing No.1 in 1874, and a 3ft 9¼ in gauge one built to Drawing No.3 in 1901. However for the latter one, the only entry in the Baldwin construction list that closely matches it is a 2-4-2 of 3ft 10in gauge. It is possible that "2-4-2" is a typographical error.

Other Baldwin narrow gauge 2-4-0s

As mentioned previously Baldwin offered a wide range of 2-4-0 locomotives, with the 6-14C being about the middle of the range. So photographs exist of locomotives which have an overall similarity to *LITTLE YARRA*, but lack the proportions; they may be shorter, fatter, skinnier or longer, and on any gauge from 2ft to at least 5ft. Only nine of the next smaller size – the 6-12C with 9 x 16in cylinders, were built, none of which were of 3ft gauge, and two of which were of metre gauge for Brazil. The next larger class – the 6-16C with 11 x 16in cylinders, was much more popular with 34 built, only one of which was of 3ft gauge, for Central America, and 11 were for metre gauge.

The first Baldwin narrow-gauge 2-4-0s were of 3ft gauge for the Denver & Rio Grande Railway. They were built in 1871. Their driving wheels were of 3ft 4in diameter (compared to *LITTLE YARRA's* 3ft 1in). In all other dimensions they were slightly smaller. They were the D&RG's first passenger locomotives, but very few were built, 4-4-0s and 2-6-0s quickly becoming more popular for passenger trains. In fact, up to 1890, the total number of 3ft gauge Baldwin 2-4-0s built for US common carrier railways was only six.²

These, and all subsequent Baldwin narrow gauge 2-4-0s had two interesting features. The first was that the valve-gear eccentrics were on the leading axle, not the same axle as the connecting rod cranks. This was because the firebox and ashpan were around the rear axle. The valve gear faced backward, not forward.

The second was that they had a three-point suspension system. There was a rocker beam between the two drive axles, with the whole loco swinging forward onto the pilot axle, supported

Serial No.	Purchaser	Gauge	Fuel	Date of delivery
Drawin	g Number 1:			
1	Pensacola & Perdido RR, Florida [C/n 3557]	5ft	Wood	May 1874
Drawin	g Number 2:			
2	Altamont Coal Co. (Kentucky ?) [C/n 8781]	3ft	Soft coal	Oct 1887
3	Hipolito Dumois & Co. (Cuba) [C/n 10868]	3ft	Soft coal & wood	April 1890
4	Hemenway & Browne (Chile ?) [C/n 11601]	3ft 3¾ in	Soft coal	Jan 1891
Drawin	g Number 3:			
5	Areata & Mad River Railroad, California [probably C/n 18564 3ft 10in gauge 2-4-2?]	3ft 9¼	Soft coal	Jan 1901
Drawin	g Number 4:			
7	Bartram Brothers, probably for Quisqueya Sugar Co. "Canutillo" [C/n 36762]	2ft 6in	Hard coal	Aug 1911
9	Bartram Brothers for Quisqueya Sugar Co., San Domingo [C/n 42481]	2ft 6in	Hard coal	Sept 1915
10	Domingo Ramirez Cuba No.2 [C/n 43959]	2ft 6in	Coal & wood	Sept 1916
11	Porcella Vincini & Co. San Domingo, probably Quisquera Plantation Co. No.8 [C/n 44230]	2ft 6in	Wood	Nov 1916
Drawin	g Number 5:			
6	United Fruit Co. Cuba Alencar Lima & Co. [C/n 37693]	3ft 3ft 3% in	Wood	May 1912
8	Newell & Co. for Victorian Powell Wood Process Ltd Australia [C/n 37718]	3ft	Wood & coal	June 1912
Drawin	g Number 6:			
12	Recreio, Cia Minas; Porto Alegre, Brazil No. 101 [C/n 61161]	3ft 3¾ in	Brazilian coal	Dec 1929
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by a sliding block. It was based on the three-point suspension system of the classic American 4-4-0. This was very effective. In *LITTLE YARRA's* case, it was able to venture to the far end of the Powelltown Bush line, where – due to their weight – even the Shays could not go until the bridges were upgraded. This was quite an achievement, for the far end of bush line was sharply curved, very rough, with stub points, and a wide variety of light rails. It also had a 1 in 19 grade leading up to the tunnel. The only other locomotives that could do this were the 4-ton 0-4-2T 'Squirt', and the 8-ton 0-4-0T 'Coffee Pot'.

Dimensions

My interest in (or obsession with?) LITTLE YARRA goes back to 1954, when at the age of nine I first saw the photo below, which shows my father standing next to the loco at Powelltown in the early 1930s. More than anything else it kindled my interest in timber tramways. Around February 1958, I set out to get as much information as possible on the Powelltown Tramway, with the intention, amongst other things, of finding or recreating scale drawings of the locomotives. LITTLE YARRA always presented insuperable problems in trying to create a drawing which captured its character. It has taken 50 years to find out why! Some of the key published dimensions were wrong. In particular the rigid and total wheelbase was always quoted incorrectly. No one actually checked it with a tape measure when the locomotive still existed.

The leading dimensions are shown in the table at right. For comparison I have also included the Victorian Railways 2ft 6in gauge ^NA class, and *POWELLITE* (Bagnall, Builder's No.1965 of 1913) the locomotive with which *LITTLE YARRA* shared the main-line work.

Of these dimensions, the total wheelbase has always been quoted incorrectly as 14ft 4in; the rigid wheelbase has been quoted as either 7ft or 8ft 6in, (both are wrong); the leading

Dimensions	LITTLE YARRA	VR ^N A	POW- ELLITE
Wheel arrangement	2-4-0	2-6-2T	0-6-0
Pony wheel diam.	2ft	26 0¼in	-
Driving wheel diam.	3ft 1in	3ft	2ft 6in
Rigid wheelbase	6ft 3in	8fi	9ft
Total wheelbase, loco	12ft 4in	21ft 10in	9ft
Tender wheel diam.	2ft	-	1ft 9½in
Total wheelbase, engine and tender	30ft 11½in	-	24ft 5%in
Boiler pressure	160psi	180 psi [†]	160 psi
Cylinders, diam. & stroke	10 x 16 in	13 x 18in	11 x 16½in
Tractive effort	5880lbs	12,168lbs†	80001bs
Weight, roadworthy, loco and tender	23t 4cwt	34t 7cwt	
Maximum axle load	6t 5cwt*	9t 9cwt	

* Assuming the weight on the driving axles was evenly divided.

† 1A's original boiler pressure was 160psi and the tractive effort 10,816lbs.

Data for LITTLE YARRA is from the Baldwin catalogue, and confirmed from the Baldwin specification; for the VR ^NA from EA Downs, Speed Limit 20; and for POWELLITE from the builder's pipe diagram for the loco.

wheel diameter quoted wrongly as 2ft 4in; the tender wheel diameter quoted wrongly as 1ft 10in; and the driving wheel diameter usually quoted correctly as 3ft 1in; but (inexplicably) as 3ft 6in in *Powelltown*, page 139 (I do not know where I got that figure from, but all the others have been quoted consistently



LITTLE YARRA at Powelltown, circa 1932. The author's father, Laurence Stamford is inspecting the loco.

Photo: Reg Stamford



Direct side-on views of LITTLE YARRA are rare. This one helped to confirm the dimensions of the loco wheelbase. Photo: Frank Stamford collection

in articles published in 1916, in the 1930s, 1940s and 1960s!). It appears that the figures quoted in *The Railway Magazine* article of 1916 were always taken as gospel, and have been thus repeated ever since.

As a result of the availability of the correct specifications, and using his extensive knowledge of Baldwin narrow gauge locomotives, David Fletcher has been able to recreate a scale drawing of *LITTLE YARRA* using the information available: key dimensions and many photographs.

Livery

In the book Powelltown the original livery is given as red, with white lining and black trim. This was based on The Railway Magazine article of 1916, and the memory of Jack Saxton and others who worked with the locomotive from about 1915 to the early 1930s. Jack Saxton described the locomotive as "reddish brown". He also accurately described the livery of POWELLITE at that time, as deep green with lining, which is in agreement with all other sources. In an interview with Jack Saxton. I was able to rate his memory as very reliable, based on many other facts that I could corroborate from other sources. However in the article in The Locomotive magazine of December 1915 the livery is given as unlined black. I dismissed this is as incorrect, because there was no other supporting evidence, and many photographs taken at that time showed that the statement was at least half wrong - the locomotive and tender was definitely lined at the time of delivery, and for some years after. In the case of the tender, photographs show that the lining and painted name LITTLE YARRA survived until at least about 1920. A very good photograph of the locomotive in near-new condition at Yarra Junction can be found on page six of the LRRSA's book Arsenic and Molasses.

However, the Baldwin specifications shows that the loco was to be painted in Style 229: black with gold lining; including a black painted boiler, and the lettering was to be gold, lined with red. The 1915 article in *The Locomotive* stated that major overhauls on the locomotives were done by the Victorian Railways at Newport. Since *POWELLITE* would have been less than two years old when this article was written, it is unlikely that it would have been there for major overhaul at that time. But it was apparently assembled at Newport prior to delivery to Powelltown in 1914. *LITTLE YARRA* was probably due for an overhaul shortly after *POWELLITE's* delivery, as it must have been very intensely used from the time of its delivery in October 1912, including work on the tramway's construction, and was on its own for much of that time.

This puts the question of the locomotive's original livery in doubt. To many this may seem a trivial detail, but it is a problem for anyone wanting to build a model of *LITTLE YARRA*, and there are many who do!

The following are possibilities (and I emphasise they are only possibilities), with either the third or the fourth being the most likely, as these two theories fit most of the written, photographic and oral evidence.

1. The specifications changed and Baldwin painted the loco red, and the article in *The Locomotive* got the colour wrong and details of the lining wrong. (Since it also got many of the dimensions wrong this seems possible). The only problems with this theory are that Baldwin would normally annotate such a change on the specification sheet, and red was not a colour that they normally used on locomotives. However late in 1911 they built twenty DD class locomotives for the Victorian Railways, and if these were delivered complete the VR presumably would have required them to be painted Canadian Red.

2. The loco was delivered black, with lining, and *The Railway Magazine* got the colour and lining details wrong, and Jack Saxton's memory of the loco's colour was wrong and *The Locomotive* got the colour right, but was wrong to say it was unlined!

3. The loco was delivered in black with lining, and within a few years was sent to the VR for overhaul. Baldwin paint finish did not weather well, apparently, so the VR may have repainted it in VR Canadian Red livery, and carefully reproduced the Baldwin lining and lettering on the tender. The VR would certainly have had the skills available to do this, and up to about 1922 the VR did not paint their own locos black.

4. The loco was delivered in black with lining, and within a few years the loco alone, but not the tender, was sent to the VR for overhaul. The VR may have repainted the loco in Canadian red whilst the tender remained in lined black livery.

There seems to be no doubt on the livery of LITTLE YARRA



SPECIFICATIONS:

GAUGE: 3FT CLASS: 6-14-C - DRAWING 5 TENDER: DRAWING 858 RIGID WHEEL BASE: 6' 3" TOTAL WHEEL BASE: 12' 4" WHEEL BASE ENGINE & TENDER: 30' 11 1/2" WEIGHT IN WORKING ORDER: 33,000 lbs TRACTIVE EFFORT: 5880 lbs BOILER PRESSURE: 160 lbs CYLINDERS: 10 X 16" DRIVING WHEELS: 37" PILOT & TENDER WHEELS: 24" TENDER CAPACITY: 800 Imperial GALS PAINTING: BLACK & GOLD, STYLE 229









VICTORIAN POWELL WOOD PROCESS LTD BALDWIN 6-14-C (8) - LITTLE YARRA CONSTR. NO. 37718 - 1912





in later years, after it had lost its cowcatcher, bell, kerosene headlight, and painted name on the tender. It was reported by John Buckland as being unlined green in the 1930s, and by WRB Johnson as newly overhauled and freshly painted green in 1940. As for the shade of green, movie films show the Shays in a green not unlike the foliage of the gum trees, presumably *LITTLE YARRA* was painted with the same paint.

Performance

The Baldwin specification sheet for LITTLE YARRA said that the sharpest curve on the Powelltown Tramway was 11°, compensated, (this is slightly less than 8 chains radius, or 158 m), the steepest grade 1 in 40, and the rails 40 pounds per yard. These figures would apply to the Yarra Junction – Powelltown section, as the curves and grades beyond Powelltown were much more severe. The loco was required, for passenger service, to haul trains of 55 tons at an average speed of 15 mph "throughout", including a grade of 1 in 40 which had compensated curves of not less than six chain radius. As a comparison, 55 tons was the load limit for a VR ^NA class locomotive between Gellibrand and Beech Forest, which had continuous 1 in 30 grades on curves of less than three chains radius.³

In almost all major dimensions affecting performance, LITTLE YARRA was about half the size of an ^NA. The tractive effort (at 85% boiler pressure) of LITTLE YARRA was 5,880lbs, compared to 11,490lbs for 1A (which had a boiler pressure of 160psi, the same as LITTLE YARRA), and 12,980 lbs for the other ^NAs, which had a boiler pressure of 180psi. The ^NAs would have needed double the power to cope with the long stretches of 1 in 30 grades and numerous sharp curves found on most VR narrow-gauge lines.

At 6% tons the maximum axle load of LITTLE YARRA was much lighter than the 9% tons of the ^{N}A , making it suitable for 40lb rail and lighter bridges.

The specification sheet tells us the cab was made of wood, with "crystal plate glass windows". The kerosene headlight had a 12-inch diameter reflector, and came complete with six headlight chimneys and 12 wicks! The front engine truck was designed to swing three inches each side of centre. Like the locomotive, the six-wheeled tender had a form of three-point suspension, with the leading wheels working in pedestals, and the rear four in an arch bar bogie. Baldwin provided the same arrangement on the tenders of the VR's successful 5ft 3in gauge W class 4-6-0 locos 32 years earlier. Steam and handbrakes were provided on all driving wheels, and hand brakes on all tender wheels. The "painting [was] to receive particular attention as loco will be ready for immediate service on arrival inVictoria". *LITTLE YARRA* was designed to burn wood or coal, but "chiefly hardwood blocks" and no brick arch was fitted in the firebox.

In the Powelltown Tramway's busy days up to the late 1920s LITTLE YARRA was normally used on the 'passenger trains'. These were the trains that appeared in the Victorian Railways timetables, and included either one or two passenger cars. But they were really mixed trains, and included a variety of 5-ton and 3-ton trucks. Five-ton trucks were mainly used to carry general freight, whilst 3-ton trucks normally carried sawn timber. In the busy days of the 1920s LITTLE YARRA's train would usually be as heavy as the loco could pull. But the main burden of timber haulage fell to POWELLITE, which was more powerful, running timber trains day and night to carry the loading. And if all the timber had not been cleared by the end of the week, a Shay would be called upon to run a long train on a two-hour journey to Yarra Junction on Saturday afternoon.

LITTLE YARRA was easily the fastest of the Powelltown tramway engines, and on several occasions it was called on to make a mercy dash to Yarra Junction, either to take in an injured person, or to fetch the doctor. In one case, it did the 10½ miles in 20 minutes. Nearing Yarra Junction LITTLE YARRA's whistle would be blown to warn the doctor he was needed – and on arrival at the station the doctor was usually already waiting.

For light trains, *LITTLE YARRA* was more popular with drivers, as it had a spacious cab with padded seats and rode well, features lacking in *POWELLITE*. But it could be difficult to fire, the fire had to be stacked very carefully. It was unpredictable, and could run well one day, and badly the next. It had steel



LITTLE YARRA at Yarra Junction in the 1930s.

Photo: Frank Stamford collection LIGHT RAILWAYS 200 APRIL 2008



The first Baldwin narrow gauge 2-4-0, built for the 3ft gauge Denver & Rio Grande Railway. Photo: from Baldwin catalogue of 1871

boiler tubes and a thin steel tube plate, which was troublesome and difficult to repair. The steel tubes did not retain heat well and frequently leaked at the tube plate. Up to six tubes were blocked off at a time. The leaking tube plate problem was finally fixed in 1934 when *LITTLE YARRA* visited Newport workshops for the repair. Apart from being more powerful, *POWELLITE* was also more predictable, easier to fire, and easier to work on.

LITTLE YARRA's other idiosyncrasies included a leaking regulator valve and a tendency to wander off on its own. It was usual to chock it in place at Powelltown, and on one occasion when this was forgotten it was found half a mile from Powelltown.

LITTLE YARRA's fuel was cut into 3ft 6in lengths, compared to 4ft for the Shays and Powellite. Occasionally coal was used, sometimes obtained from helpfulVictorian Railways' crews at Yarra Junction.Various types of wire mesh spark arrestors were fitted in the fire season, but they all used to clog up quickly, affecting steaming. The Radley & Hunter stack fitted to its mate 37693 would surely have been better.

LITTLE YARRA and POWELLITE both ran funnel first to Powelltown until about 1916. This was not ideal, as the direction of heavy loading was towards Yarra Junction. About that time a temporary triangle was laid at Powelltown to turn them. From that time they always ran funnel first to Yarra Junction

LITTLE YARRA's ultimate fate is not known. In 1945 it was sold to Cameron & Sutherland, machinery merchants, who bought it and POWELLITE for the British Phosphate Commission for use in Nauru. Whilst POWELLITE saw a few years service in Nauru, there is no record of LITTLE YARRA ever being shipped there. It is likely that it was judged as being too worn to be worth repairing, and was probably scrapped in Australia.

Acknowledgennents

Firstly I would like to thank David Fletcher for the prodigious amount of work he has put into this project, culminating in the drawings which appear in the centre pages on this issue. David has also produced drawings, in colour, showing the livery details of *LITTLE YARRA*, and explaining the Baldwin standards on locomotive livery. You will find this information in the current issue of Narrow Gauge Downunder.

In addition, David and I wish to acknowledge the following organisations and people who have provided information:

California State Railroad Museum Library, Sacramento. Special thanks to Librarian Cara Randall, who has been central to our searches.

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The Yahoo Groups of the LRRSA and the Industrial Railway Society (UK).

Phil Rickard for deciphering the purchaser names in the list of 6-14C locomotives, which enabled the construction numbers to be identified.

Finally, it is worth noting that the power of the internet to communicate worldwide has enabled all this information to be brought together in a way which was inconceivable only a few years ago!

References and sources

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Baldwin Construction list for Class 6-14C locomotives.

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Notes

1. http://www.estacoesferroviarias.com.br/ba_paulistana/santaluz.htm

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Dear Sir,

Ultra Light Railway!

I would like to draw your readers' attention to a light railway which I believe has previously gone unreported.

In the book Peninsula Memories recently published for the Eyre Peninsula Railway Preservation Society, there is an interesting photograph on page 91. The caption reads: The Train Control desk from Port Lincoln has been relocated for display in the freight shed portion of the Port Lincoln Railway Museum. Note the width of the desk which was necessary to hold the 24-hour graph on which the Train Controller plotted all train movements. The chair ran on rails which made it easier for the controller to move along the desk.

The gauge is not stated but appears to be about 18 inches, with a total route mileage of about seven feet. This would seem to be relatively easy to verify with a site visit.

Malden Island Tramway (LR 199)

I have just read Jim Longworth's article about the Malden Island tramway - a fascinating story.

If you open Google Earth, type in 'Malden Island' and wait a bit, you can pick out the track of the tramway, even the junction at the southern end of the island. My Pacific Islands Yearbook tells me that the lease was not exercised after 1929, so you are looking at something not only far away, but quite old as well.

Ian Cutter Mentone, Vic

Dear Sir,

Lake View & Star 0-6-0T (LR 195)

Regarding the request for information about the Lake View & Star mine locomotives, Orenstein & Koppel supplied two 0-6-0T 610mm gauge locos to this mine in 1910 (builder's numbers 4241 and 4242). No. 4241 later worked at Wodonga and was at the Goulburn Steam Museum in NSW from December 1972 to late 1977 (LR 69, p.16). No. 4241 is preserved at the ARHS Railway Museum at Bassendean in Perth, where it was photographed for the front cover of LR 80 (April 1983).

Miniature Railway at Kempsey NSW

While browsing through some old family papers recently, we came across two old photographs. Believed to have been taken at the Lazy Daisy Ranch Motel/Caravan Park on the Pacific Highway south of Kempsey around Christmas 1975, they show a miniature railway of unknown gauge. The steam outline locomotive has a large 'spark arrester' type funnel, while the station carried the name 'Jellytown Junction'. Does any reader have any information about this operation?

The operations of Australian Blue Asbestos Ltd around Wittenoom in the Pilbara region of Western Australia have become notorious because of the disatrous impact of asbestos on the health of many workers and family members. Mining began in 1940 under the management of Lang Hancock, and finished in 1966. Australian Blue Asbestos used 2ft gauge railways in the mines in a number of the local gorges, with some battery electric locomotives remaining on site until recently.

What is it?

However, this interesting photograph shows another story altogether. Dated 1950, it shows what appears to be a substantial diesel locomotive emerging from a mine adit. The lengthy locomotive has a long overhang at the front, above which is the engine, making it appear quite unbalanced. The shape of the welded frame gives grounds for suspicion that it might have started life as a trolley-wire electric. The axle boxes are of a very unusual design.

I have seen photographs of mines locomotives in Serbia which are ex-trolley-wire units fitted with a diesel engine and generator and utilising the original traction motors, so I wonder if this is a similar case.

If any reader can comment further on any aspect of this scene, that would be much appreciated.

John Browning



Hagan's Patent locomotives

Well-known light railway historian Charles S Small wrote an article, 'Hagan's Articulated Patent Locomotive', in *Short & Narrow Gauge Rails* (No. 10, 1984) that describes a large Hagan Patent four-axle articulated locomotive *THESSALIE* supplied to the Greek Volos-Miliai 600mm gauge line (the Thessalian Railway) in 1895. There is a fine scale drawing of this locomotive in the article. Like its Tasmanian counterpart, the 'monster' was regarded as a failure and the railway subsequently stuck to 2-6-0 tank locomotives. I was surprised that this information was not covered in Geoff Murdoch's book, *Tasmania's Hagan's*.

Garry Allen Palmwoods, Qld

Dear Sir,

Re: Garratt Locos

I was interested to read your editorial in LR 191, wherein you commented on the Gauge 1 railway. My wife and I have such a railway at the Museum. The main layout is 51m in circumference, and when finished will have twin track, a rack railway and a live steam loop, for which we have a 3-cylinder 2-truck Shay.

Our new drawcard, we hope, will arrive in a few months; an Accucraft 2-6-2+2-6-2 Garratt. A high quality model based on the Welsh Highland Railway No.138 (ex-South African Railways class NGG16).

This sent us to the WHR website (http://whr.bangor.ac.uk/whr.htm) to see Garratt K1 in action. It has recently been converted to coal firing (LR 199), while No.138 is currently dismantled for overhaul.

The British seem to have developed the art of dragging exported machinery back to Britain, which may seem a bit harsh until you look at the list of 23 exhibits on the Welsh Highland Railway – only three are from Wales!

Incidentally, *Wikipedia* is a great source of such information. They have a 14-page entry on the Welsh Highland Railway.

Jim Walker Curator, Turon Technology Museum Sofala, NSW

Dear Sir,

Jetty & Wharf Tramways on Kangaroo Island, South Australia (LR 142) Vivonne Bay jetty

The tramway on the jetty at Vivonne Bay is still complete and in regular use. The rails had fresh wear marks. The shore-end had long fresh ruts, worn by the wheel flanges running off the end of the rails into the dirt. While Judy and I were there, a fishing boat pulled in and unloaded its catch onto the trolley, which was then pushed along the line to the shore. The jetty has been much shortened from the 990ft in 1919, and the gauge seemed narrower than 3ft 6in (LR No.142, August 1998). A good photo of the original long jetty with its curving outer end and line is to be found in the State Library of SA photo collection.



Looking shoreward along the Vivonne Bay jetty, 21 November 2007. Photo: Jim Longworth

Cape du Couedic

There were two light railways at Cape du Couedic. One ran along the jetty, past the base of the flying fox, to the shoreline. The other line, of a wider gauge, ran from the top of the flying fox onto solid ground.

A good photo of the original jetty with its T shaped outer end and line is to be found in the State Library of SA photo collection.



Looking down the cutting for the flying fox from above the Cape du Couedic jetty. One rail remains in place, 23 November 2007. Photo: Jim Longworth

Harveys Return, Cape Borda

As noted in LRN No.39, there was light railway associated with the lighthouse at Cape Borda. The line did not run along a jetty or wharf as strictly defined. However it did run along a rocky shoreline to a derrick crane where supplies were off-loaded from ships. The Cape Borda lighthouse museum has several excellent photographs of the double track incline up from the shore, a wheel set, and horse capstan once used to power the incline.

Jetty and wharf enthusiasts have as much problem defining a jetty and wharf as we do defining light railways. So, could the definitions of a jetty and a wharf be stretched to include a constructed landing place? Or must the light railway at Harveys Return be categorised as a 'landing place light railway'?

Jim Longworth Cheltenham, NSW



LRRSA NEWS

MEETINGS

ADELAIDE: "A Register of Light Railways in South Australia"

Members will be working on the record of light railways in SA, with a view to creating a complete register of such railways. Location: 150 First Avenue, Royston Park. Date: Thursday 3 April at 8.00pm. Contact Arnold Lockyer on (08) 8296 9488.

BRISBANE: "No.5 at Moreton Mill"

The April meeting will feature a DVD by Bob Gough, showing the visits by ANGRMS to Moreton Sugar Mill at Nambour, between 1997 and 2001, with their locomotive Bundy Fowler No.5. Location: BCC Library, Garden City Shopping Centre, Mount Gravatt. After hours entrance (rear of library) opposite Mega Theatre complex, next to Toys'R'Us. Date: Friday 11 April at 7.30pm. Entry from 7pm.

MELBOURNE: "Puffing Billy Railway -Maintaining the Locomotives"

Adam Black, Rolling Stock Manager of the Puffing Billy Railway will give a first hand insight into the problems and challenges of maintaining and restoring locomotives on the Puffing Billy Railway. He is currently responsible for 13 locomotives of eight different types, from 6-ton 0-4-0Ts to a 69-ton Garratt, a geared steam loco, and three very different diesels. Location: Ashburton Uniting Church Hall,

Ashburn Grove, Ashburton. Date: Thursday, 10 April 2008 at 8.00pm

SYDNEY: "The Maine Two-Footers and

Indonesian gold mine tramways" A double presentation, with Michael Bickford showing images from his 2007 visit to preserved Maine 2ft gauge railways plus vintage video footage, then Ray Gardiner on Indonesian gold mine tramways, which still use battery and overhead electric locos for haulage. Location: Woodstock Community Centre, Church Street, Burwood, (five minutes walk from Burwood railway station). Date: Wednesday 23 April at 7.30pm.



Coal Mines of Puponga by Peter Dyer

211 x 278 mm, 192 pages printed landscape format with card covers. 132 black and white photographs, 29 maps and diagrams. Published 2003 by River Press, PO Box 10, Picton, New Zealand.

Puponga was a small coal mining area at the north-west corner of New Zealand's South Island. Two coal mines used 2ft gauge tramways to bring coal to ocean wharves with the Puponga mine using steam locomotives from 1901 to 1943 while the North Cape mine used a Fordson tractor conversion during the 1920s.

Your reviewer missed this book when it was published in 2003, but it is still in print and available from the publisher. What a fine production it is too, a most attractive volume, with Peter Dyer producing a very readable text and the use of landscape format making the presentation of many of the fine photographs particularly appealing.

The detail of tramway, wharf and mine infrastructure shown in the photographs makes this book a modeller's delight and the quality of Peter Dyer's locomotive and rolling stock line drawings is already well known. The book also provides a valuable social history of the area.

This book will also appeal to anyone with a love of 2ft gauge railways or who wishes to gain a better understanding of the challenges that faced coal mine operations in a remote location 100 years ago.

Copies may be purchased from the publisher for AU\$50 including economy postage. E-mail orders to riverpress@xtra.co.nz

Highly recommended. John Browning

Silimpopon: A Borneo Coal Mine

by Ross Ibbotson

254mm x 183mm, 210 pages, hard cover. 105 monochrome photographs, 11 maps and diagrams. Published 2007 by Opus Publications, PO Box 15566, 88864 Kota Kinabalu, Sabah, Malaysia.

The Silimpopon coal mine was established in a remote corner of British North Borneo in 1906 and closed in 1932. It had a 4½ mile 2ft gauge tramway connecting the mine with a river wharf, using four Andrew Barclay steam locomotives. Many of the problems it faced were similar to those dealt with more successfully at Puponga, but the situation at Silimpopon was exacerbated by its location in a tropical colony with remote corporate control and an unskilled workforce of miners who were mostly illiterate Chinese peasant labourers.

This is a well-written and beautifully produced book. The writer succeeds well in clearly explaining the technical aspects of coal mining as they applied to the mine, and traces well the various vicissitudes of the coal company. Fortunately, a wonderful archive of excellent photographs of all aspects of the mine and its associated settlement has survived, and these have been reproduced to a high standard using sepia tones. With his long experience of managing enterprises in Borneo, the author is well able to analyse and explain some of the difficulties faced by those who had the task of local management of the mine. Unfortunately, they do not seem to have done a good job by and large.

While the author's main focus is not on the mine tramway, it receives adequate treatment and there are several excellent photographs showing the locomotives and rail operations. The level of detail in many of the photographs taken around the mine would provide much valuable data for the modeller.

The book provides valuable insights into the enormous problems of operating a technically complex enterprise in a remote part of the British Empire in the first half of the twentieth century. Such a task was only possible because of the seemingly inexhaustible confidence and ample financial resources of the colonisers, combined with the availability of cheap labour working under dreadful conditions.

Copies may be purchased from the publisher at about AU\$55, plus postage.

Email info@nhpborneo.com or go to http://tinyurl.com/23wqpv Highly recommended. John Bro

John Browning

70 ans de chemins de fer betteraviers en France: La voie de soixante betteravière

by Eric Fresné

286mm x 210mm, 144 pages, card covers. 24 colour and 126 monochrome photographs, 70 maps and diagrams. Published 2007 by LR Presse, 12 Rue du Sablen, 56400 Auray, France

This book deals with the 600mm gauge railways associated with the sugar beet industry in France in the period from the 1890s to the 1960s. As such, it provides a valuable comparison with the same period for Queensland's sugar cane railways. This book is very attractively presented. It forms a general survey of the large topic of French sugar beet railways. There were around 50 factories and the book does not attempt a comprehensive listing of them or their locomotives. As in



Queensland there were numerous amalgamations and rail system linkages over the years. The lines were largely used for transporting sugar beets from the fields to the factory and in return taking the spent pulp back to the farms for use as animal feeds. Some also carried finished sugar to transport outlets, such as the last survivor which brought the product to a canal wharf.

The author deals with methods of operation and gives significant attention to the development of locomotives and rolling stock, which was significantly influenced by the impact of two world wars, with many locomotives designed for wartime use being put into sugar tramway use. Apart from an influx of American war service locomotives following the Great War, the main locomotive suppliers were either French and Belgian, or German, and some interesting comparisons are drawn between them.

The author also discusses the reasons for the demise of the French beet tramways at a time when the Queensland cane tramways were reinvesting and expanding.

Schoolboy French is quite sufficient for comprehension of most of the text, but for those with more limited linguistic skills the outstanding features of the book include the range of wellproduced photographs, some in colour, and the selection of beautifully-presented 1:43 scale drawings of locomotives and rolling stock that would be a modeller's delight.

Unfortunately, the cost of freight means that LRRSA is unable to stock this book at economic rates, but you can easily purchase direct from the publisher at http://tinyurl.com/2hy68l by credit card using the very same process that is used to make purchases from the LRRSA online shop (although the instructions are in French). The cost including postage is approximately \$48 depending on prevailing exchange rates. Highly recommended. *John Browning*

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A selection of books from the LRRSA Sales Department ...

Furnace, Fire and Forge

Lithgow's Iron and Steel Industry 1874 - 1932 by Bob McKillop

The story of Australia's first and only inland heavy industrial centre, from its beginnings with the opening of New South Wales' Great Western Railway into the Lithgow Valley in 1869 and the establishment of the first blast furnace there in 1874, to the final closure of the iron and steel works in 1932. It covers the technical, commercial, industrial and political history of the operation.

G.& C. Hoskins and its predecessors used twenty locomotives at Lithgow steel works and associated plants. The works railways, and those of the limestone quarries, iron ore mines, and collieries which supplied the raw materials, are described and illustrated in the book.

320 pages, hard cover, A4 size, over 250 photographs, 80 maps, plans and diagrams

\$59.95 [LRRSA members \$44.96] Weight 1,600 am.

Bellbrakes, Bullocks & Bushmen

A Sawmilling and Tramway History of Gembrook 1885-1985 - by Mike McCarthy 104 pages, soft cover, A4 size, 71 photographs, 17 maps and diagrams, references and index. \$26.00 (LRRSA members \$19.50). Weight 500 gm.

Settlers and Sawmillers

A History of West Gippsland Tramways and the Industries they Served 1875-1934 by Mike McCarthy

168 pages, soft cover, A4 size, 96 photographs, 17 maps and diagrams, 6 graphs, one loco diagram, references and index.

\$31.90 (LRRSA members \$23.93) Weight 700 gm.

The Golden City and its Tramways Ballarat's tramway era by Alan Bradley.

Published by Ballarat Tramway Museum Inc.

Using the wealth of the 1850s goldrushes, the founders of Ballarat built a magnificent provincial city. This book is not a dry technical history but describes how the citizens of Ballarat used the trams in their daily lives. It brings to life the difficulties experienced in the second world war, when lights were dimmed and petrol severely rationed. The book also addresses the technology, economics, politics, working conditions, and competition from other forms of transport. Many wonderful photos dating back to the 1880s. 144 pages, A4 size, hard cover, 119 photographs (15 in colour), 4 maps, bibliography, index.

\$43.95 (LRRSA members \$39.56) Weight 900 gm

The Mapleton Tramway

The line of the diminutive Shay locomotives

By John Knowles, published by the author

The Mapleton Tramway was an 18 km long 2 ft gauge railway, which climbed the steep ranges, west of Nambour, about 110 km north of Brisbane. In many places the line was located on shelves in the mountainsides with magnificent views over the coastal lands to the sea. It used steep gradients and very sharp curves, and reached 380 m. altitude. It was operated by two small Shay locomotives. It carried sugar cane, logs and sawn timber, fruit, cream, small livestock, as well as passengers and mail.

Includes seven scale drawings of the rolling stock and locomotives. 92 pages, A4 size, plus card cover, 81 illustrations, references, and index. \$28.50 (LRRSA members \$25.65) Weight 480 gm

Laheys' Canungra Tramway

by Robert K. Morgan, revised by Frank Stamford. Describes Queensland's largest timber tramway with one Climax locomotive and 3 Shay locos. 32 pages, soft cover, A4 size, 28 photographs, plus maps and diagrams, references and index. \$9.95 (LRRSA members \$7.46) Weight 220 gm.

The Innisfail Tramway

The History and Development of the Geraldton Shire Tramway and the Mourilyan Harbour Tramway

by John Armstrong & G.H. Verhoeven. 128 pages, A4 size, 99 photos, 22 maps/diagrams. \$37.90 Hard cover (LRRSA members \$28.43) Weight 650 gm. \$29.95 Soft cover (LRRSA members \$22.46) Weight 470 gm.

Mountains of Ash

A History of the Sawmills and Tramways of Warburton - by Mike McCarthy

Describes a network of over 320 km of tramways which linked 66 major mills to the Warburton railway. 320 pages, A4 size, 280 photos, (incl. 52 duotones), 50 maps/diagrams, (incl. 14 four-colour maps). \$59.95 Hard cover (LRRSA members \$44.96)

The Aramac Tramway

By Peter Bell & John Kerr

The history of the 41 mile long 3 ft 6 in gauge Aramac Tramway, almost in the centre of Queensland. Built in 1913, it operated for 62 years, providing the Shire Council a major challenge to keep it going.

48 pages, A4 size, 49 photos, 5 maps and plans, references, bibliography and index.

\$15.00 Soft cover (LRRSA members \$11.25) Weight 350 am.

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Trains, Locoshed, Ausloco, Wheels on Steel & LRRSA e-groups and to Barry Blair's ANZ Inside Rail enews

NEW SOUTH WALES

BT CONTRACTORS – iQR ALLIANCE, Drayton Junction

(see LR 195 p.18)

1435mm gauge

The two German 4wDH shunting locomotives together with the ballast hoppers and other equipment used for the construction of the Bayswater and Drayton Mines joint facility at Antiene were last reported to be stored at the Macquarie Generation unloader at Drayton Junction. The two locomotives appear to be similar if not identical, so it is likely both were built by Orenstein & Koppel. Scott Abberfield 9/07

QUEENSLAND

BUNDABERG SUGAR LTD, Bingera Mill & Millaquin Mill

(see LR 199 p.16 & 198 p.18)

610mm gauge

Bundaberg Sugar has announced its intention of closing the Tegege and Moorlands lines and replacing them with multi-lift road transport. These lines are in the northern part of the former Fairymead Mill system and much further from Bingera mill by rail than by road.

Problems at Millaquin Mill mean that a decision has been taken to crush 70 per cent of the district crop at Bingera Mill in 2008, with only 30 per cent at Millaquin. It now appears that cane will be ferried from the south side of the Burnett River to Fairymead for haulage to Bingera, rather than the reverse as has happened in recent seasons.

Further work is proceeding to ease grades on the Fairymead – Bingera link to allow the haulage of 65 full bin trains. This is planned to include work at Chase's Hill as well as Pitt's Hill and Cella's Hill. The work at Chase's Hill was well advanced by the end of February but inclement weather will probably mean the postponement of work at Cella's Hill. In addition, the Strathdee's line linking the Burnett River ferry with Millaquin Mill should be completed for the 2008 season.

Bingera Mill's Com-Eng 0-6-0DH JAMAICA (B1112 of 1956) has been acquired for preservation by Mitch Zunker at Sharon, and was delivered to a siding there by EM Baldwin 0-6-0DH MANOO (3875.1 7.71 of 1971) on 12 December 2007. The Bundaberg District Canegrower 12/07 via Bill Kerr; Lincoln Driver 1/08, 3/08; Mitch Zunker 1/08

BUNDABERG SUGAR LTD, Innisfail District

(see LR 199 p.16 & 198.p.19) 610mm gauge

Further progress with the construction of the new link line connecting the **South Johnstone** and old Mourilyan networks in the Boogan area was noted in February. From near the QR loop at Boogan, the new line turns onto the old 1067mm gauge South Johnstone branch formation. Just before Wilkie Gray Road, it turns off the old right of way in a roughly south-west direction, crossing the road and disappearing into the countryside, away from public roads.

The new river bridge to be built on this line will not only replace the ex Innisfail Tramway Queensland Bridge and South Johnstone Mill's silver bridge but also the old dual gauge bridge that was part of the QR South Johnstone branch. Cane railway 610mm gauge bins still cross this bridge at South Johnstone but have to be pushed across as locomotives are not allowed onto it. A farmer's tractor collects the bins on the other side.

In the slack season, all 6-tonne bins are maintained at the former Mourilyan Mill site, with the rest receiving attention at South Johnstone. Locomotives 1 to 20 are serviced at **Babinda** and the others at South Johnstone.

It is reported that Bundaberg Sugar's northern mills will be hived off into a separate company irrespective of any progress of merger talks with neighbouring mills.

Peter Lukey 1/08; Chris Hart 2/08; Shane Yore 2/08

CURTAIN BROTHERS (QLD) PTY LTD, Townsville

1067mm gauge

A Plymouth 4wDH locomotive has been repatriated from Papua New Guinea and is currently stored. Its last known use was on oil exploration work at Paibuna (see LRN 119 p.22) in 1994, after which it was stored at the Curtain Brothers yard in Port Moresby. Its history goes back to the Snowy Mountains Scheme and it was later used on the Melbourne underground railway construction around 1977 and the Cardstone tunnelling project in north Queensland in 1990. The locomotive is unidentified but is almost certainly one of 6127, 6128 and 6130 of 1958 or 6131 and 6132 of 1959.

Curtain Brothers are involved in a scheme to develop the Mt Moss iron ore mine, about 105km north-west of Townsville, which lies about 30km from the trackbed of the old QR Greenvale line. It is understood that they hope to build a railway to the mine site, largely using the old Greenvale line route.

Peter Murray 2/08; Peter Renton 3/08; Courier-Mail 25/3/2007

CSR PLANE CREEK PTY LTD

(see LR 198 p.19)

610mm gauge

The mill's four Walkers B-B DH locomotives are being repainted this slack season, with only *CARMILA* (651 of 1970 rebuilt Bundaberg Foundry 1995) remaining to be done by late February. EM Baldwin B-B DH D12 (6890.1 10.76 of 1976) had its cab painted by mid February, and the remainder was expected to follow.

The Plasser Model TC50 linecar (built 1982) has reappeared on rails. It appears to have had some panel work done and has had new windscreens installed. Its bodywork has largely been painted with a light grey primer.

Carl Millington 1/08, 2/08, 3/08

CSR SUGAR (HERBERT) PTY LTD, Herbert River Mills

(see LR 199 p.16)

610mm gauge

The carcass of EM Baldwin B-B DH *BRISBANE* (5423.1 9.74 of 1974) arrived in Brisbane on 17 January. It is to undergo a major rebuilding by Australian Diversified Engineering Pty Ltd at the direction of an associated company, ADE Products Pty Ltd. Work will include lengthening of the frame by approximately 800mm, and it will receive a new Caterpillar engine and drive train with locally manufactured new final drive gearboxes and axles. The cab will be lengthened by about 300mm and joystick controls will be fitted. Main braking will be through the transmission system. It is expected that the locomotive will be ready to return to service for the 2008 crushing season.

125 new 8-tonne bins are to be supplied this year, and while wheelsets and couplings will be sourced in Australia, the remainder will be manufactured in China and shipped in containers to be assembled locally by Rinaudo Engineering.

Work has been going on at Victoria Mill on various locomotive engine upgrades. EM Baldwin B-B DH *TOWNSVILLE II* (6400.2.4.76 of 1976) has received the engine taken out of *BRISBANE*. EM Baldwin B-B DH *ADELAIDE* (7070.2 4.77 of 1977) appears likely to receive a new engine and the one that had been removed from it by mid-February may be going into another locomotive.

The end of Macknade Mill's Seymour branch was lifted in December in another siding rationalisation which will see the last three sidings, Warren's, Cresta and Jones, being replaced by a large siding to be situated between Warren's and Cresta. The line between Cresta and Jones has been lifted and a bridge in this section removed.

Chris Hart 1/08, 2/08; Tony Gray 1/08; 'jf934' 1/08

CSR SUGAR (KALAMIA) PTY LTD, Kalamia Mill

(see LR 199 p.16)

Victoria Mil's EM Baldwin B-B DH *GOWRIE* (7135.1 7.77 of 1977), sent to Kalamia on Ioan in December 2007, has been returned north, arriving in Ingham on 20 February. Two locomotives are expected to be sent to an outside contractor for sandblasting and repainting during the 2008 slack season.

Jason Lee 1/08; Chris Hart 2/08



Lincoln Driver was out and about in the Bundaberg District on 26 October 2007. **Top:** With the picturesque Sloping Hummock in the background, Millaquin Mill's EM Baldwin B-B DH FAIRYDALE (10048.1 6.82 of 1982) hauls full bins across the red soil of the Woongarra towards Grange Road. The loco is hauling fulls cab-first to the old Qunaba Mill site, where they will be stowed for later collection, because the points at Grange Loop face the 'wrong' way in relation to Millaquin. **Centre:** Having arrived at Wallaville with empties from Bingera Mill, EM Baldwin B-B DH MIARA (8988.1 6.80 of 1980) pauses briefly outside the delightful ex-QGR station building before heading back with the waiting fulls that have been brought here by the locally-based locomotive. **Above:** The massive size of the ex-government railway conversions is accentuated here as Bingera Mill's Walkers B-B DH KOLAN (633 of 1969, rebuilt Bundaberg Foundry 1996) clears the top of Pitt's Hill on its way with a shuttle from Fairymead.

LIGHT RAILWAYS 200 APRIL 2008

Industrial NEWS Railway

HAUGHTON SUGAR CO PTY LTD

(see LR 199 p.16) 610mm gauge

The crush at Invicta Mill continued up to around 8 January, with Pioneer Mill finishing on that day. Very heavy rain meant that Giru was flooded at least three times during the wet season. The last occasion, around 12 February, was said to have been the worst in living memory. The entire mill yard area at Invicta Mill was submerged and TV shots showed locomotives standing in water about a metre deep.

At the same time, torrential rain also caused disastrous damage to the two largest concrete bridges on the mill's Dalbeg line, both 13 metres in height, at Landers Creek and Expedition Pass Creek, tributaries of the Burdekin. The 195-metre Landers Creek bridge had two spans carried away and also lost a pier, while at the 135-metre Expedition Pass Creek bridge one span was carried away and a pier has sunk a couple of metres, leaving another span perched precariously upon it. In flood times, these bridges would normally carry the line above water backed up from the Burdekin, but on this occasion, it appears that it was the raging creeks themselves that did the damage. It will be a major task to return the bridges to use in time for the 2008 season.

Victoria Mill's Walkers B-B DH *CAIRNS* (681 of 1972 rebuilt Bundaberg Foundry 1997), together with Solari brake wagon BV13, sent to Invicta on loan at the end of November 2007, have been returned north, arriving in Ingham on 27 and 21 February respectively.

Locomotive work at Invicta this slack season was scheduled to include fitting a new MTU engine to Walkers B-B DH *SCOTT* (669 of 1971 rebuilt Bundaberg Foundry 1995). In addition Walkers B-B DH *GIRU* (593 of 1968 rebuilt Tulk Goninan 1995) will receive a similar new MTU engine as well as a reconditioned Voith transmission from Europe to provide dynamic braking, the first ex-QGR DH class to be so fitted.

The new blue 6-tonne bins delivered in 2007 were manufactured in China and assembled in Australia.

Jason Lee 1/08, 2/08; Chris Hart 2/08; Carl Millington 2/08; Peter Murray 2/08; *Townsville Bulletin* 18/2/08 via Corey Seaton

MACKAY SUGAR CO-OPERATIVE ASSOCIATION LTD

(see LR 199 p.17)

610mm gauge

The torrential rain that occurred on 15 February brought extensive damage to the Mackay Sugar rail network, with repairs estimated to cost at least \$1m. The fall of up to 600mm in six hours has meant that many causeways, culverts and bridge headwalls have been significantly affected, with track washed away in some locations.

The new Harsco Track Technologies Model

Industrial NEWS Railway

TSR/TRS resleepering machine, RSLEP 8, was noted working on track refurbishment at Otterburn on the Marian Mill system on 5 February. It carries builder's number 226577 and was apparently delivered during 2007. It weighs 7.3 tonnes.

Two Walkers DH-class B-B DH locomotives have been purchased from Mackay Sugar by Emerald Tourist Railway Board to meet the future needs of the Puffing Billy Railway. These are reportedly DH25 (607 of 1969) and CC02 (587 of 1968). DH25 was purchased by Racecourse Mill in 1995 and was stored there before being moved to North Eton in 2003. CC02 was purchased by Cooks Construction in 1992 and used on 900mm gauge track at Yallourn in Victoria. It was purchased by Mackay Sugar in 2001. It is believed that both locomotives are substantially complete, with one to be put into service and the other to be a source of spare parts.

ABC Local Radio 22/2/08; Carl Millington 2/08; Frank Stamford 2/08

PIONEER SUGAR MILLS PTY LTD, Inkerman Mill

(see LR 198 p.21) 610mm gauge

Another locomotive is expected to be sent to a contractor for sandblasting and painting before the start of the 2008 crushing, continuing a programme that has gone on for a number of years. Jason Lee 1/08

TOLL ORX

1067mm gauge

QRX, part of the Toll Group, has hired ex-Emu Bay Railway Walkers B-B DH locomotives from Cairns Kuranda Rail Services for captive shunting duties at various depots. 1101 (638 of 1970) was at the Mackay QRX depot in 2005 and after its return to Cairns the following year, it was used for a short time at the Woree QRX depot (see LRN 113 p.10). In August 2007 it was transported by road to the Rockhampton depot and was used there until January 2008 while building works were carried out there. On its return to Cairns, it was again put to use at the Woree QRX depot to replace a broken down shunting tractor.

1105 (642 of 1970) was obtained by Caims Kuranda from the Beaudesert Railway in 2005. It was sent directly to Mackay and has been there ever since. Carl Millington 1/08, 2/08; Editor

TULLY SUGAR LTD

(see LR 198 p.21)

610mm gauge

The Bruce Highway is being rebuilt and relocated between Murray Flats and Tully and this has affected the rail system. At Hewitt, the new highway will run parallel to the QR and will pass over the cane railway on the eastern side of the catchpoints. At Euramo, the new highway is being built on the western side of the existing highway over the course of the Stamp Road line. This line



Top: Carl Millington caught the new Mackay Sugar sleeper replacement machine (Harsco Track Technologies 226577 of 2007) at a relaying job at Otterburn on 5 February. **Centre:** Jason Lee drove out to survey the flood damage to the creek bridges on Invicta Mill's Dalbeg line on 16 February. The forces that led to the wrecking of this substantial concrete structure at Expedition Pass Creek are scarcely imaginable, and it should be remembered that the bridge deck is 13 metres above the normally-dry creek bed, meaning that in this photo about 3/4 of the bridge pier is still submerged. **Above:** The new line from the old Mourilyan Mill area to South Johnstone crosses Wilkie Gray Road, and heads across country towards the site of the as yet unbuilt new bridge across the South Johnstone River, 3 February. Photo: Chris Hart is being moved to the eastern side of the existing highway from where it branches off the main line to where it currently crosses to the eastern side of the highway. Chris Hart 1/08

VICTORIA

JOHN HOLLAND PTY LTD, Northern Sewerage Project

(see LR 193 p.21)

762mm gauge

Christoph Schottler Maschinenfabrik GmbH of Diepholz in Germany supplied a number of "Schöma" 4wDH locomotives to the John Holland Group in Australia in 2007, presumably for this project. Three locomotives are Model CHL 40G and are builder's numbers 6242 to 6244, while the other three, builder's numbers 6245 to 6247, are Model CHL 60G. Bob Darvill 2/08

McCONNELL-DOWELL CONSTRUCTORS, Bogong Hydro-Electric Scheme (see LR 197 p.22)

A storage and fit-out yard has been developed behind the Pyles Falls Creek Coach Services Terminal in Tawonga South where material is sorted and made ready for transport to the construction sites as required. This includes prefabricated railway track and rolling stock items.

There are two main construction sites at



Top: The transfer station for road cane at South Johnstone Mill is where loaded containers are slid from road trucks onto rail vehicles for transport to the tippler. On 3 February, the external structure still bears the scars of a spectacular shunting accident that occurred during the 2007 season. Com-Eng 0-6-0DH 21 (AD1453 of 1962) slumbers in the distance. Photo: Chris Hart **Above:** Ex-Innisfail Tramway Baguley 0-6-0DM 10 (3390 of 1954) sits out of use at the old Mourilyan Mill site on 3 February. The brake wagon alongside began life as a diesel locomotive from the same builder, Drewry 2396 of 1952, ex-South Johnstone Mill number 14. Photo: Chris Hart

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Bogong Village. One is the Power Station site, next to the junction of the Rocky Valley Branch and the Pretty Valley Branch of the East Kiewa River, where the 1.2km high pressure tunnel commences. The other is the old Commissioners Residence site, just above Bogong Village, where the 6.5km headrace tunnel is being constructed by a tunnel boring machine.

http://www.bogongvillage.com/pdfs/thisweek/ thisweek4.pdf

WESTERN AUSTRALIA

BHP BILLITON IRON ORE PTY LTD (see LR 199 p.18)

1435mm gauge

BHP will commence duplication of the railway track between the Yandi mine and Port Hedland. Railway construction is expected to begin in May 2008, subject to various government approvals. It is believed that BHP Billiton will take delivery of 10 new Model SD-70 locomotives diverted from a USA order for Burlington Northern Santa Fé, to be shipped from north America about the end of April.

BHP Billton media release 2/08; David Rowe 3/08

MONARCH GOLD MINING CO LTD, Mt Ida 610mm gauge

Monarch Gold Mining acquired a 2.5 tonne 4wBE 'Goodman' locomotive built by Trident SA in Germiston, South Africa, for use at the Mt Ida mine, apparently in late 2006. Trident also supplied in late 2006 a new Eimco 12B bogger for underground use here. It is assumed that Monarch Gold Mining is associated with Mt Ida Gold Operations Pty Ltd (see LR 198 p.22).

http://www.flickr.com/photos/markedgar via Phil Rickard

THE PILBARA INFRASTRUCTURE PTY LTD (see LR 199 p.18)

1435mm gauge

All four of the construction locomotives are in use with AE Goodwin Co-Co DE DR8404 Vera (G-6040-01 of 1970 rebuilt GTSA 2007) noted in use at Indee Station Road level crossing on 12 January. By the start of March, the tracklaying train, owned by Laing O'Rourke, was working on the line at the Fortescue overpass of the BHP Billiton line near Woodstock. CFCLA's ex Kowloon-Canton Railway Clyde Bo-Bo DE TL154 (57-144 of 1957) has been shipped to the Pilbara, and is being used to work ballast trains north from Cloud Break Mine.

Toad Montgomery 2/08,3/08; Brett Geraghty 3/08

PILBARA RAIL

(see LR 199 p.18) 1435mm gauge Rio Tinto Ltd has formed an alliance with equipment supplier Komatsu to develop and deploy advanced

autonomous haulage solutions, with a new control

Industrial NEWS Railway

centre in Perth, 1300km away, controlling driverless trains, planned to be in initial operation during 2008. The plan also includes a driverless truck fleet and remote control drills.

The first instalment of 10 new GE Model ES44DCi Co-Co DE locomotives arrived in port at Dampier in early February. These have builder's numbers 57996 to 58005 and carry numbers 8100 to 8109. A company statement indicated that the purchase of 30 more of these locomotives was planned in the current year.

Fortescue Mineral Group has applied to the National Competition Council to gain access to Rio's iron ore lines. It has also been successful in fighting attempts by Rio to have the Federal Court prevent the Australian Competition Tribunal from dealing with access disputes in the future. *The West Australian* 18/1/08; David Bromage 2/08; *The Australian* 22/1/08 & 15/2/08

FIJI

FIJI SUGAR CORPORATION

(see LR 198 p.22)

610mm gauge

The Fiji Sugar Corporation Annual Report for 2007 recognises the current shortcomings of the rail infrastructure and the need to turn back the tide of conversions to lorry transport, which has adverse effects on foreign exchange and causes traffic congestion. FSC aims to have 49 per cent of the crop back on rail by 2010. This will call for significant steps to address the state of the locomotive fleet and cane truck fleet as well as considerable investment in the track. John Peterson 2/08



One of two 2ft gauge Jenbach Model JW15 4wDM locomotive situated on Makira Island in the Solomons, for possible use in swamp logging operations. It was originally used in Sarawak and has Jenbach transmission number 1394, probably dating from the 1970s. An extension has been provided at the front to accommodate a replacement Japanese Yanmar 18/22hp diesel engine. Photo: Ross lbbotson

SOLOMON ISLANDS

MIDDLE ISLAND INVESTMENT PTY LTD, Makira

610mm gauge

Situated on the island of Makira (formerly San Cristobal) are the logging operations of this company, a subsidiary of Lau Brothers of Sarawak (Borneo). A quantity of rail equipment was brought over from Sarawak in early 2005 in preparation for its possible use in swamp logging operations. The equipment consists of 3.7 miles of rail, two sets of points, 100 sets of wheels and axles, a 4-wheel carriage, and two Jenbach Model JW15 4wDM locomotives. One locomotive still has its original Jenbach engine (number 11299), built in 1974, and the other has been fitted with frame extensions to accommodate a replacement Yanmar engine. It is doubtful if this rail equipment will ever see use in the Solomons Islands as conventional methods are proving satisfactory in the patches of swamp forest that have been encountered. Ross Ibbotson 2/08

CORRECTIONS & CLARIFICATION

 LR 199, page 16. NDIA NRE MINERALS should read INDIA NRE MINERALS

• LR 199, page 16. Chris Hart indicates that while Victoria Mill locomotives *CENTENARY* and *INGHAM* were both at Macknade Mill on 17 December, it was only to transfer bins there, and they returned to Victoria Mill the same day.

• LR 199, page 18. The lower photo was taken by Toad Montgomery. Apologies to Toad and to Carl Millington.



Brett Geraghty captured a BHP Billiton iron ore train passing under the new Fortescue line overpass with the Laing O'Rourke track laying train working above on 1 March. The ore train is headed by General Electric Model AC6000CW Co-Co DE 6077 NIMINGARRA (51069 of 1999), with a General Motors EMD second-hand Model SD-40R locomotive behind.



Beaudesert Shire Tramway, QLD

The Logan West Leader of 20 February 2008 carried a short news report on the donation to the Beaudesert Historical Society of 'documents recently uncovered in Beaudesert Shire Council files' that provide valuable insight into the history of the Beaudesert Shire Tramway back to 1911. In presenting the documents to the society, the mayor Cr Joy Drescher said 'it is important to ensure that records of some of the pioneers of Beaudesert Shire, and one of the Shire's first major transport networks are kept for future generations to enjoy."

Barry Blair

Malcolm Moore construction machinery

A reader, David Wilson, has commented on the amazing depth of research that underlies the information that has appeared in *Light Railways* over the years. David has a special interest in Australian construction machinery manufacturers, such as Malcolm Moore and Pacific (Tutt Bryant) Construction who manufactured road rollers and, in the case of Malcolm Moore, graders.

He has recently donated two Malcolm Moore multi-wheel rollers to the Richmond Vale Preservation Cooperative Society for preservation.

David is keen to make contact with people who have researched Malcolm Moore industrial locomotives (or other Australian construction machinery manufacturers) in the hope that they may have picked up various pieces of information about construction machinery made before 1980. Anyone who may be able to assist, please get in touch with David Wilson, PO Box 215, Watt Street, Gosford NSW 2250; or email super.steel.south@hotmail.com Editor

National Library of Australia newspaper digitisation

Newspapers are a basic reference for industrial and light railway researchers. Readers will therefore be interested in the four-year project initiated in 2007 by the National Library of Australia, in collaboration with each Australian state and territory library, to digitise major newspaper from each state and territory. The aim is to build a service that will provide a free on-line access from the first Australian newspaper published in 1803 through to 1954, when copyright comes into play. The total cost, funded by the National Library, is expected to be \$8 million.

By the end of 2008, the 19th century portions of the following newspapers are expected to be available: Sydney Gazette, Maitland Mercury, Argus (Melbourne), Courier Mail (Brisbane), Hobart Town Gazette, Courier, Advertiser (Adelaide), the West Australian and the Northern Territory Times. It was announced on 13 December 2007 that the Sydney Morning Herald will be digitised as part of this project at a cost of \$1.7 million, \$0.7 million of which will be contributed by the National Library and the remainder by a grant from the Vincent Fairfax Foundation. Digitisation of the Sydney Morning Herald, which commenced publication as the weekly Sydney Herald on 18 April 1831, is expected to be completed by 2009. Phil Rickard

Forestry railways in North Borneo

Ross Ibbotson is currently researching a history of logging in North Borneo. His short article on 'The development of rail transportation in the logging industry' can be found at

http://tinyurl.com/2vbod6 (NB This is a large file, most suitable for downloading using broadband.) It is interesting to note that light railways are still used for swamp logging in Sarawak.

Ross would be interested in hearing from anyone who has information or photographs of logging operations in North Borneo. He can be contacted at lbbotson@pd.jaring.my

He has also authored the recently published book, *Silimpopon: a Borneo Coal Mine* (see page 26), which is illustrated with a selection from a fascinating collection of photographs. *John Browning*

LRRSA Mt Cole Forest Tour report

On the weekend of the recent Federal Election, 24 and 25 November 2007, a group of 20 LRRSA members and friends undertook a forest tour to Mount Cole and the adjacent Mt Buangor State Park. Peter Evans led the tour and provided a detailed historic account of key sawmills on-site and in his comprehensive tour notes. The weather was perfect for bushwalking with the temperature in the high 20's and both fine and sunny. Mount Cole is approximately 200km northwest of Melbourne and, due to its proximity to the Ararat, Ballarat and Beaufort goldfields which boomed in the last half of the 19th century, its forested slopes were home to some of the earliest and most intensive forest utilisation in Victoria. It was also fortuitous that, in the early 20th century, the area had a far-sighted forester who displayed a passion for protecting the forests which had re-grown when mining had faded, and Mount Cole remained essentially closed to sawmilling until after the Second World War, by which time the logs were processed off-site at Ararat and Beaufort.

Mt Cole is therefore a time capsule of the archaeological expression of 19th century sawmilling practices. The terrain is relatively dry and steep, which enabled the sawmillers to utilise extensive systems of log chutes. This largely eliminated the need for the elaborate light rail or tramway networks used elsewhere in Victoria.

The tour commenced at Bailes Picnic Area which was named after Thomas Derham Bailes, the local forester who was instrumental in closing the area to logging for the first half of the 20th century. The first stop was Kozminsky's log chute which starts high on the summit above Saddle Road and ran down to the mill site in the valley below. Kozminsky's



Members of the LRRSA Mt Cole forest tour group pose on the stone works at Philipson's mill site on 25 November 2007. Photo Peter Evans

mill was a large operation featuring a 4 metre deep saw pit surrounded by a number of bed logs, and a surprisingly long sawdust trench. The saws were driven by a large stationary steam engine and belt system sited close to the pit. The sawn timber was transported away from the mill by jinker over relatively flat terrain when compared to the upstream log chutes.

The next mill visited was Emery's spot mill. Thomas Bailes called this type of operation "wretched little tinpot spot mills" as they exploited the forest by drastic over-cutting of immature trees with consequent wastage of timber. It was easier for such sawmillers to move onto the next good stand of timber, rather than optimise the yield in one location for the long term. The remains at Emery's are few in number and typical of a spot mill. A small sawdust trench and a few bedlog impressions are all that is left.

The group stopped at the Chinaman's Picnic Ground for a well earned lunch. This is also the site of Wood's relatively large sawmill and visitors can see the sawpit designed to take a vertical saw (now half filled with local rubbish) and several bedlog impressions.

In the afternoon we visited a mill site of unknown ownership that had substantial earth works. The main excavation was around 11 by 5 metres and had a 7 metre belt trench, possibly for an underfloor drive system. The bifurcated sawdust trench had two large (1 metre diameter) trees growing in it, indicating the site was quite old. Other interesting items included the remains of stone foundations (probably indicating a boiler setting), heavy iron bolts, and piles of stone and rubble not typical of a mill site. Argued historic evidence and the unusual lavout makes it possible that this mill site was Henry McGie's 1854 sawmill, the first in the Mount Cole Forest. On his death McGie was eulogised as the "father of Victorian sawmilling". The final mill site for the day was another spot mill of Emery's where the terrain surrounding the various mill sites seen that day was discussed to explain why tramway technology had practically by-passed the Mount Cole Forests.

The group then made their way to

Ararat for dinner and a tour of the Ararat Railway Museum adjacent to the Ararat Station. Prior to dinner several members visited the Langi Morgala Museum in Ararat which houses a fascinating range of old historical items associated with town and rural life in general. Adjourning for dinner at the local RSL club, members of the group who approached the management to see whether the TV station could be changed from the greyhound racing to the ABC election special were warned that, unless they wanted to be on the

Coming Events

APRIL 2007

3-7 Kerrisdale Mountain Railway & Museum, VIC. This scenic narrow gauge railway and steam museum is now open to the public from 1000-1700 Thursday to Monday and public holidays. Information, phone (03) 5797 0227 or website: www.kerrisdalemtnrailway.com.au.

5-6 Wee Georgie Wood Railway, Tullah, TAS: narrow gauge steam train operates 1000-1600 – last operating days 2007-2008 season. Phone: (03) 6230 8233.

5-6 Redwater Creek Steam & Heritage Society, TAS. Narrow-gauge steam railway rides daily 1100-1600. Information Chris Martin, phone (03) 6334 8398 or 0429 418 739.

6 Richmond Vale Railway, Kurri Kurri, NSW. Heritage month operating day with steam train rides and an exploration of J&A Brown's achievements in creating a showpiece for his mining and railway empire – 1000-1630. Also on 13 April. Enquiries: (02) 4955 1904.

6 Australian Sugar Cane Railway, QLD. Steam-hauled narrow gauge steam trains in Bundaberg Botanic Gardens (1000-1600) every Sunday, public holiday and Wednesdays during Queensland school holidays. Phone (07) 4152 6609.

6-20 Timbertown, Wauchope, NSW. Special event 'Where Our Timber Industry Comes to Life' for the 2008 National Trust Heritage Festival, including narrow gauge steam train operations. Daily from 0930-1500, entry \$5 adults. Information: (02) 6586 1940.

12-13 Puffing Billy Railway, Belgrave, VIC. Day Out with Thomas, featuring THOMAS in steam and DOUGAL the Diesel performing in Emerald yard and THOMAS hauling special steam trains to Nobelius or Clematis and return. Also on 19-20 April. Bookings (03) 9754 6800.

12-13 Illawarra Light Railway Museum Society, Albion Park, NSW. Operating day with two narrow gauge trains on mainline, plus the trolley-wire miners' tram and miniature railway 1100-1630. Also on second Sunday each month. Phone: (02) 4256 4627 or www.ilrms.com.au

12-13 Alexandra Timber Tramway & Museum, VIC. Market day on 12th with petrol-hauled trains and steam trains on 13th. Also steam-hauled trains 26-27 April. Information: Bryan 0407 509 380 or Peter 0425 821 234. 18-20 Richmond Vale Railway, Kurri Kurri, NSW. Steam train operations for Steamfest 2008. Enquiries: (02) 4955 1904.

20 Cobdogla Irrigation Museum, SA. Narrow gauge steam train operating day. Phone (08) 8588 2323.

MAY 2007

4 Puffing Billy Railway, Belgrave, VIC. The Great Train Race with participants racing against a train hauled by Garratt G42 over the 13.2km from Belgrave to Emerald Lake. Information (03) 9754 6800.

11 Alexandra Timber Tramway & Museum, VIC. Narrow gauge steam trains 1000-1545. Also diesel-hauled trains 25 May. Information: Bryan 0407 509 380 or Peter 0425 821 234.

17-18 Campbelltown Steam & Machinery Museum: Oil, Steam & Machinery Open Days with operating narrow gauge steam railway, traction engines, steam rollers, stationary and portable engines of all types and heritage machinery. Email: big-trev@bigpond.com

17-18 Richmond Vale Railway, Kurri Kurri, NSW. Model Exhibition with steam train operations. Enquiries: (02) 4955 1904.

JUNE 2007

8 Cobdogla Irrigation Museum, SA. Narrow gauge steam train operating day. Phone (08) 8588 2323.

8-9 Alexandra Timber Tramway & Museum, VIC. Narrow gauge steam trains 1000-1545. Also diesel-hauled trains 22 June. Information: Bryan 0407 509 380 or Peter 0425 821 234.

Note: Please send information on coming events to Bob McKillop – rfmckillop@bigpond.com - or the Editor, Light Railways, PO Box 674, St lves NSW 2070. The deadline for the June 2007 issue is 5 May.

receiving end of a re-enactment of World War II using all the attack memorabilia in the RSL lobby, the station should stay permanently on the greyhound racing.

After dinner the group visited the Ararat Railway Museum and, following a tour of its restored signal box, Peter Evans made a presentation on how what we had been seen during the day fitted into a national historical context. Coincidentally, the volunteers at the museum had the ABC election special on in the background and members were torn between listening to Peter's talk and watching Johnny's team march resoundingly out of office.

Next morning the tour commenced from The Glut Picnic Ground and followed the local water supply road up to the headwaters of Fiery Creek and past Hill's mill site. Significant excavation had been undertaken around the mill site to bench it into the hill side, resulting in a fairly confined operation in an extremely picturesque location. To the North East of the mill is a substantial linear excavation which pre-dates Wilkinson's mill. This excavation (possibly the site of Mount Cole's only tramway) was followed down to Tunbridge's (later Caldwell's) mill site at the foot of the hill. The tour party then walked back to The Glut Picnic Ground for lunch.

After lunch the tour visited Philipson's Albion sawmill on Philipson's Track. At this site there are significant stone works up to 2.4 metres high that delineate the boiler setting, as well as bolts near the likely position of the mill engine. Unfortunately this site is very close to recent logging operations and is potentially at risk.

The final destination of the tour was Sanderson's mill near Cave Hill Creek. The earthworks are relatively well preserved, but the site is heavily overgrown. Peter included an historic photograph of this site in the tour notes which allowed the tour party to visualise the site in its heyday.

Once again Peter Evans researched, planned and executed a sensational tour to Mt Cole, which is a time capsule of 19th century sawmilling practices in Victoria.

Special thanks go to Peter who freely shared his comprehensive historical knowledge with the participants of this tour.

Simon Moorhead



News items should be sent to the Editor, Bob McKillop, Facsimile (02) 9958 8687 or by mail to PO Box 674, St Ives NSW 2075. Email address for H&T reports is: rfmckillop@bigpond.com Digital photographs for possible inclusion in *Light Railways* should

be sent direct to Bruce Belbin at: boxcargraphics@optusnet.com.au

NEWS

Queensland

DURUNDUR RAILWAY, Woodford 610mm gauge Australian Narrow Gauge Railway Museum Society

Further to the report in LR 199 (p.26) on the sale of ex-Pioneer sugar mill 0-4-2T KILRIE (Perry 265 of 1925) to the Queensland Pioneer Steam Railway, the ANGRMS President, Terry Olsen, has explained that while it would have been nice for the Society to have donated the locomotive to their kindred organisation, the harsh reality is that ANGRMS has financial commitments that must be met. The QPSR did not wish to continue with the past lease arrangement, so the loco was offered to them for purchase at a considerable discount.

The ANGRMS Trackmaster carried out his annual inspection on 15 December 2007 and found the standard was generally good, with just two medium priority defects to be addressed. Track work days in October and November concentrated on spot re-sleepering on the main line and monthly track work parties are scheduled through until June 2008 *DR Bulletin* No. 291, January 2008

BAUPLE HISTORICAL MUSEUM, Bauple 610mm gauge The Bauple & District Historical Society Inc.

John Fowler 0-6-0T (B/N 11165 of 1907) from the Isis Central Mill is

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on display in a fenced-off area (see photo LR 175, p.29). Its cab design is said to represent that of the Krauss locomotive that once worked at the Mount Bauple mill nearby. Also at the museum is a representation of the first locomotive built by Walkers, the Pettigrew & Sims 0-4-0VBTG loco *MARY ANNE*, built in 1873.

John Browning 11/07

CHRIS HART, Ingham 610mm gauge

Following his move to a new home, Chris Hart transported his collection of 610mm gauge equipment from Cordelia on 5 and 6 November 2007. The items include two Clyde and two Hansen linecars, and two locomotives – Malcolm Moore 0-4-0DH *Moore* (DH-112-GT-1 of 1956) and Drewry 0-6-0DM *HERBERT* (built by Baguley, but with Drewry builder's plate 2394 of 1952).

Chris Hart 11/07

GYMPIE MINING & HISTORICAL MUSEUM 610mm gauge Mancha 4wBE Z22, with battery box ZL09, has been moved from the Gympie Eldorado Gold Mine to the museum site, along with an ore car. John Browning 11/07

ISIS DISTRICT HISTORICAL SOCIETY, Childers

610mm gauge

The John Fowler 0-6-0T (B/N 7607) built in 1896 for the Colonial Sugar Refining Company's Childers Mill, and subsequently No. 4 on the Isis Central Mill roster, has been returned to Childers for restoration as a static display at the local museum. Following its withdrawal from service, the locomotive was placed in a kindergarten playground in Childers in 1964. The locomotive was purchased by a private collector and moved to Sydney in 1983, where it was apparently stored in the open in poor condition. It was advertised for sale in a vintage machinery magazine in 2004 and the owner subsequently applied for an export permit, which was refused (LR 196, p. 6).

The Isis District Historical Society has received a \$22,000 grant to refurbish the locomotive for static display. It arrived back in Childers on 23 November by road from Wollongong and, by mid-December 2007, 'Old No. 4' was awaiting sandblasting as the first step in the refurbishment project. Further reports on this project would be appreciated. *Isis Town & Country*, 22 November & 13 December 2007, via Bob Gough

ERROL DENNIS, Jambin 610mm gauge

Formed Farleigh Mill Simplex 4wDM locomotive PHAR LAP (Motor Rail 21623 of 1957) was advertised on ebay for sale in February with a reserve price of \$10,000 (with the B/N given as 216231). No bids were received. Chris Statton, LRRSA Yahoo Group 16 Feb 2008

New South Wales

ILLAWARRA TRAIN PARK, Albion Park 610mm gauge Illawarra Light Railway Museum Society

The fruits of the strong volunteer efforts at Albion Park during 2007 have come to maturity in the early months of 2008. The ex-Condong Mill Ruston 40DL 3-cylinder 4wDM (R&H 371959 of 1953) has now rolled out of the paint shop in its new colour scheme and following completion of lining the livery, it is hoped to commission this locomotive in mid-2008. SHELLHARBOUR, the ex-Tully Sugar 0-6-0DH No. 8 (John Fowler 2192 of 1937, rebuilt EM Baldwin 5.80.9.63 of 1963) was trialed after the successful fitting of its new torque converter and other related works. The trial, which involved load test hauling the locomotives CAIRNS, TULLY 6 and KIAMA dead attached, was successful with the loco performing well. Following completion of paint works this loco is expected to commence active service around mid-year.

The Society maintained an active operating schedule over the Christmas/New Year holiday period. The 0-6-0DH *SEYMOUR* (Baguley 2392 of 1952) was on main line duties during the December 2007 running day, while a mixed bag of operations throughout the school holiday period saw the two-cylinder Ruston twins in



The representation of the first locomotive built by Walkers of Maryborough, the Pettigrew & Sims 0-4-0VBTG loco MARY ANN (built in 1873), on display at the Bauple Museum. Photo: John Browning

Heritage &Tourist

operation with the Vernier mancar making a guest appearance. 0-6-2T *TULLY 6* (Perry Eng. 7967/49/1 of 1949) was in action for the January operating day, but unfortunately heavy rain resulted in cancellation of the February event.

Brad Johns 03/08

GOLDEN MEMORIES MUSEUM, Millthorpe Millthorpe & District Historical Society

This dynamic museum in the heritage village of Millthorpe located between Blayney and Orange in central western NSW, offers a model for railway preservation groups. Its main attraction is the Museum of Rural Technology, a vast collection of agricultural machinery and tools, including many unique items. It includes a mining section, featuring the Cadia Mine and its private railway (a standard gauge line connecting with the NSWGR system at Spring Hill), as well as items from the Browns Creek Gold Mine. Pride of place in the separate tractor display is the huge 1911 Clayton & Shuttleworth traction engine (B/N 44128). Following use on a farm at Cowra, it went to Trunkey Creek in 1928 where it was used at a local sawmill and to drive the stamper at a gold mine until 1970.

The museum is open from 1.30pm every weekend, daily from 10.30am during school holidays, and from 10am-5pm (4pm winter) on public holidays – entry \$5 adults. It will be open daily during Heritage week (12-20 April) and there are several other open days each year which feature special displays and machinery demonstrations.

Editor 02/08

LAKE MACQUARIE LIGHT RAIL, Toronto 610mm gauge Grahame Swanson

In recent months, activities have ranged over a wide number of fronts. Restoration of the ex-SECV Malcolm Moore 4wPM locomotive (1050 of 1943) is well advanced, with the original radiator (which leaked like the proverbial sieve) now replaced by a reconditioned unit which once saw service in an underground man-riding car. Still fitted with its original Ford V8 petrol engine, the



Ex-Tully Sugar 0-6-0DH No. 8 SHELLHARBOUR (John Fowler 2192 of 1937) hauls fellow locomotives CAIRNS, TULLY 6 and KIAMA dead attached during load trials at Albion Park. Photo: Brad Johns



Skips from the Browns Creek Gold Mine on display in the mining section of the Museum of Rural Technology, Golden Memories Museum at Millthorpe on 10 February 2008. Photo: Bob McKilllop

locomotive has proved to be very powerful - easily pulling the 0-6-2T Perry while in idle.

The Commissioner's Car has been fitted with a pair of reconditioned bogies. A second ex-Innisfail Tramway H-wagon frame has been overhauled, and this will form the basis of a new passenger carriage, which will be an end-platform vehicle, in the style of a North-East Dundas Tramway AB car.

Construction of the station building at Nomad is almost completed, with only some internal fitting-out remaining to be done. Thanks to some recent donations, the booking office now has an Edmonson ticket validator, restored to as new condition which, along with the original date stamps, is once again validating tickets, whilst the platform is now graced by an authentic set of Avery platform scales, together with a fully operational destination board which invites guests to join the next train for all stations to Sydney!

Earthworks have commenced for the projected back road at Nomad, which will feature a low-level platform to facilitate easy loading and unloading of the tramcar and the four-wheel passenger cars.

Recent acquisitions from the former Megalong Valley Railway have included a four-wheel miners' car (ex-Excelsior Colliery, Thirroul) and several whole-stick cane trucks (ex-North Eton Mill). Once these are restored, it will be possible to run a heritage cane train of seven whole-stick trucks.

The level crossing adjacent to the running shed at Onslow now has a

swinging gate, complete with flashing red lights and fully interlocked with the railway signalling.

The first running day for 2008, on Sunday 10 February, saw Baldwin 0-4-2T *FAIRYIMEAD* (10533 of 1889) back in action following repairs to its cab and cylinder lubricator. It performed faultlessly throughout the day, at one point hauling the longest train yet assembled on the LMLR – 13 vehicles in all.

The engine shed has recently been extended at the front by 3m, giving around 25% additional weather protection over all four tracks.

On 30 March, the LMLR was due to host its first charity event for 2008, A group of children from Camp Quality have been invited as guests. Bruce & Graeme Belbin 03/08, Grahame Swanson 03/08.

RICHMOND VALE RAILWAY, Kurri Kurri 1435mm gauge Richmond Vale Preservation Cooperative Society Ltd

The RVR suffered several graffiti attacks on its rolling stock during 2007, the last occurring between 22 and 28 December. In this instance charges were laid against the offenders. The affected stainless steel carriage was painted with two types of paint – one on each side - to test their effectiveness against graffiti and their resilience to extreme weather conditions.

Extensive repairs were undertaken on the ex-Lysaghts 0-4-0ST MARJORIE (Clyde Eng 462/1938) over the holiday period in an attempt to address the problem of hot bearings. The locomotive was lifted from its wheels to allow the four axle boxes and their brasses to be removed. The brasses fitted by the former owners were on the small side for the weight of the locomotive, so extensive repairs will be required. At the same time the spark arrester was removed and the smokebox washed out, and the regulator and washout plugs were removed to allow the boiler to be washed out ready for its annual boiler inspection. Ex-SMR 2-8-2T No. 30 (Beyer Peacock 6294/1924) was also prepared for its boiler inspection.

The Link Line, January 2008

STATE MINE HERITAGE PARK & RAILWAY, Lithgow 1435mm gauge

City of Greater Lithgow Mining Museum Inc.

Mining museum volunteers at the Lithgow State Mine Heritage Park & Railway are continuing to develop interpretations of coal and shale mining, and to upgrade existing exhibits. Two former National Oil and Petroleum Ltd (Glen Davis) underground electric locomotives were moved into position in early February 2008 to provide an integrated display with the previously established Mercury Arc Rectifier in the State Mine Bath House (see LR 199). Constructed by the Department of Railways as a power station in 1923, the Bath House has been restored as an exhibition hall and houses larger museum items.

The former Glen Davis locomotives were donated to the museum by LRRSA researcher Ross Mainwaring in 1989. After the closure of the Glen Davis Oil Shale Works in 1952 these locomotives were purchased by Bill Clinton, owner of the Nattai-Bulli colliery near Camden. They were not used again and were dumped at Clinton's brickworks site near Narellan. Museum volunteers removed layers of clay and debris from the locomotives and they were stored outside until a place had been prepared for them. The mercury arc rectifier was originally a back-up unit used at the Kandos Colliery. It was also donated to the museum by Ross Mainwaring.

One locomotive was originally built in 1909 by the General Electric Company, Schenectady, New York for the Sulphide Corporation and used at their Cockle Creek works. This and a sister locomotive were relocated to Glen Davis in 1938. Its original cast iron frame was replaced by a fabricated steel frame in 1946. The second locomotive was built in the workshops at Glen Davis in 1948 using old Sydney tram motors and a frame specifically manufactured by A. Goninan & Co. Ltd of Newcastle. It is planned to further conserve the locomotives and undertake some minor restoration, including repositioning of controllers. Interpretive panels will also be prepared using information researched by Ross Mainwaring and Leonie Knapman. Historical photographs for these panels have been provided by Leonie Knapman. The rectifier was installed in a new cabinet manufactured from scrap timbers by State Mine volunteers in 2006 and has been on display since January 2007. Restoration of a second Lithgow Valley Colliery cable-drawn man transport has also been completed. This unit is now on display with

Heritage &Tourist

the transport previously restored. The museum was recently successful in obtaining a Museums & Galleries NSW Volunteer Initiated Museums Small Grant of \$1000 to upgrade display lighting. New track lighting is being installed in the museum to better illuminate existing displays. Ray Christison, 02/08

Victoria

ALEXANDRA TIMBER TRAMWAY & MUSEUM 610mm gauge

Further to our comment in LR 199 (p.26) on the efforts of the ATT&M to address global warming, the February 2008 issue of TreeSmart News (the newsletter of TreeSmart Australia, a carbon pooling organisation that offsets emissions from the transport sector) has a feature report on the ATT&M initiative. The society has offset its estimated 7 tonnes of carbon dioxide emissions for 2006-2007 through TreeSmart Australia using a local eucalypt plantation at a cost of \$84. Thus the society was a carbon neutral organisation for this period.

Peter Evans, 02/08



On Sunday 10 February, Lake Macquarie Light Rail's first running day for 2008, former Fairymead Mill 0-4-2T number 1 FAIRYMEAD (Baldwin 10533 of 1889) hauls a special 'mixed' train past Nomad station. Photo: Steven Saunderson

Heritage &Tourist

PUFFING BILLY RAILWAY 762mm gauge

Emerald Tourist Railway Board There have been some interesting developments on the locomotive front at the PBR. Among the 'little locos', 0-4-0T CARBON (Couillet 986/Decauville 90 of 1889) is currently out of service for a major boiler inspection requiring removal of the tubes. It is unlikely to operate again during 2008. Work on preparation of the Climax boiler is continuing. Cracks have been found in several castings which handle high pressure steam and replacement parts will need to be made. A new smokebox is currently being made which will closely resemble the original smokebox. It will replace the smokebox made by the Forests Commission Victoria, which differed from the original.

The ETRB has purchased two more ex QGR B-B DH locomotives from Mackay Sugar in Queensland. One is former QGR DH25 and is still 1067mm gauge. The other is a former Cooks Construction locomotive, CC02 (ex-DH5), used on the SECV Yallourn to Morwell railway in Victoria, which was converted to 90cm gauge. Both locos are located in Queensland, but will be transported by road to Victoria in the next few months. It is intended to deliver them to the Menzies Creek Museum, where good road access is available. They will be temporarily stored there until about June. At that time DH31 is scheduled to undergo a major service, and its bogies will be used to shift the new acquisitions to Belgrave. The intention is to convert one of the new locos to 762mm gauge, and to use the other as a source of spare parts.

Frank Stamford, 02/08

Tasmania

IDA BAY RAILWAY 610mm

gauge

We have not had a report on this preserved railway since August 2006 (LR 190, p.27), though there have been rumours of 'hard times' for the owner, Meg Thornton. It has now been reported that Meg will be forced to walk away from her investment unless she can get funding to help upgrade the stateowned track. She leased the former limestone railway early in 2005 and there was a gala reopening of the line on 17 December 2005 (LR 187, pp. 28 and 31). Since then Ms Thornton has been upgrading the track and building a cafe and accommodation at the site, but she says the track still needs constant upkeep and she's been unable to get funding grants, partly because of the fact that the railway is state-owned infrastructure. She is hoping that the state government will offer to help, arguing that it should recognise the importance of the Ida Bay Railway, not only to the history of Tasmania and to the far south, but also to the people and visitors to the area.

ABC Local News, 3 Feb 2008, via Barry Blair

South Australia

COBDOGLA IRRIGATION & STEAM MUSEUM 610mm gauge

Cobdogla Steam Friends Society Inc.

Boiler inspections at the museum were conducted in early 2008 and all were passed. Due the practice of inert gas filled dry storage of the boilers the museum is now running a 24-month cycle between boiler inspections.

To cater for increased running at night, the Simplex 4wDM locomotive FARLEIGH (Motor Rail 7369 of 1939) has been fitted with side mounted clearance lights hardwired in and a radio is fitted in the cab, while the passenger carriages have also received clearance lights and reflectors. Following the failure of a bearing under the ballast hopper, two new tri-axle roller-bearing suspension bogies have been constructed and will be fitted to a passenger carriage to be constructed once the line has been completed to Loveday. Another two new sprung roller-bearing bogies are also under construction to fulfil our complement of passenger stock, which will be six carriages to enable two threecarriage sets to be run. The Bagnall 0-4-0ST locomotive (B/N 1801/1907) MARGARET has had the original coupling replaced with a new standard sliding link coupling to bring it in line with the rest of the rolling stock.

Denis Wasley, 03/08

Western Australia

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

The BBR operated trains every day during December and January, most of them comprising ex-Lake View & Star Planet 0-4-0DM No. 1 (FC Hibberd 2150 of 1938) and the four-carriage corridor train set. The Planet travelled over 800km during this period and in February it was shopped for adjustments to the brakes and general maintenance work. The boiler of 0-4-2T BT1 (Perry Eng 8967.39.1 of 1939) was inspected on 2 February 2008 and received a clean bill of health. It has received a new coat of paint and reassembly of the locomotive commenced during the month.

Volunteer crews were focusing on track maintenance tasks in February, with some 1500 timber sleepers to be installed in conjunction with steel sleepers. The 'track crew' achieved its 'best ever' result on the evening Friday 22 February with 176 sleepers being unpacked, de-plated and restacked by the end of the night. A Barthgate train indicator donated to WALRPA by the Puffing Billy Railway has been refurbished and was installed at Whiteman Village Junction Station on 8 February. Barthgate indicators were used extensively in the United Kingdom, Victoria and New South Wales and similar forms of indicators were used at Perth City Station. The Puffing Billy Railway also has a working example.

BBR website news, 02/08

CARNARVON LIGHT RAILWAY 1067mm gauge

Carnarvon Heritage Group Inc. Fire, believed to be deliberately lit, destroyed a 72 metre section in the middle of the famous 1.6km long Carnarvon Jetty in the early hours of Sunday 28 October 2007. It took firefighters 14 hours to quell the blaze. The Carnarvon Heritage Group immediately launched an appeal for \$100.000 as a deposit on the jarrah timber required for repairs. It is estimated that rebuilding of the destroyed section will cost \$1.2 million, for which the preservation group is looking to contributions from the state and Federal governments. The president, Mike Maude, reports that the group is hopeful that this task can be completed during 2008. For the 2008 tourist season (Easter

to November), the *Coffee Pot* train will operate over about 1km of the jetty tramway from the Babbage Island station to the destroyed section of the structure. In addition the 2.5km 'town tramway' will operate from the Fescine station (the old South Arm of the Gascoyne River) to the Babbage Island station. Initially trains will be hauled by the Simplex diesel locomotive, 'Banana Clipper'.

The impending return to service of the ex-Public Works 0-4-0T steam locomotive KIMBERLEY, (Barclay 1754/1921) has generated considerable excitement in Carnarvon. Ian Lindsay, a Queensland boiler inspector on vacation in the town has assisted local volunteers to refurbish the locomotive after 8 years in storage due to mechanical problems and the lack of a qualified driver (LR 185, p.29). The locomotive undertook a test run in early February 2008 when a number of faults were identified that require rectification, but it is hoped to have KIMBERLEY back in action on the town tramway during the 2008 tourist season. A \$10 return fare will be available from town to the jetty covering the two trains.

The Carnarvon Heritage Group is seeking individuals with steam tickets to assist them by providing driving instruction for members on *KIMBERLEY*. Any reader with appropriate qualifications who is interested in a vacation at Carnarvon with accommodation provided should contact Mike Maude on (08) 9941 3384 or write to the Carnarvon Heritage, PO Box 779, Carnarvon WA 6701.

ABC Radio 20 February 2008, via Barry Blair; Editor based on interview with Mike Maude 02/08

Overseas

COMMUNITY TRUST OF SOUTHLAND, Invercargill, New Zealand

1435mm gauge

A replica of New Zealand's first locomotive, the railway curiosity *LADY BARKLY*, is on display on the old Invercargill wharf. Built in 1861 by Hunt and Opie at the Victoria Ironworks in Ballarat, the locomotive was built to the Davies patent design with flangeless driving and carrying wheels, and guide wheels at each end set at an angle of 45 degrees and featuring a V-shaped groove to engage the inside, upper edges of the wooden rails. Named after

the Governor of Victoria, the LADY BARKLY was originally used on an experimental 1600mm gauge line that James Davies had built near his home at Green Hills.

Davies persuaded the Province of Southland to construct a standard gauge wooden railway to his patent design after he demonstrated the *LADY BARKLY* on the Invercargill jetty on 8 August 1863, thus becoming the first locomotive to operate in New Zealand. The diminutive *LADY BARKLY* was used for ballasting work on the 20 mile Oreti Railway built to the Davies patent design, but it, like the railway, was not a success, in large part due to its having been built to the wrong gauge! The illconceived project caused the Province of Southland considerable financial embarrassment. Following rebuilding, the locomotive was used for shunting at sawmills in the Invercargill area. The replica, built in 2003, was funded by the Community Trust of Southland.

Editor and Ian McKillop, 02/08

SANDSTONE HERITAGE TRUST, South Africa 610mm gauge The Trust is scheduled to hold a Steam & Cosmos Festival between 9 and 13 April 2008 when the railway will be open to the public. Up to 10 different narrow gauge locomotives will be steamed throughout the Festival with visitors and enthusiasts given an opportunity to familiarise themselves with the railway and the Sandstone Heritage Trust preservation programme. Regular guided tours will be held of all items in our collection. A highlight will be the Reefsteamers passenger train from Johannesburg, which will provide an opportunity for visitors to see some of South Africa's biggest steam locomotives in operation. Joanne West, SHT 02/08



The 2003 replica of New Zealand's first locomotive, LADY BARKLY, on display at the Invercargill wharf in February 2008. Photo: Ian McKillop



David Payling photographed the front (low pressure) bogie of Garratt K1 on the Welsh Highland Railway on 6 February 2008. It shows the steam sanding equipment recently fitted.

LIGHT RAILWAYS 200 APRIL 2008



WELSH HIGHLAND RAILWAY,

United Kingdom 597mm gauge The WHR's ex-South African Railways 2-6-2+2-6-2 Garratt loco NG138 has been taken out of traffic for its ten years boiler inspection, making the recent progress with the performance of the line's pioneer Beyer Garratt, K1, very timely. The locomotive has been in traffic at Caernarfon over the Christmas season with Santa trains and is now expected to be in front line passenger service during 2008 along with the line's other NGG16 Garratt, NG143.

Coal firing has led to better steaming and fuel economy for K1 than was achieved with oil. The valve settings shown in the Beyer Peacock drawings have proved unsatisfactory compared with experimentally found settings which are currently being optimised through the use of test trains. The recent fitting of steam sanding using equipment recovered from scrapped ex-BR Class 08 shunters has allowed K1 to take a full service load of six cars (and with a considerable load margin to spare). The haul up the 1 in 60 gradient from Caernarfon and the 1 in 40 from Dinas towards Tryfan Junction are achieved without slipping. The locomotive has also proved happy working in its compound steam mode throughout. When starting away from stations, this makes it unnecessary to use the simpling valve which allows live steam into the low pressure cylinders of the front engine. Improvements to the oil feeds and oilways of the axlebox bearings have made hot axle boxes a thing of the past. The water capacity is proving sufficient for the locomotive to run from Caernarfon to the summit station of the line at Rhyd Ddu with only normal water stops.

David Payling, 02/08

LRRSA ONLINE DISCUSSION GROUP Have you joined the LRRSA's email discussion group yet ? See: http://au.groups.yahoo.com/ group/LRRSA/ and click on "Join This Group"!

