LIGHT RAILWAYS

Sandfly Colliery Tramway, Tasmania
Mt. Morgan Electric Locos, Queensland

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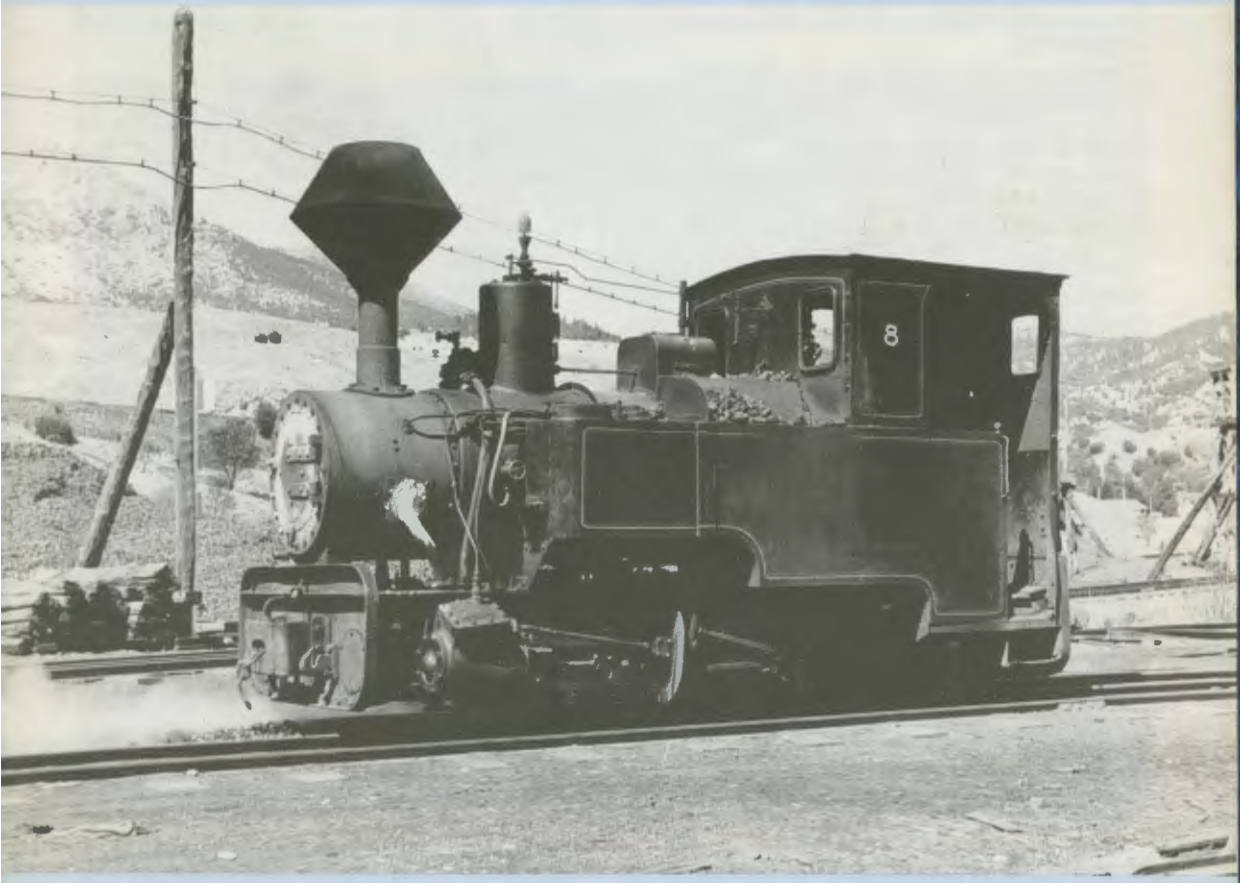

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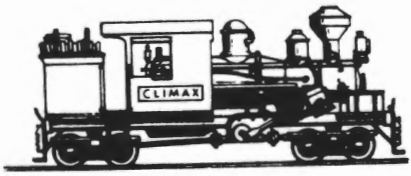

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EDITORIAL

Tasmania, with its many narrow gauge railways serving its timber and mining industries, is a mecca for the light railway historian. A small group of enthusiasts, including LRRSA members Lou Rae, Lindsay Whitham and Wayne Chynowerth, have been active in researching the history of these light railways. In this issue we offer the joint efforts of these researchers in recording the history of the Sandfly coal mine and its railway. Lindsay Whitham's article is an amended version of one which appeared in the Tasmanian Historical Research Association, *Papers and Proceedings* in 1973. Wayne Chynowerth has built on this information through detailed research into newspapers, Parliamentary papers and boiler records, while Lou Rae has facilitated the provision of these papers to *Light Railways* as a Tasmanian contribution and supplied the accompanying photographs.

An item from David Mews on the electric locomotives used by Mt Morgan mines in Queensland and an extensive letters section complete the issue.

Cover: Krauss No. 8 (B/No. 5480/1906), an 0-4-0WT of the Mt Lyell Mining & Railway Coy, shunting in the yards at Queenstown on 4 October 1960. Photo: Glen Johnston

AN INTRODUCTION TO THE SANDFLY COLLIERY TRAMWAY

by Lou Rae

On travelling 21 km south of Hobart along the Channel Highway, the popular residential town of Margate is reached. Over the past ten years the Margate district has seen a rapid redevelopment from a fertile orcharding, small fruit and livestock area, into the inevitable low density residential area. A further ten kilometres due West of Margate and some 460 m above sea level, the small town of Kaoota is also undergoing a transformation as commuters eagerly seek small holdings in the area.

Despite the recent changes of land use within the Margate and Kaoota districts, the tell-tale glimpses of cuttings, embankments and gently curving formations, readily give the visitor an insight into the transportation methods used to open the area up eighty years earlier.

Just after the turn of the century, Kaoota had become the centre of a rapidly expanding coal mining field, and Margate the port for the hard won spoils mined up in the hills. A 20 km 2 ft gauge tramway was constructed between the two centres in 1905. Examples of the many diggings around Kaoota are still clearly visible as evidenced by the sunken hollows in paddocks, old machinery sheds, coal heaps, rusted metal trucks, plant and rails that testify to a long gone era. A few years ago, an octogenarian by the name of Mr Owen Roberts related how busy the township of Kaoota had been, the undulating paddocks having been the site of many a miners humpy, and the often rowdy scenes after pay day drinking binges.

Special picnics were the highlights of the working

Easy gradients and sweeping curves, an obvious sign of an old tramway formation. This is the former Sandfly colliery tramway formation, now Allens Rivulet Road, 1 km east from Kaoota travelling towards Margate. Photo: Lou Rae

Some of the more recent coal mining operations at Kaloota in September 1982. This mine, situated half a kilometre north of Kaloota along the Pelverata Road, was abandoned many years ago.
Photo: Lou Rae

community and the train would carry the eager passengers in an assortment of coal trucks and makeshift passenger waggons down to Margate for the day.

Despite all the happy memories of the area, Mr Roberts quickly pointed out that work in the mines was far from easy as few mechanical aids were employed underground by the owners. The majority of the coal mined was in thin seams and he recalled working in narrow tunnels on his hands and knees, with virtually no room to swing the pick. The mines were often damp and pumps worked overtime to keep the water levels down.

Today many of the workings have been dozed-in, fenced off or merely appear as deep wells. The former site of the Sandfly Coal Mine is hard to locate because of the dense regrowth of scrub and blackberries.

The tramway's route from Kaoota towards Margate is clearly visible, as the road to Allens Rivulet runs along the formation for a kilometre and a half. The tramway then leaves the road and for the next seven kilometres is extremely difficult to follow. Bushfires and landslides have accounted for most of the bridges in this section, and the numerous patches of thick regrowth encountered makes progress along the track slow and tiring.

The section of the tramway between McGowans Road and Van Morey Road is easily negotiated and the final run downhill into Margate is predominantly over pasture and grazing land. On reaching the wharf site, the existing fish processing works and jetty have obliterated the marshalling yards, and the once substantial wharf has long disappeared.

In the years since the line's closure the Crown has sold off the majority of the tramway reserve to adjoining owners, and permission is required before walking some of the sections.

THE SANDFLY COAL MINE AND TRAMWAY

by Lindsay Whitham*

Early Proposals

Mr Gustav Thureau, Government Geologist, visited the Kaoota area in 1881 to inspect and report upon the Southern Coal Measures at Sandfly.[1] He found one 30 ft shaft and several adits being worked for coal of such good quality that he expressed wonder that so little work was being done. His report noted that a tramway with heavy gradients would be needed to transport the coal at North West Bay from the level of existing workings and suggested that diamond drilling be carried out to ascertain whether the whole series of coal measures could be worked from one main adit at a much lower level.

Shortly afterwards, a tramway was proposed from the Huon River near Southbridge by the Huon River Coal Mining Company. It was agreed that a reservation would be provided through Crown Land, but the tramway does not appear to have got beyond the proposal stage.

Sandfly Coal Mining Company

In December 1891, the Sandfly Coal Mining Company secured by Act of Parliament the right to construct a railway, of not less than 2 ft 6 in and not more than 3 ft 6 in in gauge, from Margate to the mine, near the saddle between Allen's Rivulet and Sandfly Rivulet (now Kellaway's Creek).[2] The Company was to have the rights and responsibilities of a common carrier and was required to submit its scale of charges for approval. Mails were to be carried free of charge and Members of Parliament were given the privilege of free travel to the same extent as was required by the Government Railways. By way of assistance to the Company, all Crown Land in a strip two miles wide on either side of the straight line from the harbour to the mine was withdrawn from sale, lease or licence until the railway was complete, or for a period of 18 months. Permission was granted to take, free of charge, from adjoining Crown Land, such timber, clay, stone etc. as might be needed for the construction of the line and to dump any material, rubbish etc. on Crown Land. A minimum rate of expenditure for two and a half years was specified to ensure prompt action by the Company.

In April 1893 Mr Alex Montgomery, Government Geologist reported that the Company had not done any work on the mine and was still searching for a tramway route.[3] Although Montgomery reported favourably on the quality of the coal, access was so poor that coal mined to that date could only be packed out on men's backs. Coal reserves were estimated at 20 million tons. North West Bay could, he considered, become a good coaling station for the ships of Her Majesty's Fleet and the lines of ocean steamers calling at Hobart. Some £50,000 would be necessary to construct the railway and wharves and open up the mine for large scale production. Montgomery recommended that at last six bores should be put down with the Department's diamond drill to prove the location of the seams and four holes, totalling 2,130 ft, were drilled in 1895-6.

There was no further activity until 1903, when two syndicates commenced operations. The Government Geologist, Mr Twelvetrees, reported in October that some good coal seams up to five feet thick had been exposed, but real production still awaited the construction of a tramway.[4] The route being considered at that time involved a steep drop of about 1,000 ft from the saddle to Allen's Rivulet and thence by easy grades to Margate.

Almost a year later the two syndicates united to form the Sandfly Colliery Company Limited, which started operations with a flourish by working three shifts to mine one hundred tons of coal for steaming trials in a warship. Tenders were let for the carting of coal to Margate.

Tramway Construction

The company engaged Huckson and Hutchison, engineers and surveyors of Hobart, to prepare plans for a tramway. A substantially different route via Poverty Gully and Nierinna was selected and work began on the line and a wharf at Margate in the first quarter of 1905. Apart from a few short level sections, the 2 ft gauge line climbed continuously from sea level to about 1500 ft at the mine in a length of 12.5 miles, almost double the straight line distance. The Government sold to the company eight miles of rails which had been purchased for a tramway at Farrell on the West Coast, a project which was abandoned. A Krauss locomotive (B/No. 4526/1900) and a number of side-tipping trucks were purchased for use during construction

* This is an adaptation of the paper which originally appeared in Tasmanian Historical Research Association, *Papers and Proceedings*, Vol. 20, No. 4, December 1973, pp. 201-209.

The tramway terminus near the Margate wharf. Krauss 4526/1900 is shunting.
Photo: *Weekly Courier,* 2 February 1907

of the line. (Ed. see p. 14)

The company constructed some of the earthworks and bridges itself and had the remainder done by contract. Bad weather and a scarcity of good material for track ballast hampered construction in the early stages. In 1906, when the rails were laid on the bridge at 6.5 miles, a good ballast pit was opened up there and the rate of progress improved. Rail connection to the mine was established in August 1906.

In the meantime, the company had carried out considerable exploratory work and installed machinery at the mine. A second Krauss locomotive (B/No. 5682/1907) arrived on site in early 1907 (see p. 14). It was reported that the railway line, wharf, rolling stock and accessories had cost some £18,000.

In January 1907, a representative of the Launceston *Weekly Courier* visited the works and his report, couched in glowing terms, was published a few weeks later. The article was reproduced in a well produced glossy-paper brochure. Both were illustrated with a dozen photographs by JW Beattie.

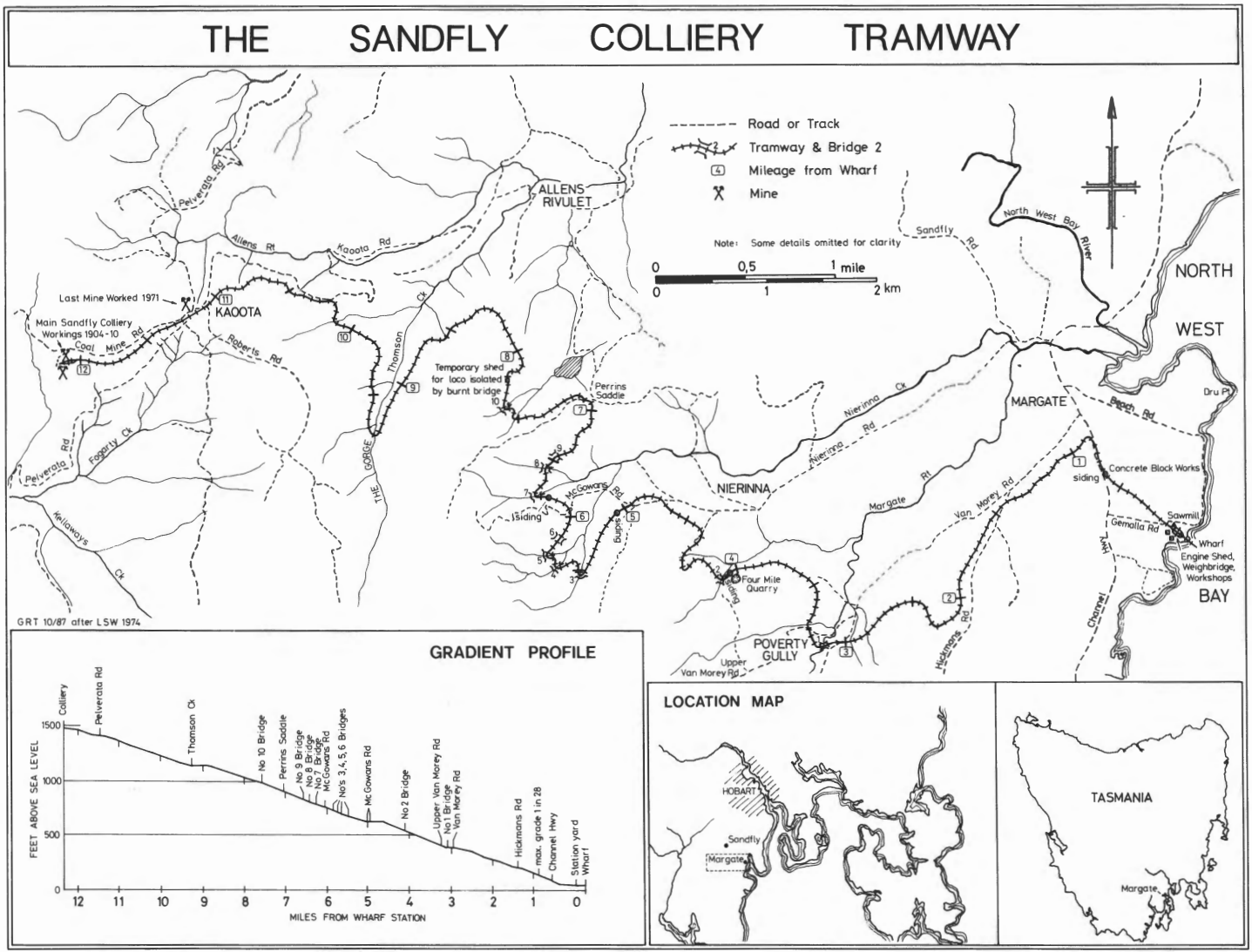
The company bought and hulked the 47 years old brig *Fairy Rock* for the transport of coal from Margate to Hobart. The Sandfly Colliery Company produced 8,500 tons of coal before going into liquidation in late 1907, still owing the Government most of the £2,250 for rails.

Some time in 1908 the tramway was leased to Mr Oates of Huonville for the carriage of timber, including squared logs, 20 x 20 in and 90 ft long. A tragic accident occurred in March when the trucks carrying two such logs skidded on greasy rails and left the track at the "top" bridge, killing one man and badly injuring another.

Tasmanian Wallsend Colliery Company

Late in 1908, the Tasmanian Wallsend Colliery Company took over the assets of the Sandfly Company, including the debt to the Government, and prosecuted the mining work with some vigour. The main workings were from a tunnel at tramway level and two other seams, about 300 and 500 ft respectively lower, were worked, the coal being raised to the main tramway by a surface haulageway.

THE SANDFLY COLLIERY TRAMWAY



For the four consecutive years, 1907-10, the Sandfly coal mine was the third highest producer in the state, the best effort being 7,677 tons in the part-year 1910. All told, the company produced 16,000 tons of coal, but ceased production when the seams ended abruptly at faults.

Public Ownership

With closure of the mine in 1910, the tramway continued to operate for the public, carrying timber, vegetables, small fruit, etc. When efforts by the Tasmanian Wallsend Colliery Company to promote the establishment of large sawmills failed in 1913, the tramway was offered to the Government. On the advice of departmental heads, the offer was declined and the rails and rolling stock were advertised for sale in Tasmanian newspapers. Local residents reacted promptly by petitioning the Minister for Lands and Works to have the tram retained as a public service.

The tramway mining easement 153-W was declared void in December 1913 and forfeited for non-payment of rent. Nearly half the original debt for the rails was still outstanding. The company continued to try to persuade the Government to purchase the tramway and in August 1915, engineers from the Public Works and Railway Departments inspected the line and rolling stock. On their advice, the Government again declined to purchase and the company negotiated a sale with a Victorian firm. The Government then reversed its decision and, in September 1915, agreed to purchase the tramway.

A request by a newly formed coal-mining syndicate to lease the tramway from the Government drew another petition from the residents along the line to have the tramway controlled by the Kingborough Council. The Bill to purchase the tramway was rejected early in 1916, but after further inspections and reports by the PWD and TGR, the Wallsend Colliery Tramway Purchase Act was finally approved in December 1916.[5] The tramway service had been maintained throughout this period.

Just what had the Government bought for its £4,500? Extracts from the reports by Mr F Groom Butler, Engineer-in-Chief, and Mr Wm R Deeble, Chief Mechanical Engineer, to the Commissioner

Miners huts east of the main Sandfly colliery workings, Kaoota.
Photo: *Weekly Courier,* 2 February 1907

The main Sandfly colliery workings and tramway terminus looking east.
Photo: *Weekly Courier,* 2 February 1907

for Railways describe the situation:

Mr Butler, 30 September 1916:

The line generally, has been well and substantially made for this class of Tramway . . . but has been allowed to get very much behind in the matter of repairs and maintenance.

The formation, both in cuttings and embankments, is about 9 feet wide with well laid out curves, and even gradients, the banks having slopes of about 1 to 1 with substantial log culverts under them where wanted. The rails are generally in a good state, but 4 different sections and weights have been used. From the Wharf to 6 miles in 20 lb, German rails, flat-footed in 26 ft and 18 ft lengths. From 6 miles to 7 miles, the rails are lighter, being about 16 lbs per yard in 15 feet and 18 feet lengths. These rails are too light and have been supported by an abnormal number of sleepers. From 7 mile to 8 mile — the rails are 30 lb. Iron, single topped chair rails, in Cast Iron chairs. These are evidently some of the old Deloraine to Mersey Tram rails, and are similar to those on the Smithton to Pelican Point Tram. From 8 miles to 11½ miles the rails used are of the 43 lb steel section of the Tasmanian Government Railways. From the 11½ miles to the terminus (12 miles) the same lighter section of 20 lb or 16 lb are used. The line on this length has been practically abandoned since the mine closed down.

The grades on the line have been well laid out and carefully kept, the steepest being about 1 in 27 or 28, though there is a large proportion of the line laid to far more easy grades . . . The curves have been well and carefully laid out and made and, especially on the seaboard end of the line, are surprising easy radius. Of course, as the line climbs into the hills, the curves have been laid to smaller radius down to 1½ chains.

There are at present five dead end sidings along the line at various points. The table drains are in a very bad state and are practically blocked throughout from end to end.

The scrub and brushwood have been allowed to grow up on the line throughout its length . . . There is not enough room at present for the

locomotive to pass without risk of damage to the motion and fittings &c . . .

There are 10 bridges on the line all built of timber obtained locally and they were, when new, evidently substantial and carefully constructed. The original bridges No. 5 and 6 have been burnt out and those re-erected in their place have not been nearly so well built.

The following are rough details of the various bridges:[6]

No. of Bridge	No. of Spans	Height at Centre	State of Repair etc.
1	11/21'	27'	Very fair order
2	13/12'	18'	Very fair order
3	13/12'	14'	Good order
4	9/12'	16'	Good order
5	5/21'	15'	Not in good order
6	4/21'	15'	Not in good order
7	3/21'	12'	Fair order only
8	10/21'	35'	Good order
9	8/21'	32'	Good order
10	6/21'	27'	Good order

. . . The [recommended] work would, I estimate cost at least £300 and would employ 2 men for 12 months or a larger number for a proportionate period . . . The material on this line is still fairly valuable and, if removed and sold at the present price of second hand railway material . . . would be worth about £4,500.

Mr Deeble, 10 October 1916:

The valuation of the rolling stock and sundries is:

	£
No. 1 locomotive	300
No. 2 locomotive	400
8 Bogie wagons @ £35 each	280
Weighbridge	50
2 side tip wagons @ £4.10.0 each	9
2 Underframes complete for ditto	5
1 Locally made passenger vehicle	10
Duplicates and sundries	10
	£1,064

No. 1 Locomotive: 10 tons Krauss, 4-wheeled coupled, 2-wheeled leading bogie, date 1906. This engine is in good working order.

No. 2 Locomotive: 8 tons Krauss, 4-wheeled coupled, date 1900. This engine has had no internal examination of boiler and it is now 16 years old. Engine has been standing idle for two years. An internal examination of the boiler should be made before the engine should again go into regular work.

Wagon Stock: There are 7 double 4-wheeled bogie trucks by RJ Pickering and Co, near Glasgow, of 7 tons capacity, and 1 double bogie by Salisbury, Launceston, of same capacity. They are medium sided wagons. Floor area 16' x 5'; sides 2'6" deep, but they are easily converted into flat wagons when required. These wagons are in good working order, but require painting to preserve them from deterioration. The above remarks apply also to the locally made passenger car, tip trucks and weighbridge mentioned in the valuation of stock.

Provision was made for the repair work listed by Mr Butler and the tramway was leased to the Kingborough Council in 1917 for an initial term of three years at the nominal rental fee of five shillings per annum. However, before the Council took over, some of Mr Butler's forebodings were realised when, in February 1917, a bushfire swept in from Longley, damaging many sleepers and destroying No. 10 bridge. The Department promptly arranged for the bridge to be renewed.

Council Operation

There is little on record during the first three years of the Council's lease. The tram usually ran two or three times a week and daily in the small fruits season. A local syndicate took up the Sandfly coal leases when shipping strikes in 1917 cut off mainland supplies. They sent nearly 1,600 tons of coal down to Margate before closing at the end of 1919.

At some time, probably during the Council's lease, No. 9 bridge was replaced by an embankment on the same grade an alignment. Prospects for re-opening the mine were not good and other traffic had declined when, in January 1919, a bushfire totally destroyed the High bridge (No. 7) at the mid-point of the line. The larger locomotive and several trucks were stranded on the far side. The Council promptly overhauled the smaller locomotive and maintained freight services as far as the burnt out bridge for another two years.

In the meantime, the stranded locomotive was deteriorating as neither the Council nor PWD could afford to rebuild the bridge. After considerable delay a timber shed was built around the engine at the 7½-mile peg and a nearby resident appointed caretaker.

Closure

In November 1921, the Department suggested that the lease be cancelled and the line pulled up. The Council requested that the line be retained, but in early 1922 a contract was awarded to the Catamaran Coal Company Proprietary to pull up the line from the mine to the bridge. A temporary

Krauss locomotive [B/No. 4526/1900], pictured at 5 mile travelling towards Kaoota.
Photo: *Weekly Courier,* 2 February 1907

line with a curve of only 50 ft radius was built around the gully in June 1922 and the stranded locomotive was brought back to Margate.

The Catamaran Coal Company bought the 8-ton locomotive, three 7-ton trucks and rails for 3 miles 11 chains of tramway for its line at Recherche. The Carbide Company bought the 10-ton engine, three 7-ton trucks and rails for 4 miles 20 chains of tramway for use at its Ida Bay limestone quarries. The remaining rails were stacked at Margate wharf for use on departmental works and a few were sold. The last were not removed from Margate until 1934.

The Sandfly Coal Mine

In 1922 the Department of Mines produced a comprehensive report on the coal resources of Tasmania.[8] The management of the succession of companies and syndicates who had worked the Sandfly coal mine were trenchantly criticized for their lack of definite mining policy, failure to clean clay and shale out of coal sent to market and generally unsuitable handling arrangements. The number of tons of coal produced per man employed at Sandfly mine was only about one third of the corresponding figure for the Mt Nicholas mine at St Mary's for the period 1907-10. Based on 1895-6 diamond drilling and the extent of seams proved by mining, the reserves of coal economically available were then estimated at 4.3 million tons.

There was virtually no action at the Sandfly mine all through the 1920s, but after a slow start in the early thirties, the mine was reopened. From 1937 to 1971 small scale hand mining was carried on, initially by the Fogartys and, for the last 24 years, by the Roberts. Motor lorries bearing the name *Kaoota Coal Company* carried the coal to market. Production of bituminous coal — that worked by the original companies — ceased in 1941 and, from that date, only semi-anthracitic coal was produced for use in households and hop drying kilns at Granton, the calcium carbide works at Electrona and the newsprint mills at Boyer. The total production of coal during this era of mining exceeded 52,000 tons. However, the ground is badly faulted

The remains of a coal mining operation in a paddock near Kaoota, September 1986.
Photo: Lou Rae

and a recent programme of diamond drilling failed to locate any further semi-anthracitic seams which could be worked economically. Accordingly, mining operations have ceased at Kaoota once again.

Despite the quality of coal and the high hopes of a succession of owners, the Sandfly mine has produced only some 80,000 tons of coal over ninety years. Whether the impending world fossil-fuel crisis will eventually bring about a re-opening of marginal coal mines such as the Sandfly must, for the present, remain a matter of conjecture.

Postscript

I wish to congratulate Wayne Chynoweth on his article generally and, in particular, on 'discovering' Hurst's tramway through his boiler research. I had started with the first Mine Department reports and had therefore completely missed it.

I have walked almost the entire length of the Sandfly tramway, some of it many times, and found remnants — iron work and in some cases timber remains — of all but two of the bridges, numbers six and nine.

References

1. Parliamentary Papers 1881 (HA), No. 109.
2. 55 Vict. Private.
3. Parliamentary Paper 1893, No. 50.
4. "Report on the Sandfly Coalmines", WH Twelvetrees, 12 October 1903.
5. 16 Geo. V, No. 27.
6. The original drawings show that the bridges listed as 7, 8 and 9, actually occur in the order 8, 9 and 7. Site inspections confirm this.
7. The name of the Post Office near the mine was changed from "Woodstock Crossing" to "Kaoota" (aboriginal for 'dusk') in 1923.
8. Geological Survey, Mineral Resources No. 7, "The Coal Resources of Tasmania, 1922".

THE LOCOMOTIVES OF THE SANDFLY AND CATAMARAN TRAMWAYS

by R Wayne Chynoweth

Introduction

This article is prepared as a compliment and complement to Lindsay Whitham's definitive histories of the Sandfly and Catamaran collieries published in the journal of the Tasmanian Historical Research Association.[1] It details the histories of the locomotives used on these tramways.

With the steam industrial age blossoming in Tasmania in the early 1870s, two important developments took place. To cater for the manufacture and maintenance of the heavy machinery being used, local engineering foundries expanded in skills and facilities. As well, the need for more fuel to fire the increasing number of boilers prompted the development of local coal resources held under mineral leases. One such lease, situated 13 miles (20 km) south-west of Hobart in the Sandfly district, was held by James Hurst, a prominent coal merchant.[2] Hurst's coal supplies were obtained from the Government coal mines at Saltwater River on the Tasman Peninsula, which he had leased since 1849.[3] Previously he had superintended them for the Imperial British Government, employing convict labour from infamous Port Arthur.

Hurst knew that the Saltwater coal mines would close with the abolition of Port Arthur as a penal settlement in 1877 and so, in 1876, he began to develop his Sandfly coal deposits to provide an alternative supply. The coal was of excellent quality and seemingly unlimited in quantity, but access was poor in the steep hilly country. Hurst proposed to build a tramway from the mine "to the shipping place at the head of North-West Bay, a distance of nine miles or thereabouts; the tramway to be worked if practicable, by a steam locomotive, otherwise by horse power."[4]

Hurst, together with his solicitor Richard James Lucas, petitioned the Tasmanian Parliament to obtain a grant of 100 acres of land for every mile of tramway constructed by them. They argued that the proposed scale of operations would be of such great benefit in opening up the rich Sandfly district that they were entitled to some consideration by the Crown.[5]

The Hurst Locomotive

In late 1876 the confident Hurst placed an order with local engineer, John Clark, to build a steam locomotive for his tramway. John Clark was proprietor of the Excelsior Engine Works, New Wharf (now Salamanca Place), Hobart, a local engineering foundry which manufactured heavy machinery such as steam engines, boilers, mining and mill machinery. Clark had continually upgraded his works and had no trouble in meeting Hurst's requirements. The locomotive was nearly completed when a local reporter inspected it on 27 March 1877 and reported:[6]

> The engine is known as a tug locomotive and is 14 horse-power nominal, but capable of being worked at up to 18 horse-power. It is upon four wheels, the wheels being 2 feet in diameter, and coupled with side rods, the base being 5 feet. The locomotive is fitted with axle boxes, side springs etc., in the same manner as an ordinary engine. The boiler has been tested with 150 lbs of steam to the square inch, and is considered sufficiently strong for a much higher test. The ordinary working power of the engine will be at the rate of 4 miles per hour, but on level it can be worked at double that speed, while drawing 50 tons. It will be finished in a fortnight's time, all that is now being required is to lay the foot plates, and connect the breaks [sic].

Whilst the erection of the locomotive proceeded in Hobart, Hurst organised work to start on the construction of the tramway. However, even though the locomotive was completed, trialled and waiting in Hobart, the tramway was far from complete when James Hurst died on 28 June 1877 at the age of seventy-three.[7] His death unfortunately removed the drive behind the proposal and little further work was undertaken until 1904, when the Sandfly Colliery Company Limited was formed.[8]

The fate of the Clark locomotive remains a mystery. Lucas, Hurst's solicitor, retained ownership of the Sandfly mineral leases and kept trying to form a company to develop them.[9] In the meantime, he concentrated on his timber-milling operations in the Mountain River district, north of Huonville. By 1882, his operations included "11 miles of tramway used for conveying split timber for shipment and logs to mill".[10] If Lucas also retained ownership of the locomotive he may have used it at Mountain

River, or he may have just kept hoping for the Sandfly development to occur. Extensive research has not uncovered anything concrete, although evidence shows that other John Clark locomotives went to the Douglas River colliery on the east coast of Tasmania and to Sinclair, New Zealand in 1880.[11]

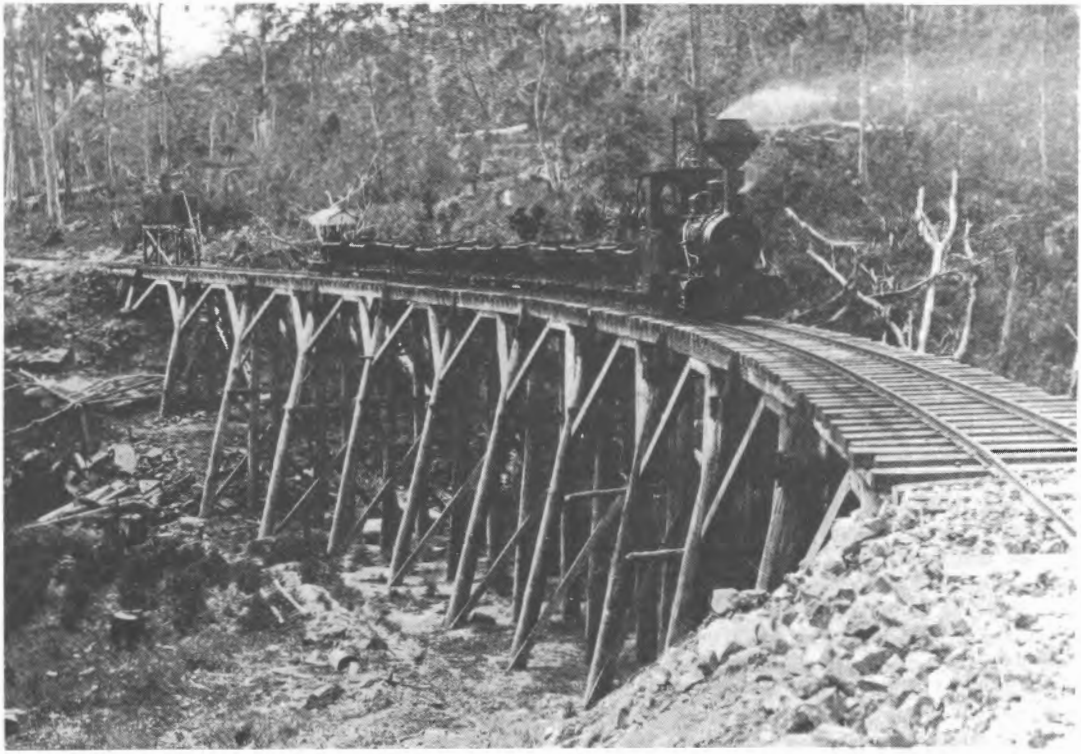
The Sandfly Tramway Locomotives

With the formation of the Sandfly Colliery Company Limited in 1904, the long awaited development of the Sandfly coal reserves took place, including the construction of a tramway connecting the mine and port. To assist with construction of the 2 ft gauge tramway, the company purchased a Krauss locomotive (B/No. 4526 or 1900).[12]

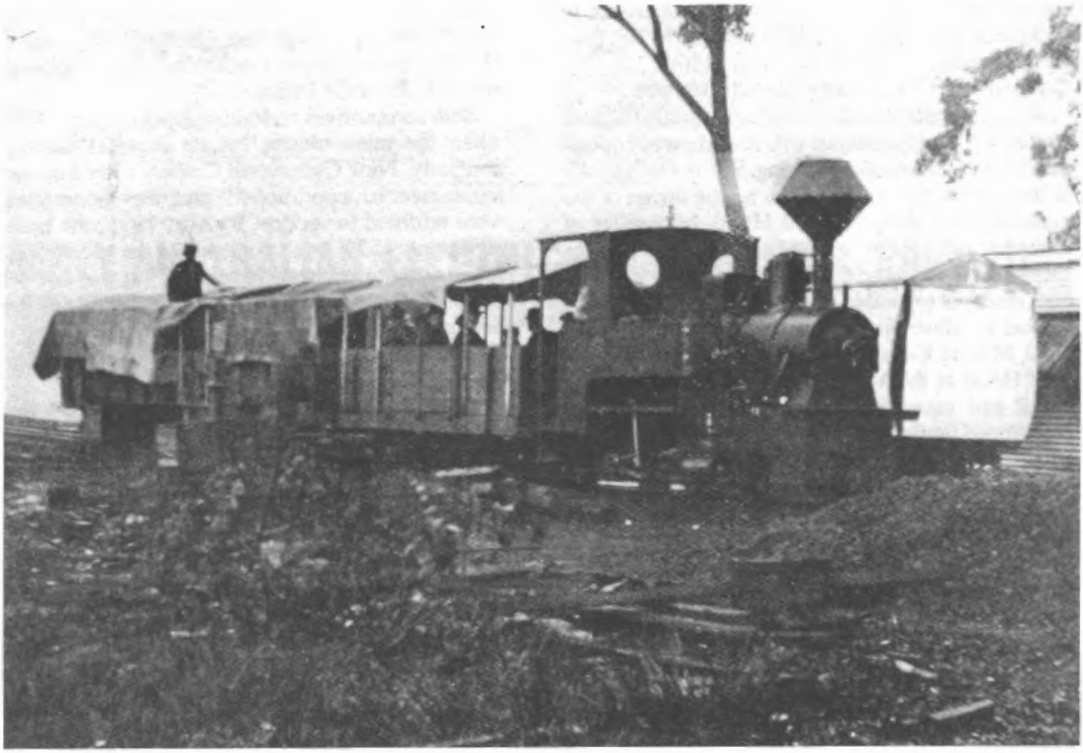
This loco had been purchased new from Diercks & Son, Melbourne, Krauss agents, by Hendrickson and Knutson, contractors for construction of the East Neck Canal at Dunalley.[13] It arrived in early 1902 and commenced work in April,[14] hauling away the spoil from the canal excavation. When the canal was completed in 1904 the locomotive was stored until early 1906, when it was sold to the Sandfly Colliery[15] and transferred by sea to Margate.

The Sandfly Colliery Company obtained a second Krauss locomotive (B/No. 5682 or 1906),[16] which was purchased new from Lohman Brothers of Melbourne, Krauss agents.[17] It was shipped to Margate and arrived early in 1907.[18] Being newer and heavier than Krauss 4526, it was regarded as No. 1 locomotive.

Upon completion of the line in August 1906, the locomotive hauled coal from the mine and local produce such as timber and small fruit from the Sandfly district to the wharf. Although the Sandfly Colliery Company went into liquidation in late 1907, the tramway continued to operate, being leased to Mr Oates of Huonville to carry timber. The mine was re-opened in late 1908 by the Tasmanian Wallsend Colliery Company and coal was carried over the line until 1910. The tramway continued to operate as a service for the public, but



Krauss locomotive [B/No. 4526/1900] and empty wagons on the first bridge near Poverty Gully. Note the water tanks at the end of the bridge. Photo: *Weekly Courier,* 2 February 1907



Krauss locomotive [B/No. 5682/1906] prepares to leave Margate with a party of visitors.
Photo: *Weekly Courier,* 14 September 1907

in 1913 the company sought to sell the railway to the Government.[19] Initially the Government declined the offer and Krauss 4526 became idle in 1914,[20] with Krauss 5682 maintaining the public service.

In September 1915, the Government reversed its decision and finally passed a Bill authorising acquisition of the tramway and rolling stock in December 1916. The tramway was leased to the Kingborough Municipal Council in 1917.[21] In January 1920, a bushfire destroyed one of the large bridges on the line, stranding locomotive 5682 at the far end of the tramway.[22] The Kingborough Council quickly overhauled Krauss 4526[23] and used it to maintain the public service to the site of the burnt bridge. As rebuilding the bridge was too expensive, Krauss 5682 was left idle, having a timber shed built around it for protection.

In November 1921, the Public Works Department recommended that the lease be cancelled and the line pulled up.[24] Although the Council wanted to retain the tramway, the Catamaran Colliery Company, which urgently needed railway equipment for its operations at Catamaran, was quick to capitalise and, in early 1922,[25] secured contracts to recover the rails and fittings. To assist with the dismantling operations, this company purchased Krauss 4526 from the Government[26] and used it at Sandfly until late 1922, when it was transferred by sea to Catamaran.

During dismantling of the Sandfly tramway, a temporary line was built around the burnt bridge to enable recovery of Krauss 5682.[27] The locomotive was sold to the Carbide and Electro Products Company[28] for use on the Ida Bay tramline carrying limestone. In 1935 the state of the boiler rendered the locomotive out of use till it was reboilered in 1938 with "an identical boiler except that the furnace was steel instead of copper".[29] The locomotive continued to work till 1948,[30] when it was put out of service with the arrival of the first diesel locomotives. It was later dismantled. In the late sixties and early seventies the boiler, tanks, cab etc were combined with the frame and wheels of Krauss 5800 by the Tasmanian Steam Preservation Society for their Karoola tramway.[31] Interestingly

enough, this locomotive visited the Ida Bay Railway in March and April of 1985 and 1987 to help generate custom for the now tourist line.

Catamaran Tramway Locomotives

About 44 miles (70 km) south of Sandfly the coal deposits in the Catamaran area also showed enough potential for economical mining. Site investigations at the turn of the century, both by the owner of the mineral lease, Major Lloyd Hood, bookseller of Hobart, and (more extensively) by the Mines Department diamond drilling team, found sufficient coal reserves to enable the raising of the necessary capital for development. In 1905 the Catamaran Coal Mining Company No Liability was formed with Hood as the Manager.[32] In the previous year Hood had taken out a mineral easement on an abandoned timber tramway which had been built by McDougall Bros in 1885[33] to bring logs to their mill at the mouth of the Catamaran River. The tramway was repaired to enable horses to haul coal to the wharf for shipment.

Mining ceased in 1906 when the company's capital ran out, but interest in the field remained. In 1910 a new company, Catamaran Colliery Company Pty Limited, was formed[34] and further developments took place, including converting the tramway to steel rails with a gauge of 2 feet. This ambitious company soon collapsed and work stagnated until 1922, when the coal deposits began to be developed in earnest with the formation of the Catamaran Colliery Pty Limited.[35]

The new company relaid the tramway with rails and fittings from the Sandfly tramway, using Krauss locomotive 4526 to assist with this task. The locomotive was then used to haul coal from the mine to the wharf until 1925. In this year Catamaran Collieries Limited was formed to take over the assets of the previous company and further develop the mineral field. They constructed a new 2 ft gauge tramway between the mine and a new port at Evoralls Point.[36]

In December 1926, the company purchased a second locomotive, Krauss 4080 of 1899, to assist in moving the greater volume of coal. This loco had been imported new by the Tasmanian Government Railways (their H.4) and based at Zeehan to serve on the North-East Dundas and Comstock tramways, as well as other smaller Government lines serving the mines and Zeehan smelters.[38] In 1926 the TGR transferred H.4 to the Launceston workshops[39] and late that year it was placed under offer of sale to Catamaran Collieries, pending satisfactory boiler inspection. The inspection was given on 2 December 1926[40] and a certificate was obtained, enabling the sale to proceed. The locomotive was transferred to Catamaran, probably by rail to Hobart, thence steamer or ketch to the company's wharf at Evoralls Point.

Both locomotives continued in service until 1930 when the mine closed.[41] Late in 1931 another company, New Catamaran Collierys Pty Limited, recommenced operations[42] and the locomotives were returned to service. By May 1935, the boiler of Krauss 4526 was taken out of the chassis and found to require extensive repairs.[43] It was decided to rebuild a composite locomotive by fitting the boiler from Krauss 4080 to the chassis and cab of 4526.[44] This locomotive operated until early 1939, when the mine closed.

The locomotive was offered for sale by auction on 19 February 1940 and was sold to "Joe the Junk", a Hobart scrap merchant, who also purchased the tramway[45]. He quickly recovered his costs by charging successful bidders excessive rates to remove their machinery along his tramway, the only means of access. With all the mining plant removed, the rail was pulled up and the locomotive scrapped. The remains of Krauss 4080 were more than likely abandoned in 1935, probably being used as a source for any spare parts required. The engine frame still lying in the bush near the wharf area[46] could belong to this locomotive.

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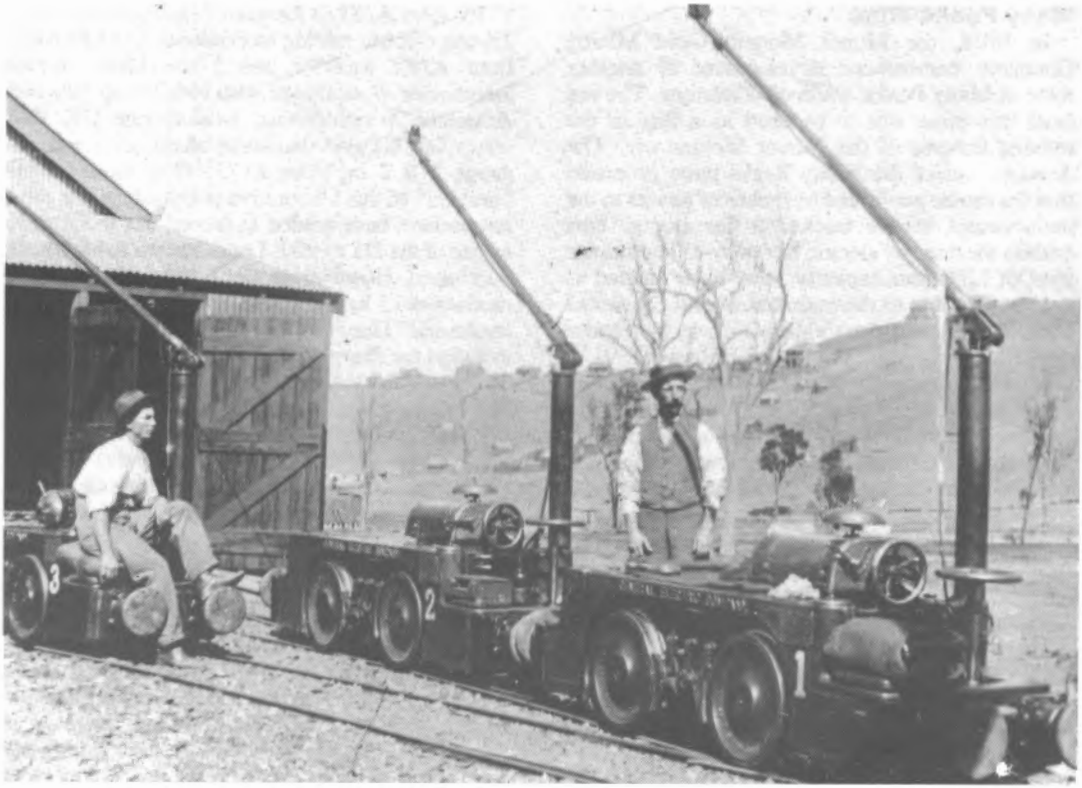
EARLY AUSTRALIAN ELECTRIC LOCOMOTIVES: PART III MOUNT MORGAN GOLD MINING COMPANY, MOUNT MORGAN, QUEENSLAND

by David Mewes

The Mount Morgan Gold Mining Company, registered in 1886, was perhaps the earliest prolific user of electric locomotives in Australia.

The Mount Morgan Company selected the most unusual gauge of 2 ft 2 in for its underground and surface tramway system. The first two locomotives



The first three 2½ ton electric locomotives at Mt Morgan.
Photo: Sir H Chermside Album, 11 May 1903; John Oxley Library

acquired for haulage of the ore from underground to the surface works were steam locomotives, one being built by the Airdrie Iron Co, Airdrie, Glasgow, of which few details are known and the other by Chapman & Furneaux (successors to Black, Hawthorn & Co Ltd) being builder's number 1144 of 1897. Both were 0-4-0ST.

GE Electric Locomotives

The Company purchased its first electric locomotive in 1899, a 2½ ton machine built by the General Electric Co of the USA[1].

The locomotive had inside frames with a trolley pole offset at the driving end of the locomotive. The driving position gave just sufficient room for the driver to sit. It had two motors operating on 500 volts DC with a drawbar pull on level track of 700 lbs at 6 miles per hour. The overall length (including buffers) was 10 ft 1½ in; width 2 ft 7 in; height above rail (over frames) 2 ft 1½ in; wheelbase 3 ft 0 in and wheel diameter 20 in[2]. A further 13 locomotives of this type were purchased up to 1911.

Many Peaks Mine

In 1908, the Mount Morgan Gold Mining Company commenced development of another mine at Many Peaks, south of Gladstone. The ore from this mine was to be used as a flux in the refining process of the Mount Morgan ore. The development of the Many Peaks mine proposed that the ore be gravitated by means of passes to the main tunnel, thence trucked to the storage bins outside the mine by electric locomotive. The storage bins, of 1200 tons capacity, were to be erected as near as possible to the main tunnel and connected by a siding to the Boyne Valley Railway then under construction by the Queensland Railways[3].

However, although the Many Peaks mine was developed basically as proposed, it appears the use of electric traction at the mine did not eventuate. During 1911, the transport tunnels at Many Peaks were widened out to allow use of bigger trucks and by December, 1911, the transport of ore to the loading bins was being undertaken by horses replacing hand-truckers. The average output per horse was about 100 tons per day. At this time, the Many Peaks mine employed 233 men underground and 87 on the surface[4].

Withdrawal of Electric Traction

The installation of horse haulage underground at Many Peaks may have sounded the death knell of underground electric traction at Mount Morgan.

Problems were being encountered in shunting the electric locomotives around empty and full wagons at the mine face and fires being started by sparks coming from the contact of the trolley pole on the overhead wires. There was also the safety hazard to the men coming into contact with the live overhead wires.

During 1913, electric traction on the 850 ft level of Mount Morgan mine was replaced by horse haulage, with, it was claimed, economical results and a reduced safety risk, although greater attention was required to the ventilation system[5]

In 1914, electric traction underground at Mount Morgan was completely phased out, with horses now being used throughout the mine. Again, it was claimed the horses considerably expedited and cheapened the work. About 70 horses were required for the work involved[6].

The Many Peaks mine closed down in 1918, after only 8½ years of operation[7].

Disposal

During the 1920s, the Mount Morgan Gold Mining Company suffered financial difficulties and a large sale of mining equipment was organised in 1930. Item A281 in the sales catalogue was for 12 2½ ton electric mining locomotives at £120 each. Item A282 was for one 5 ton Hunt electric locomotive — equipped with two 7½ hp 500 volt American Westinghouse motors; one GE R14 controller; CI grid rheostate; chain drive and rail gauge 2 ft 2 in, price £175[8]. The name of the "makers" of this locomotive is a mystery and most researchers have tended to record this locomotive as one of the 2½ ton GE Locos known to have been purchased. However, in 1911, three electric locomotives of 15 hp were purchased along with charge trucks and "Hunt" tram track, this equipment being installed for charging the furnaces at the smelters.[9] These three locomotives may be the elusive "Hunt" locomotives.

Other, larger 2 ft 2 in gauge electric locomotives purchased between 1912 and 1913 and several 3 ft 6 in gauge steam locomotives were also on offer in the sales catalogue.

By the time of the 1930 sale it appears that two of the fourteen 2½ ton GE electric locomotives and two of the "Hunt" electric locomotives had already been disposed of as scrap or to another owner.

A new mining company, Mount Morgan Limited, was formed during this period and purchased much of the equipment from this sale. It appears uncertain if the new company purchased all the electric locomotives but at least 5 of the 2½ ton locomotives were listed as being in use by the new company in 1946[10].

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Acknowledgements

The author would like to express his sincere appreciation to George Bond, who has entrusted him with his extensive historical collection of Australian private railways files, collected over very many years, in order that they will continue to grow as more information comes to light and also so that they will continue to be available for railway historians.

Special thanks also to John Browning, Ray Ellis and John Buckland for their encouragement and support in getting me to put "pen to paper" and to my wife Pauline, for her patience and understanding

ELECTRIC LOCOMOTIVES — MOUNT MORGAN GOLD MINING COMPANY, MOUNT MORGAN

Builder	B/No	Year	Model	Weight	HP	Notes
GE	1498	1898 (or 1899)	TMM-5-A	2½ ton	5 hp	(1)
GE	1562	1900	LM-105-A2	"	"	
GE	1714	1902	"	"	"	
GE	1869	1903	"	"	"	
GE	2011	1904	"	"	"	
GE	2044	1904	"	"	"	
GE	2218	1905	"	"	"	
GE	2219	1905	"	"	"	
GE	2470	1906	"	"	"	
GE	2541	1907	"	"	"	
GE	2542	1907	"	"	"	
GE	3001	1909	"	"	"	
GE	3002	1909	"	"	"	
GE	3475	1911	"	"	"	
Hunt (?)	?	1911	?	5 ton	15 hp	(2)
Hunt (?)	?	1911	?	"	"	(2)
Hunt (?)	?	1911	?	"	"	(2)
GE	4167	1912	LM-2T7-N2	7 ton		
GE	4168	1912	"	"		(3)
GE	4366	1913	LM-2T10-A2	10 ton		(3)
GE	4367	1913	"	"		(3)
GE	4368	1913	"	"		(3)

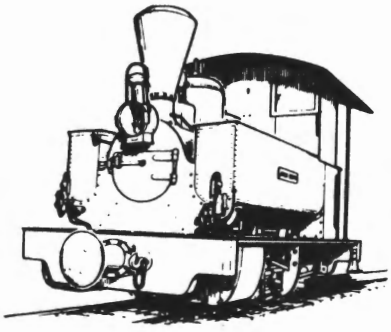
All the above locomotives are 4wWE of 2 ft 2 in gauge.

(1) The GE model number system changed around 1900 and the TMM-5-A type became the LM-105-A2.

(2) The existence or otherwise of the Hunt (?) locomotives is by no means certain. Inference that such locomotives did exist is taken from references in the Annual Report of the Under Secretary for Mines, 1911 and the 1930 Sales Catalogue.

(3) Converted to 3 ft 6 ins gauge by the new Mount Morgan Mines Ltd, probably around 1957.

The above list is compiled from official GE sources (except for reference to the Hunt locos) although some discrepancies have occurred in some GE lists, eg. some omit 3475/1911 and the two 7 ton locomotives.



LETTERS

IDENTIFICATION WANTED, LR.95

Concerning the photograph on page 9 of *LR.95,* the following may be of interest. An additional photograph of this locomotive was taken at the same location, but a head-on shot which shows the name *FOWLER* across the top of the radiator. This photo also has a number of people in it, one identified as Fred Daly, who once worked with my brother.

My brother recognised Fred and went to see him about the photo. It turns out that in the 1950s a group of enthusiasts used hand-trolleys to travel over various closed Victorian railway lines — including the Walhalla line. Fred said that the photo (confirmed taken by Doug Berriman) was taken in winter, 1955 and that the loco's motor had blown up "due to trying to haul too many rails at the one time". Unfortunately, no other details are known about the loco.

Peter Medlin
Ferntree Gully, Vic

In glancing through some photographs the other day, I stumbled upon what may be part of the solution to the "Identification Wanted" item on p.9 of *LR.95.*

This was a photograph, sent to me by Wal Larsen, of a "Caldwell-Vale" 4wDM which was noted in around 1952 at a sand mining operation at Kingscliff in northern New South Wales. This 2 ft gauge diesel is clearly very similar in design to the 2 ft 6 in gauge unit photographed near Erica, particularly in the chassis details. It will be noted that the Erica loco has its frames arranged more widely apart than the narrower gauge example [see photo]. It also has a longer engine compartment. It would appear that both these locos were fitted with Fowler power units. Possibly a standard chassis was made available with a choice of engine units, or with engine to be fitted by the customer, as was the case with Malcolm Moore.

The Kingscliff loco carried a small oval plate on the rear of the cab, and is believed to be a Caldwell-Vale 646. It is now to be seen at "Sea World" on the Gold Coast, fitted with steam outline.

I understand that Caldwell-Vale locomotives were first built in Sydney in about 1912 and at one time went by the name of *Purcell.* From their design, it would appear that the Erica and Kingscliff examples are likely to date from the 1930s or 1940s.

John Browning
Mackay, Qld

4wDM locomotive at Kingscliffe, NSW, c1952.
Photo: Wal Larsen

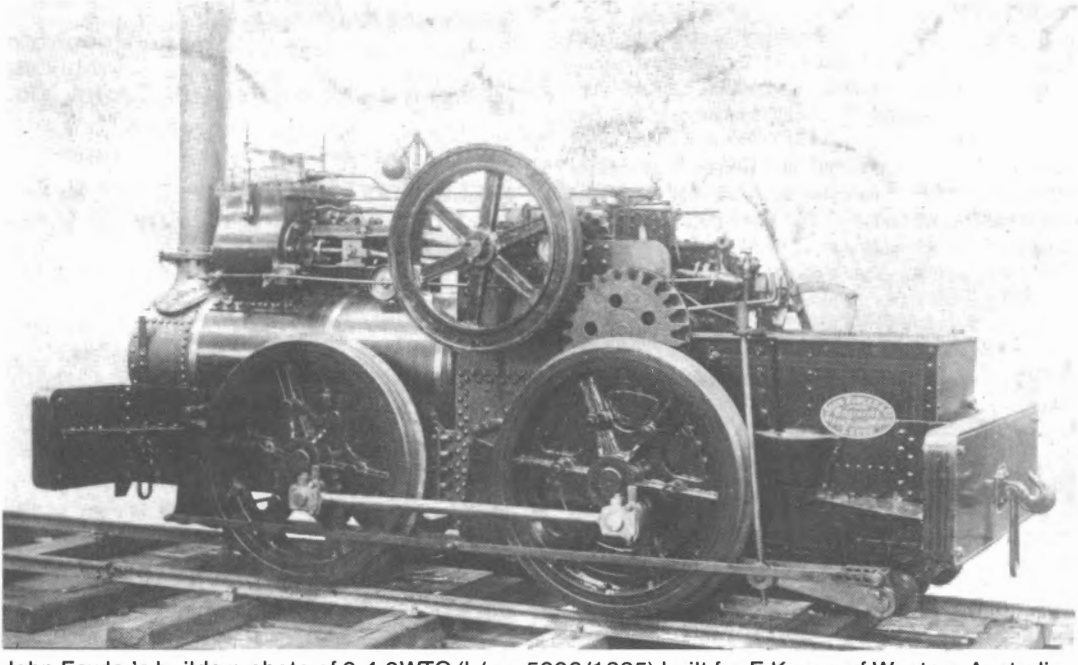
WA LOCOMOTIVE CONVERSIONS FROM TRACTION ENGINES, LR. 78, 95 In his interesting article on the Adelaide Timber Company in *LR.95,* Lindsay Watson states that the Wilga locomotive *Snorting Liz* was converted from Ransmes, Sims & Jefferies traction engine, b/no. 180477 of 1905. Based on the evidence of other RS&J traction engines, this b/no. is assuredly incorrect, having one digit too many. I have read of it variously recorded as 18047 and 18077, but have no idea if either is correct. 18xxx would seem right, though, for a date of 1905.

Also preserved in WA is another traction engine conversion, *Polly* from Buckingham Bros' timber mill near Collie. It was illustrated on page 111 of *ARHS Bulletin* No. 285, July 1961, and at first glance appeared to be a similar conversion to *Snorting Liz* (in its original state), the road wheels having been replaced by rail wheels to create a 2-2-0WT. However, I doubt that matters are so simple.

John Fowler built a number of traction engine type locomotives new, as did Aveling & Porter. With regard to the four-coupled type (ie. with equal sized wheels) the JF ones have coupling rods, whereas the A&P ones were originally chain driven, later models being coupled by gearing. These later A&P locos had a stiffening bar linking the two axles, which could at first sight, be mistaken for a coupling rod.

In *LR. 78* on page 20, Bruce Henderson drew attention to a photograph showing a traction engine type loco at Honey & Co's Lion Mill, Chidlow's Well, WA, circa 1895. He inferred, correctly in my view, that it was most probably a JF loco. The subsequent 'discovery' of the first volume of the JF engine register revealed that a 3 ft 6 in gauge locomotive of this type (JF 5006/1885) was built for E Keane in WA and there must be every likelihood that it became Honey & Co's loco (*LR. 81,* p.21-23).

The connection with Buckingham Bros' *Polly* is that its rear end and that of JF 5006 appear to be the same. Particularly noticeable are the curious 6-spoked wheels, with a bolt on each spoke, and the crankpin (completely unnecessary on *Polly*). The enclosed builders photo of JF 5006 can be compared with that of *Polly* in the *ARHS Bulletin.* It would appear that *Polly* is an amalgam of the rear half of JF 5006 attached to the boiler, cylinders etc of a completely separate road traction engine. I would imagine that this was done when JF 5006's boiler



John Fowler's builders photo of 0-4-0WTG (b/no. 5006/1885) built for E Keane of Western Australia. Photo: courtesy, Museum of English Rural Life, Reading University

became beyond economic repair. In the process, Australia lost one of its few compound locos, as it was originally fitted with 5 in and 9 in x 12 in cylinders.

I wonder if any reader can shed further light on this: when was JF 5006 acquired by Buckingham Bros, when was the reconstruction undertaken and what is the identity of *Polly's* front half?

TASMANIA GOLD MINE, BEACONSFIELD, LR. 95 The photograph of the Tasmania Gold Mine electric loco on page 17 of *LR. 95* shows that it was clearly not of 3 ft gauge, as stated by John Buckland, but considerably less. If the driver is taken as being 5 ft 8 in tall, then the gauge works out at about 2 ft.

I would be interested to know more of the associated 3 ft gauge Beaconsfield Tramway. This was originally owned by JW Wyett, but was taken over by the Tasmanian Gold Mining Coy in July 1905. This company had been formed in the UK in 1903 to take over the locally owned Tasmanian Gold Mining & Quartz Crushing Co Regd. This latter company must therefore have been responsible for the premier electric line. In a report of 1903, the company stated that it had a 10 hp loco to convey quartz to the battery. This was presumably the electric loco.

After its takeover of Wyett's Beaconsfield Tramway, the Tasmania GM Co showed in its September 1906 annual report that it had thus acquired 2 locos and 17 trucks. I assume that these locos were Kerr Stuart 0-4-0Ts b/no. 643 of 1898 and 685 of 1900 ordered per Davis & Soper of Melbourne and Launceston respectively. 643 was named *Cape* when new (and later passed into the hands of the Powelltown Tramway in Victoria). The 1907 annual report of the Tasmania GM Co mentioned, incidentally, that on Boxing Day 1906 and New Years Day 1907, 2580 people took return tickets on the tramway to Beauty Point.

CB Thomas has stated that Wyett had two earlier locos on the Beaconsfield Tramway, both vertical boilered and built in 1885 and 1889. I do not know the provenance of this information, but in his article on Tasmanian boiler records in *LR. 57,* David Beck recorded entry 1603 for the South Cameron Timber Milling Co as being a vertical boiler loco of unknown builder "formerly owned by CN Wyett of Beaconsfield". Despite the different initials for Mr Wyett, could this be one of the early Beaconsfield locos?

Richard Horne
South Croydon, Surrey, UK

I write with reference to the short article on the Tasmanian Gold Mine electric railway on page 16 of *LR. 95.* My first look-around at Beaconsfield was over 20 years ago and at that time I was told that the gauge of the electric railway was two feet, not three feet as stated. The photograph on page 16 supports this when you compare the gauge with the height of the driver. The other railway system at Beaconsfield was 3 ft gauge.

Chas W Goodwin,
Ulverstone, Tas.

GEELONG HARBOUR TRUST TRAMWAYS LR. 73

Recently I came across a photograph album prepared by the Geelong Harbour Trust depicting various scenes during construction of the Corio Quay project, 1909-1916. The portable tramway systems employed on the project are clearly shown in a number of prints, with motive power being provided by men or horses.

This evidence would seem to confirm that the Trust's locomotive was not employed on this project and worked exclusively at Sparrowvale Farm from 1908 to 1916. Since preparing the original article I have been unable to find any more information on the locomotive, so its origins and disposal still remain a mystery.

Norm Houghton
Archivist,
Geelong Historical Records Centre, Vic.

HILLGROVE, MINING FIELD, LR. 94 I did enjoy the early history of the Hillgrove Mining Field as told by Ross Mainwaring in *LR. 94.* It was certainly a most intensely developed field and perhaps unique in Australia.

However, I would disagree with the author's theory as to why miners were more susceptible to the Great Influenza Epidemic of 1919. Certainly the bitterly cold winds of the New England Tablelands would not have helped; but I feel the probable explanation is that miners as a group — particularly in the era concerned — were predisposed to a variety of chronic lung conditions known as the pneumoconioses, or in modern terminology as "Occupational Lung Diseases". Some examples of these are Anthracosis (Coal Miner's Lung), Silicosis and Asbestosis.

The longer the exposure to the different types of dusts, the greater is the risk of developing this type of lung disorder. The lung tissue of affected

individuals loses its normal elasticity, becoming fairly stiff. The lungs are unable to get rid of their normal (and abnormal in the cases of respiratory infection) secretions. Thus pneumonis is much more likely to develop in such cases. In the pre-antibiotic era this was often fatal.

John Kramer
Woolgoolga, NSW

MORTLAKE GASWORKS RAILWAY, LR.97 Unfortunately an error appears in my article on the AGL Mortlake gasworks railway. The 'sixty-miler' vessels (p.11) were not owned by AGL, but by McIlwraith McEacharn Ltd. GL Johnson of Killarney Heights, NSW, has kindly offered the following additional information on these colliers:

> There were actually four such vessels. Three were acquired from overseas about 1937 when McIlwraith and McEacharn Limited obtained the gasworks contract to supply Mortlake's coal. They were all steam powered and were named *Hetton Bank, Pelton Bank* and *Mortlake Bank.* In the 1950s an additional vessel was required and the shipping company's Marine Superintendent had great trouble in convincing the directors that they should order a diesel-powered collier: the whole idea of a motor vessel carrying coal from Newcastle was more than they would stomach!
>
> However, sanity prevailed and the mv *Hexham Bank* was ordered from Evans Deakin Ltd, Kangaroo Point shipyard in Brisbane. She was a fine little vessel and one of the smartest ships to enter Sydney Heads.

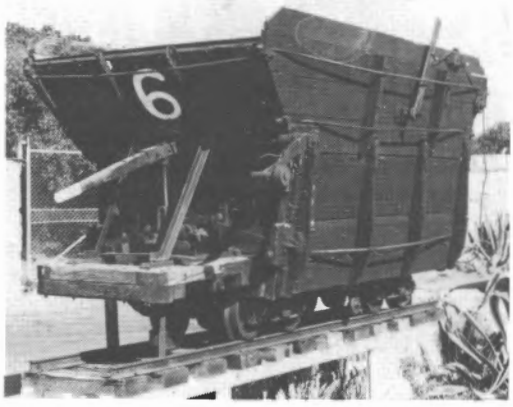
JL Buckland
East Brighton, Vic

BALL'S HEAD COAL DEPOT Many years ago in my mispent youth, I did a stint as a member of the crew of ss *Koolinga,* one of the McIlwraith McEacharn fleet of colliers on the Melbourne-Geelong run ex-Newcastle, and taking limestone from Davenport to Newcastle steelworks northbound. On one trip we attempted to load coal at Catherine Hill Bay and I was fascinated by the little engines scuttling back and forth bringing rakes of lop-sided four-wheel hoppers from the mine to the jetty. It was a frustrating experience, as the master would not permit us to go ashore owing to the likelihood of our having to put to sea at short notice due to the exposed nature of the jetty. In point of fact, this did happen and we sailed late in the afternoon with only a half cargo. Next morning we entered Sydney Heads at around 4.50 am and I found the journey up the harbour in the early morning sunshine absolutely entrancing on this my first ever visit to Sydney. This was in August 1934.

We tied up at Ball's Head coal depot (now part of the Coal & Allied empire) to load the rest of our cargo. The depot had an internal cable-operated ropeway on a circular route on which a number of wooden-bodied, wooden-frame hopper wagons of apparently 2 ft gauge operated, presumably to carry coal from the stockpiles to a loading hopper for road cartage to customers, although I did not know this at the time and was not able to see it in operation. As it happened, this was my second last voyage on the *Koolinga.* We off-loaded at Warrambool at the breakwater wharf, which was served by railway and shunted by an old Dd locomotive.

Years later — in 1982 to be precise — I was in the Ball's Head locality with the car, so I had a look to find one of the hopper wagons preserved on a plinth near the offices. I took the enclosed photographs which may be of interest to *Light Railways* readers. As can be seen from the photographs, the wagons were on bogies and were apparently unloaded by manual operation of the projecting lever at the end, which released the hinged bottom half of each side. Perhaps someone can add to my sketchy information on this railway.

JL Buckland
East Brighton, Vic



Preserved bogie hopper wagon at Ball's Head coal depot, North Sydney in 1982.
Photo: JL Buckland

HUDSWELL CLARKE UNDERGROUND LOCOMOTIVES, LR.97 I would like to add the following information to that provided on the Hudswell Clarke underground locomotives at Stockton Borehole Colliery, NSW.

These three locomotives entered service on 16 August 1956 on coal haulage duties. In November, 1986 they were inspected by representatives of Coal & Allied Industries with a view to determining if they were suitable for use in their West Wallsend No. 2 colliery. They were found to be unsuitable becasue of several factors, including the fact that the locos would have had to be completely stripped to enable their removal from Stockton Borehole colliery. At this time the locos were in reasonable condition, although one had a broken crankshaft and would have needed a new engine.

In responses to John Kramer's speculation as to whether other mining locos have been abandoned underground in Australia, the following units have been left underground in the Hunter Region when mine's closed or the locomotive's use was no longer required:

Abermain No. 3 colliery: one Jeffrey BDM class battery locomotive — serial no. unknown. (Colliery closed 1959.)

Northern colliery: one Goodman 20 ton trolley wire locomotive — serial no. unknown. (Colliery closed 1971.)

Stockrington No. 2: six Jeffrey 20 ton trolley wire locomotives were stored in working order along with approx 50 12-ton capacity mine cars when the trolley wire haulage finished in December, 1983. Loco serial nos. were 8855-7, 8952, 9003 and 9065.

Brian Andrews
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Underground trolley wire locomotives at Stockrington No. 2 Colliery. Photo: Coal & Allied Indutries