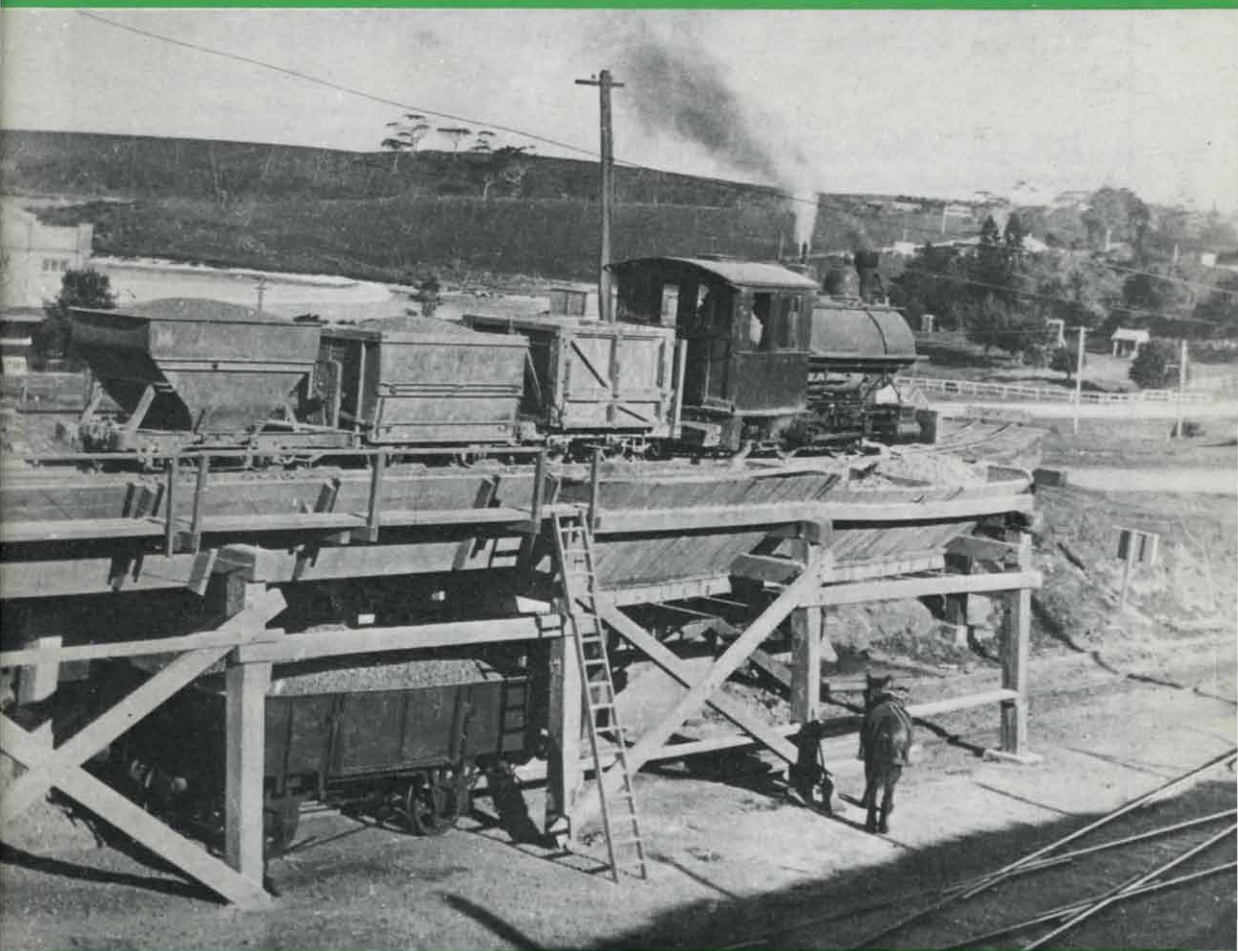


# **LIGHT RAILWAYS**

**Number 63**

**January 1979**

**90 cents**



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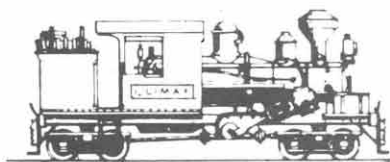
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Whilst every effort is made to ensure the accuracy of articles published in *Light Railways* errors may creep in. Additional information is being discovered all the time, and this sometimes contradicts previous information.

If you see any errors, or can add information, please contact the editor, and so help us to record the full history of Australia's light railways.

## Light Railways

# No. 63 Vol. XVII January 1979

Historical references to sums of money in *Light Railways* are in Australian pounds (£). One pound equalled two dollars on changing to decimal currency in 1966.

Articles and news items are always welcome. It greatly assists the editors if they are typed or written on one side of the paper only and double spaced.

### Editor's column

It is hoped members will like the bigger type size that this issue is printed in. For a long time it has been contemplated to change from 8 point typeface to 9 point typeface now with this issue it has been done and will be the new standard for "Light Railways".

Although there is no permanent editor this issue and No. 64 will be produced by the N.S.W. Division. We apologise for the lateness of this issue, through unforeseen circumstances, hopefully, the next one will be "on time".

A vote of thanks is extended to Author and member Ken McCarthy, who at short notice has produced several of the articles and notes in this issue and for the next issue.

We would like to see a few more members come forward with an article on their selected subject no matter how large or small and we also thank those members who have contributed to these issues.

Paul Simpson  
Hon. Editor,  
N.S.W. Division

### Front Cover:

Davenport loco 1517 at the railway goods  
yard loading bins, Bong Bong St. Kiama. C.  
1925.  
B. Holmes Collection

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# A Trio of Davenports

by K. McCarthy



At 1.30 pm on Saturday October 14th, 1978, combination Davenport locomotive 1596/1517 steamed for the first time along the 2 ft. gauge Illawarra Light Railway Museum's track at Albion Park N.S.W. Thus one of the three 2 ft. gauge Davenport locos, which were once on the PWD roster, returned to life.

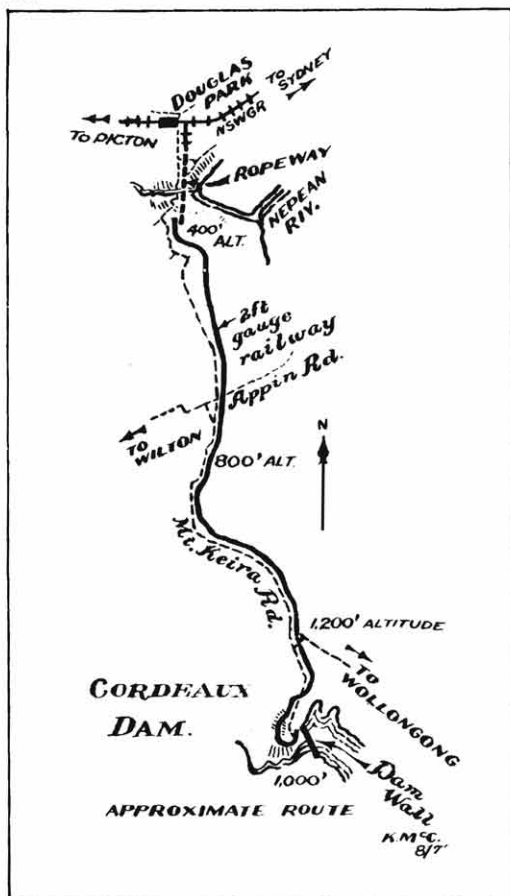
The three Davenport locomotives imported into N.S.W. from U.S.A. were identical 0-4-0 saddle tank units with 10" x 14" cylinders.

The first of the trio carried builder's number 1517 and was delivered to the small town of Kiama on the N.S.W. South Coast during March 1915. Kiama has been the host of two gravel tramways along Terralong Street, linking the Pike's Hill Quarry with the harbour. The first such installation was built to the 3ft-6inch gauge for the Kiama Council during 1885. During December 1886 the 0-6-0T Fowler loco, builder's number 5265, with 11" x 18" cylinders conducted trials along the right of way. Due to the then current financial and trade difficulties the tramway was never put to work. The rails were lifted during November and December 1889 and the locomotive sold to Queensland interests in 1890. This engine is now in the possession of the Don Tramway museum group in Tasmania. (1)

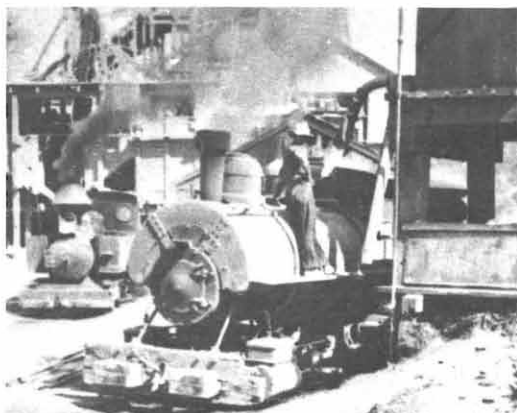
The second Kiama tramway was constructed to the 2ft. gauge for the State Metal Quarries during 1914 and opened for traffic during July of that year. Two saddle tank, 0-4-0 Baldwin locos were imported to open the tramway and these carried builder's numbers 41072 and 41073 and PWD road numbers 21 and 22. These units were found to be under powered so the larger locomotive was ordered from the Davenport Company of Iowa U.S.A. and this received PWD number 23 at Kiama.

A 2ft gauge light railway was constructed to deliver material for the Cordeaux Dam project on the Upper Nepean water supply scheme. (2) This

line connected the eastern side of the Nepean Gorge at Douglas Park with the dam site, a distance of 12 miles, mainly alongside of the Douglas Park to Mt. Keira Road. Standard gauge sidings branched southwards from the N.S.W.G.R. Douglas Park Station to the northern side of the gorge, and the gap between the two railways was bridged by a flying fox.

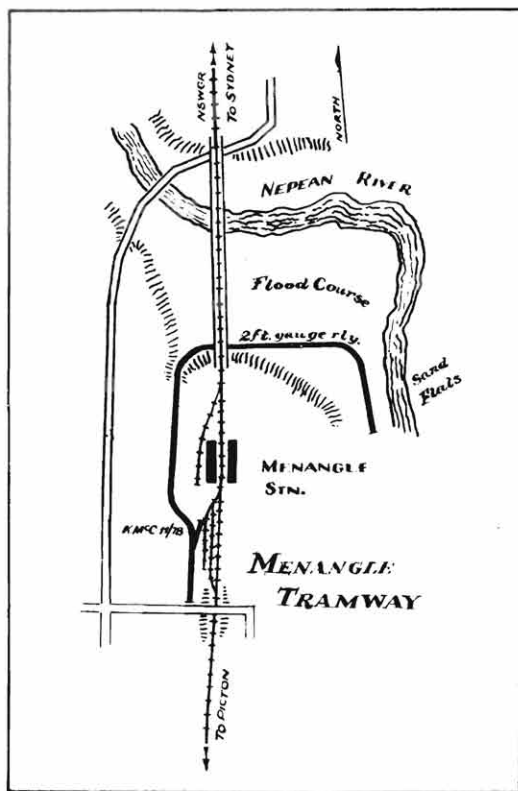


To work the Cordeaux tramway two further 0-4-OST locomotives were imported from the Davenport Company during 1917 and these carried works' numbers 1595 and 1596 and received PWD fleet numbers 64 and 65. These two units worked the tramway until the completion of the dam in 1926 when they were transferred to the nearby sand flats at Menangle to work a short 2ft gauge tramway. This undertaking was conducted by the Menangle Sand Company who had the contract to supply sand for the Sydney Harbour Bridge construction works. Their short tramway commenced in a small transshipment yard on the western side of the Menangle goods yard on the N.S.W.G.R. and ventured northwards to the Nepean River bed. The line turned under the Menangle railway bridge and tapped the sand flats upstream.



The composite Davenport loco 1517/1596 at the water tank at Pike's Hill Quarry Kiama, with 2ft gauge Fowler 16089 outside the loco shed. September 1st 1938.

K. McCarthy Collection



With the completion of the Sydney Harbour Bridge in 1932 the locos were stored at Menangle. By 1936 no. 1596 was relatively complete but sister engine 1595 had been practically stripped. The boiler from this latter unit found its way to a nearby dairy farm and was still there as late as 1960 (3). Engine 1596, however, was transferred to Kiama.

During October 1935 State Metal Quarries sold the Pike's Hill quarry at Kiama to Quarries Limited. This sale was brought about by the private enterprise policies of the Stevens-Bruxner N.S.W. State Government and the depressed state of the gravel industry at that time.

Kiama quarries had purchased a fourth locomotive in 1923, this was a large 0-4-0 side tank Fowler, builder's number 16089. During c.1924 a fifth engine arrived on the scene. This was an 0-4-0T Krauss, b/no 5870 of 1907, which had worked over the Goondah to Burrinjuck tramway in southern N.S.W. with three sister engines and possibly one Fowler unit.

This Krauss loco carried the name "Robin" but all people attached to the Kiama gravel industry at that period, who have been interviewed by the writer, state that it was never used on the Kiama tramway. Photos of the engine at Kiama show it stored at the quarry workshop west of, and on a higher level than, the 2ft gauge railway terminal at the bins and screens.

By 1935 Quarries Limited found that most of their 2ft gauge locos required major attention. To ease the situation Davenport 1596 was transferred from Menangle during 1936 and the two Baldwins were stored with the Krauss at the workshop area.

During 1938 one serviceable Davenport was assembled at Kiama from 1517 and 1596 and this combination locomotive, together with Fowler 16089, worked the traffic on the Kiama tramway until the closure in February 1941. Photos of the quarry workshop area taken during the late 1930's show the Krauss unit in very poor condition, the two



Baldwins being gradually cut up, and the wheels of the spare Davenport cut apart at the axle centres and scattered around the adjacent yard.

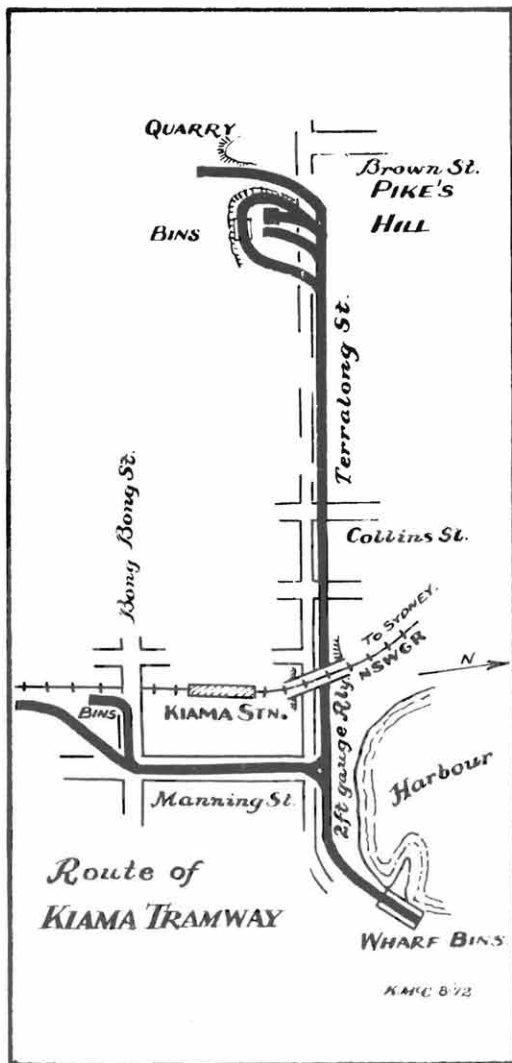
The two serviceable Kiama locos remained in the Pike's Hill locomotive shed throughout World War II. The gravel ships returned from wartime naval service to the Kiama trade on September 9th 1947 but motor trucks were used to deliver the blue metal to the harbour, the tramway was not reopened.

Mr. Bruce MacDonald, one of the foundation members of the Steam Tramway Museum at Parramatta Park N.S.W. and later the curator-manager of the Goulburn Steam Museum negotiated with the quarry interests during the mid 1950's and the two engines were donated to the Parramatta Park preservation group. During 1956 the Davenport unit 1517/1596 was removed from the engine shed and placed on display at Kiama Harbour outside the Brighton Hotel. On November 5th 1956 it arrived at Parramatta Park and eventually shared the tram depot with the steam tramway rolling stock on a 2ft gauge track laid between the standard gauge metals.

The Fowler tank engine was removed from the now fast decaying Kiama loco shed during December 1956-January 1957 and was transported soon after to the Goulburn Water Works where Bruce Macdonald was undertaking the first stages of work which later resulted in the establishment of the Marsden Museum of Historic Engines. For some time after 1958 this Fowler engine steamed on special occasions along a short length of 2ft. gauge track at Goulburn, its main function, however, was to provide steam for the Appleby beam pumping engine.



Title to the Davenport was relinquished by the Parramatta museum and this loco was transferred to Goulburn on June 2nd 1967. The Marsden Museum at Goulburn was officially opened to the public on April 4th 1970. Although the 0-6-0T Krauss loco "Stella" (b/no 3423 of 1896) performed the opening ceremony, Davenport 1517/1596 made several trips in steam on that day, hauling the bogie tender from Hudswell Clarke b/no. 1098 of 1915.



Left:

Composite Davenport 1517/1596 at the Marsden Museum of Historic Engines, opening day, April 4th 1970.

K. McCarthy photo



The two Davenports as seen at Menangle in 1931, derelict at the transfer siding end of the 2 ft gauge line. PTC NSW Archives

By this time a small boiler obtained from the local Goulburn cinema had been installed to supply the Appleby beam engine so the Fowler from Kiama possibly, did not steam during the 1970's. At the close of 1973 this locomotive left Goulburn for private preservation and restoration. (4)

The Davenport was now in a sorry condition. Although the saddle tank had been removed at Goulburn so that major restoration could be undertaken, this was never carried out. The lower plates of the saddle tank were rusted, the lower boiler tubes were thin, the cast smoke box door displayed fatigue cracks, most of the cab fittings had been removed and the steam brakes had disappeared.

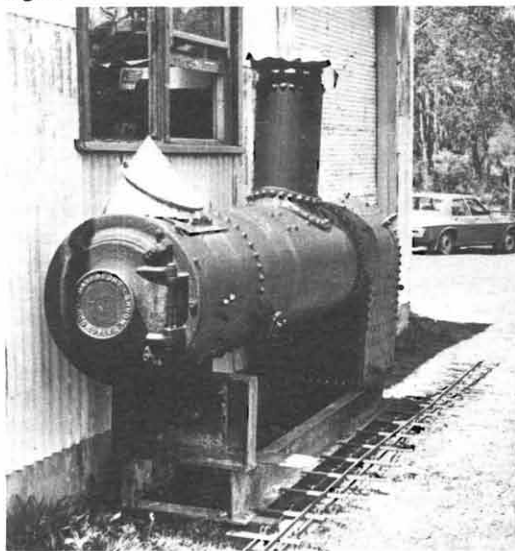
When Bruce Macdonald made the decision to retire from the Goulburn museum the Davenport locomotive was offered to the ILRMS for \$2000. This arrived at Albion Park on April 1st 1977 and was towed into the museum loco compound on the following day by the petrol engined Leyland-Krauss (2179 of 1889).

A start was soon made at Albion Park on the restoration of the Davenport unit, but the more thorough the investigation, the more defects were revealed. The saddle tank was removed and taken to the Port Kembla plant of Garnock Engineering where it was skillfully repaired, free of charge, and returned to the museum on July 11th 1977. At the same time the local B & W Steel plant fabricated a new ash pan, also free of charge, using the badly rusted original pan as a pattern.

During August 1977 the damaged cab roof timbers were replaced, while on September 17th newly cast main bearings were refitted to the frame and lapped into the driving wheel journals. These

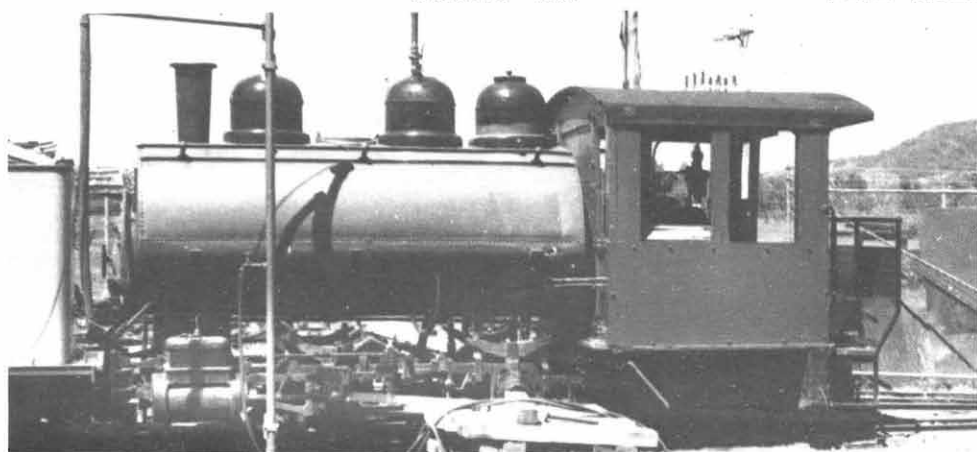
were cast by ILRMS member Keith Mayhew, the proprietor of Daniel's Engineering of Wollongong.

At this stage the ILRMS members were informed that they had been awarded the 0-6-0 Hudswell Clarke loco "Cairns" (1706 of 1939) by the Victoria Mill at Ingham Qld., and after its arrival at Albion Park on February 24th 1978, the main work thrust concentrated on the restoration of that engine.



Spare locomotive boiler at the Southern Highland Transport Museum, believed to have been constructed by the Davenport Locomotive Works, 1974.

K. McCarthy photo



Composite Davenport 1517/1596 at the watercolumn at the ILRMS Museum, Albion Park, N.S.W. October, 14th 1978.

The Davenport was lowered onto its new bearings on October 13th 1977 and the reconditioned drive rods and valve gear were gradually refitted, the underframe cleaned and repainted and the springs overhauled.

On November 12th 1977 the Davenport's cab was "resquared" and a start made on overhauling the main steam valve and throttle linkage. A Wollongong foundry came to the aid of the museum during January 1978 and cast a new smokebox door using the original as a pattern, for the nominal charge of \$25. Access to the Davenport cab was by a rear door over the rear buffing block. This was a most dangerous arrangement which had caused several injuries and at least one death at Kiama. During January 1978 the rear buffer block and coupling were extended and a rear steel platform fabricated and fitted in a manner which does not distract from the original design. This task reached completion on February 18th.

Reconstruction had reached a stage by February 18th which enabled a hydraulic test to be conducted, but this revealed that the lower tubes would certainly have to be replaced if the long lapsed boiler certificate could be renewed. The ILRMS received a stockpile of 1 3/4 inch diameter tubes for a nominal sum from the Wollongong Gas Company, but closer inspection revealed that the faulty ones on the Davenport were of 2 inch diameter! Fortunately the Unanderra plant of Tube Makers came to the aid of the project and seventeen new tubes were delivered during May 1978.

After five defective tubes were replaced another hydraulic test took place on May 20th, but an old fracture in the main steam valve casting failed and this was not repaired until July, 1978.

The Hudswell Clarke locomotive "Cairns" steamed for the first time at Albion Park N.S.W. on July 3rd, enabling work to accelerate on the Davenport restoration. During late winter the plumbing was restored, all stop valves reseated, glands repacked, steam brakes installed and after a successful series of hydraulic tests, the boiler was lagged and clothed and the saddle tank refitted on October 6th. It was a proud gathering of museum members who witnessed the initial steaming of Davenport 1596/1517 on October 14th 1978.

The Davenport story, however, does not quite finish here. On June 1st 1977, ILRMS member Bob Hague took delivery of the 0-6-0T Maffei loco "Billy" (b/no. 3677 of 1911) from the Goulburn museum for private preservation. This unit had arrived at Goulburn during 1974 without a boiler, which had been removed at the Plane Creek mill in Queensland for an overhaul that never eventuated. During June 1978 the same enthusiast collected the spare Davenport boiler from the Southern Highlands Transport Museum at Colo Vale N.S.W. This carries registration number C70993 but its origin so far remains a mystery. The boiler may eventually be fitted to "Billy" or to one of the Krauss frames presently preserved by Mr. Bob Hague.

#### Notes.

1. See K. McCarthy "Tramways of Kiama N.S.W." - "Trolley Wire" Oct. 1976, Dec. 1976 and February 1977.
2. See K. McCarthy "Railways and Ropeways at Warragamba Dam" - "Light Railways" No. 43 Autumn 1973.
3. See "The Menangle Sand Company" ARHS "Bulletin" No. 389 March 1970
4. See K. McCarthy "Marsden Museum of Historic Engines" - "Trolley Wire" April 1971.



# Levers Tramway Long Creek, N.S.W.

by Graham Rutley,  
Forester,  
Inverell

## Introduction

This is a tale of the resourcefulness of one man, who successfully resolved many of the problems confronting timbergetters in the early part of this century. It is also the story of the Long Creek tramway which he started building in 1919 on Roseberry State Forest, northwest of Kyogle.

Most of the information and photographs used in this article were supplied by Jack Lever himself. Unfortunately he died on 19th October, 1976 and I lost a true friend. But I shall always cherish fond memories of the many discussions and excursions we had together and feel grateful that he had the satisfaction of reading this article before he died.

To supplement the material, I have added some recollections of my own, dating from 1946. That was the year I was introduced to forestry, starting work as a junior Forestry Commission employee in a survey unit under the leadership of the late foreman G. H. (Dally) Storck.

Early in 1918, Walter Lever, then owner of a sawmill situated on Terrace Creek, northwest of Wangaree, heard that horse-drawn carriages were being used for timber-extraction in Victoria. Because the carriages travelled along tracks, this system of transport was known as a tramway.

Walter Lever was so intrigued by the idea that he sent his son Jack to Warburton in the Gippsland district of Victoria to investigate. Jack was told to study the system thoroughly and then come back and build something similar. The reason for Walter Lever's curiosity was the hope that the new system might be used to improve logging techniques in the rainforest areas upon which his mill depended for its supplies. His main problem was wet and muddy weather, when haulage by bullock teams was extremely difficult.

Jack Lever journeyed to Warburton where he made a thorough examination of the existing tramways. When he returned he assured his father he

could build a tramway to serve the mill. Although Jack brought no blueprints or written ideas, he was able to explain verbally how the line should be built.

Elated by his son's description of how tramways had improved logging in the Gippsland area, Walter Lever approached the Forestry Commission for the supplies of Brush Box (*Tristania conferta*) needed to build one himself. The Commission readily gave consent and provided the timber free of royalty.

Work on the tramway began towards the end of 1918. Most of the timber was obtained from Roseberry State Forest where the tramway was being built, and was sawn at the Terrace Creek mill. The tramway started from the southern boundary of Roseberry State Forest at the point where Long Creek emerges.

The track gauge was three feet.

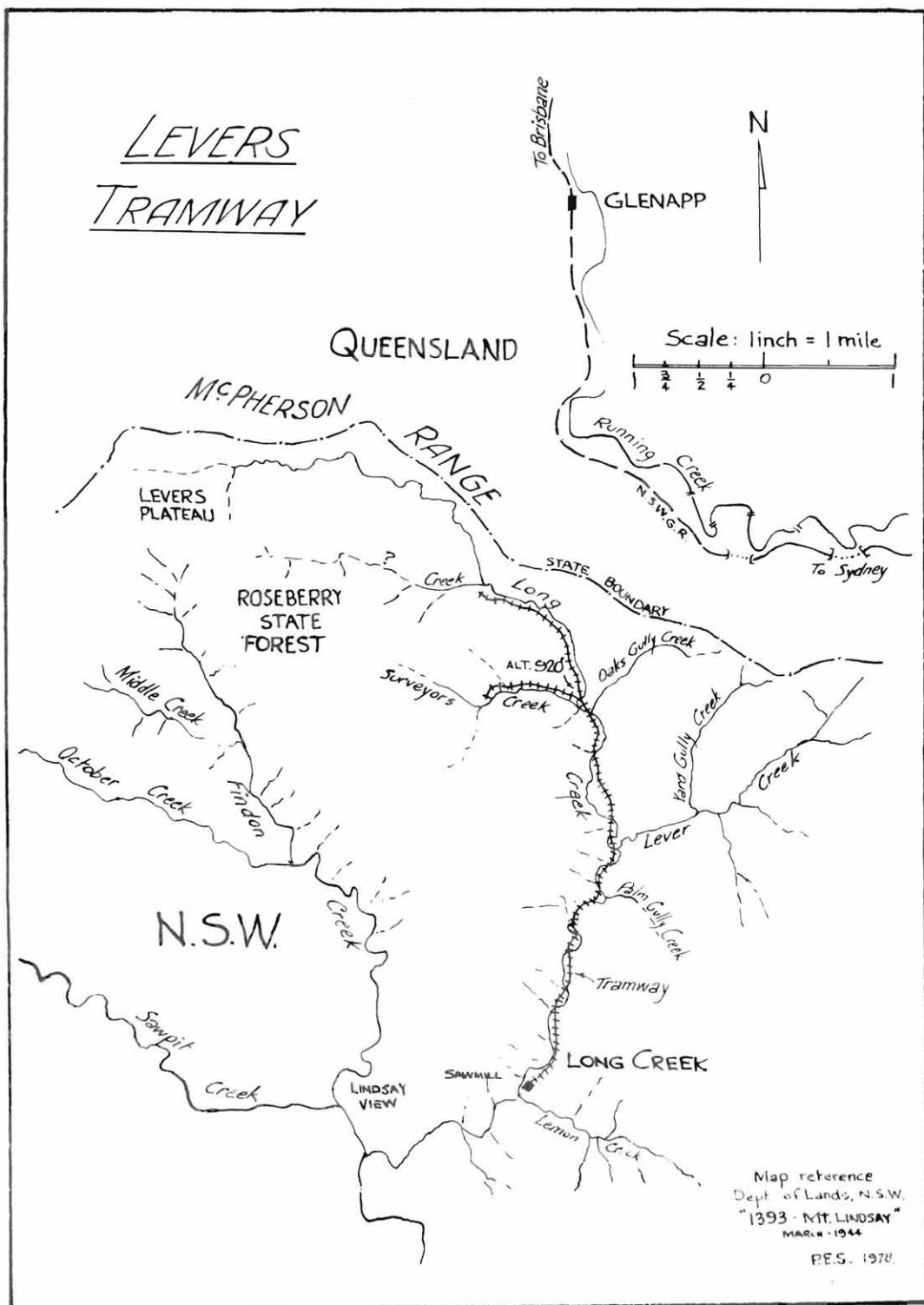
Clearing a path for the track and laying the sleepers was laborious work, impeded by dense undergrowth and thickly-wooded rainforest. Construction of bridges across the creek and its subsidiary gullies was also time-consuming. All the work was done manually, with axe, cross-cut saw, pick, shovel, horse or bullock-drawn dray and scoop. Despite the hardships about 1 mile of track was completed during 1919 and timber-extraction began. As logging progressed, the tramway was extended to the junction of Long and Lever's Creek, giving it a total length of about 8 miles.

Initially, the sleepers were laid some distance apart, but high rainfall (exceeding 60 inches per annum) soon made the first 500 yards a quagmire and the horses began to lose their footing. Laying the sleepers together solved the problem.

Usually four horses were harnessed to the log carriage, but this depended on the size of the logs being carried and sometimes only two were needed.

In the early 'thirties, the Terrace Creek mill was destroyed by fire and the horse and bullock teams on this line became redundant; they were about to







This is how the tramway altered when horses were superseded by tractors: the sleepers could then be laid some distance apart but with a walking plank in the centre of the rails.

be superseded by automation anyway.

At about this time, Jack Lever introduced a tractor to his operations. Both this and the jinker attached were modified by him to suit the tramway. Modifications had to be made to the tramway too: a new track was laid with sleepers approximately 30 inches apart; bridges were strengthened or removed and replaced. All the timber for this remodelling was milled at Long Creek.

In 1928, on the day his daughter Elizabeth (Betty) was born, Jack bought a Linn tractor. A happy occasion on two counts, Jack always said this date was an easy one for him to remember. Sometimes this new tractor was used to haul logs from nearby

forests to the mill; more often, with trailer attached it transported sawn timber to rail at The Risk, Wiangaree, or Kyogle.

Jack also recalled how, after the tractor engine, he bought an old, wrecked and battered 1928 Chevrolet 4-cylinder car from which he assembled to his own design a prime mover and trailer. Then he designed another tram along the same lines but powered this time by an International engine with higher horsepower.

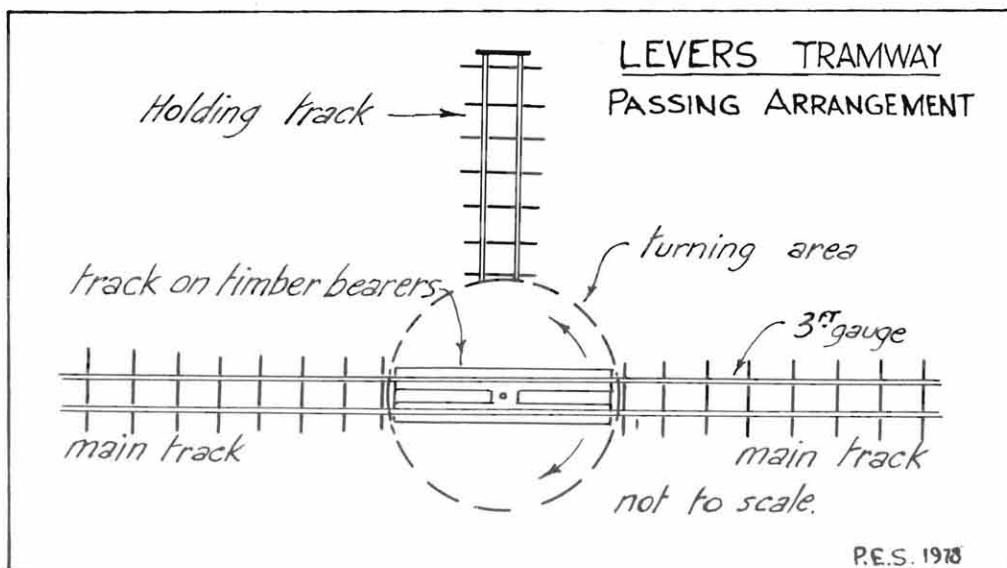
Problems with the trams' braking systems were largely alleviated by Jack's talent for modification but on odd occasions the brakes still failed and a loaded tram gathered too much momentum and left the track. When this happened, the logs had to be unhitched and the engine and jinker manhandled back onto the track. In the early days, bullock teams were called in at this stage to haul the off-loaded logs to the nearest dump; later the operation was performed by crawler tractors.

Skidding was another problem, particularly on winter mornings when rain or heavy dew made the rails wet and slippery. A 4-gallon kerosene tin full of sand kept always next to the tram driver provided the solution. As soon as the engine showed signs of skidding, the person sitting next to the driver would sprinkle sand on the rail. Sometimes the sanding process had to be repeated several times before the slippery patches were negotiated successfully.

At starting time in the morning, and depending on the number going to work, a plank would be nailed to wooden bolsters on the engine and jinker to serve as seating accommodation. (In 1946-7, these seating arrangements accommodated a faller, a snigger, and a Forestry Commission survey party of five, including the writer.) In the evening, it was a race to finish work in time to catch the last tram; failure meant "walking the line" back to camp.

When the tramway was completed, Jack installed a telephone line between it and the mill so that emergencies like personal injury or derailments could be attended to promptly. The single overhead line, powered by batteries, ran from tree to tree, or between poles insulated to avoid earthing. Each tram had a field telephone with a long wire attached. To make contact with the mill, the operator had either to clip the wire on to the line or, if the line was out of reach, throw the wire over it.

The steam-driven mill made a great deal of noise and to ensure that the phone could be heard, a large bell was fitted near the boiler where the fireman worked. This was another safety measure devised by Jack and the fact that there was never a fatal accident on the Long Creek tramway testifies to his ingenuity.



Ramps for loading logs were located at intervals along the tramway. At these points, Jack installed turntables which allowed one tram to pass another if necessary. A small section of the line was constructed at right angles to the main track so that the engine and jinker, after running onto the turntable, could be manhandled around and then reversed or driven forward off the turntable. The turntable would then be returned to its normal position on the main track where it was pinned in place to allow the other tram to proceed on its journey.

Two branch lines, Surveyor's Creek and Right Hand Branch Creek, extended off the main line. At the junctions, Jack installed a clock system which insured that only one tram at a time used these lines. The driver of the first tram set the hands when he passed a junction. Then, when the driver of the second tram came along, he knew there was already a tram on the branch line and could assess how far it was ahead.

A view of Long Creek sawmill taken in the early thirties and the logging tramway line is clearly visible in the foreground.





The first tractor which hauled log-laden jinkers from the forest to the mill, an altered 'Linn' tractor C1928. Part of the 'turntable' can be seen in the bottom of the photo.

Still operational in 1946, Long Creek tramway was used by the Forestry Commission Survey team of which I was at that time a member. We were surveying the Long Creek basin and had only one section left to cover - Lever's Plateau. (During the mid-twenties, the late George Rummery, then District Forester at Casino, had named Lever's plateau after Walter Lever, in recognition of his long and dedicated service to the sawmilling industry and his reputation as a colourful local identity).

Using the tramway for transport, we were able to maintain our base camp at the Long Creek sawmill and set up a "flying camp" near the headwaters of the creek, close to the Queensland border. The tramway took us as far as the end of Surveyor's Creek branch line each Monday morning, and back again at the end of the week. From this point, we had to hack our way through virgin scrub; luckily, we had a pack horse named 'Trixie', owned by the Commission, to carry our equipment and provisions.

The tramway was in use until 1947, but by then deterioration and heavy maintenance costs had made it impossible to run and it was replaced by a

road. Sadly, in the course of construction of the road, most of the line and its bridges were destroyed.

The tramway had been a valuable, if novel, system, both for timber extraction and for transporting workers engaged in forestry or related fields and, when the last load of logs came along the tramway to the mill, there were many long faces among those assembled for the occasion.

One never tires of reminiscing about past tram rides and the beautiful scenery to be enjoyed on both sides of the track: the majestic rainforest hung with heavy vines and epiphytes (plants like orchids, stag-horns and tree ferns); the numerous picturesque creek crossings; the cascading waterfalls, and the abundance of birdlife.

The tale of Long Creek tramway surely warrants a place in the annals of logging history, and with it the inspiration and ingenuity of one man: Jack Lever.

#### Acknowledgements:

We wish to thank the Forestry Commission of N.S.W. for their kind permission to reproduce this story from *Forest & Timber* Vol 13, No. 1 - 1977.



# Chert Incline - Mt. Victoria - N.S.W.

by F. John Reid



The least known incline that operated in the Blue Mountains of NSW was the one that existed at Mount Victoria and saw about five years working life. It was constructed for conveyance of chert and timber from the Kanimbla Valley.

Mention is made of the incline under the heading "Chert Siding" ("1") located near the old 77 $\frac{3}{4}$  mile post from Sydney on the western railway and train passengers today can still see two concrete blocks on the "Down" side which indicate the location of the long abolished siding. The siding, no doubt, was used to provide materials for the construction of the incline and later for shipment of chert and timber.

**Chert:** In the mid 1920's chert was used as a road metal and the Blue Mountains Shire Council had their own quarry on Mount Victoria Pass. Chert road metal was transported to Mount Victoria railway station in the Council's steam truck (which weighed, when loaded, about nine tons) and trucked for road works in other parts of the shire ("2").

In 1924 the Mount Victoria Chert Road metal and Timber Co. Ltd. was formed to operate and build the tramway incline from the area adjacent to the 77 $\frac{3}{4}$  mile post into the Kanimbla Valley. Towards the end of March 1925 the company "had constructed a railway from the quarry to the company's own siding, and had installed a winding plant. Arrangements were being made for the purchase of an up-to-date plant and machinery for the working of the quarry and timber mill" ("3"). It was during this period that the company also received numerous inquiries from Councils for quotations for road metal ("4").

## Official Opening

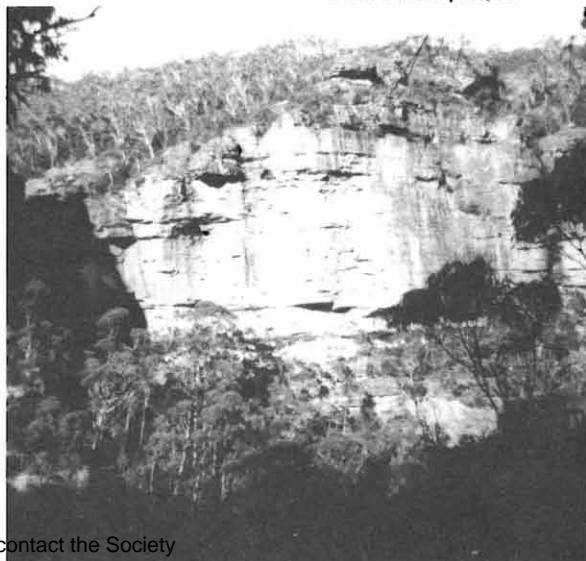
On Saturday, October 16, 1926 Mount Victoria held a Grand Carnival in ideal weather conditions ("5") and at 11 a.m. that day the Chert Company's plant was officially opened ("6").

The company had expended £15,000 in the development of its industry and at the official opening ceremony the works were visited by the directors (Messrs. F. Pontey who was the chairman, W.P. Lister, John Rankin, and Chas. Ireland), Mr. Jas. Dooley, M.L.A., Mr. L. McDonald, M.L.C., Queensland and their friends. This party saw Mrs. Pontey (chairman's wife) break a bottle of wine just as steam was turned on. Mr. Dooley congratulated the company upon the efficiency of its plant and stated "that as the day for demanding good roads had arrived, their enterprise would be abundantly rewarded" ("7").

Mr. Pontey then replied and gave relevant facts about the construction that had taken place during the past three years. He stated that some portions of

What remains of the commencement of the main trestle. By some luck this was not destroyed in the bushfire of Tuesday 5th Feb, 1952 and even as late as 8th August, 1976 it could still be seen.

F.J. Reid photo

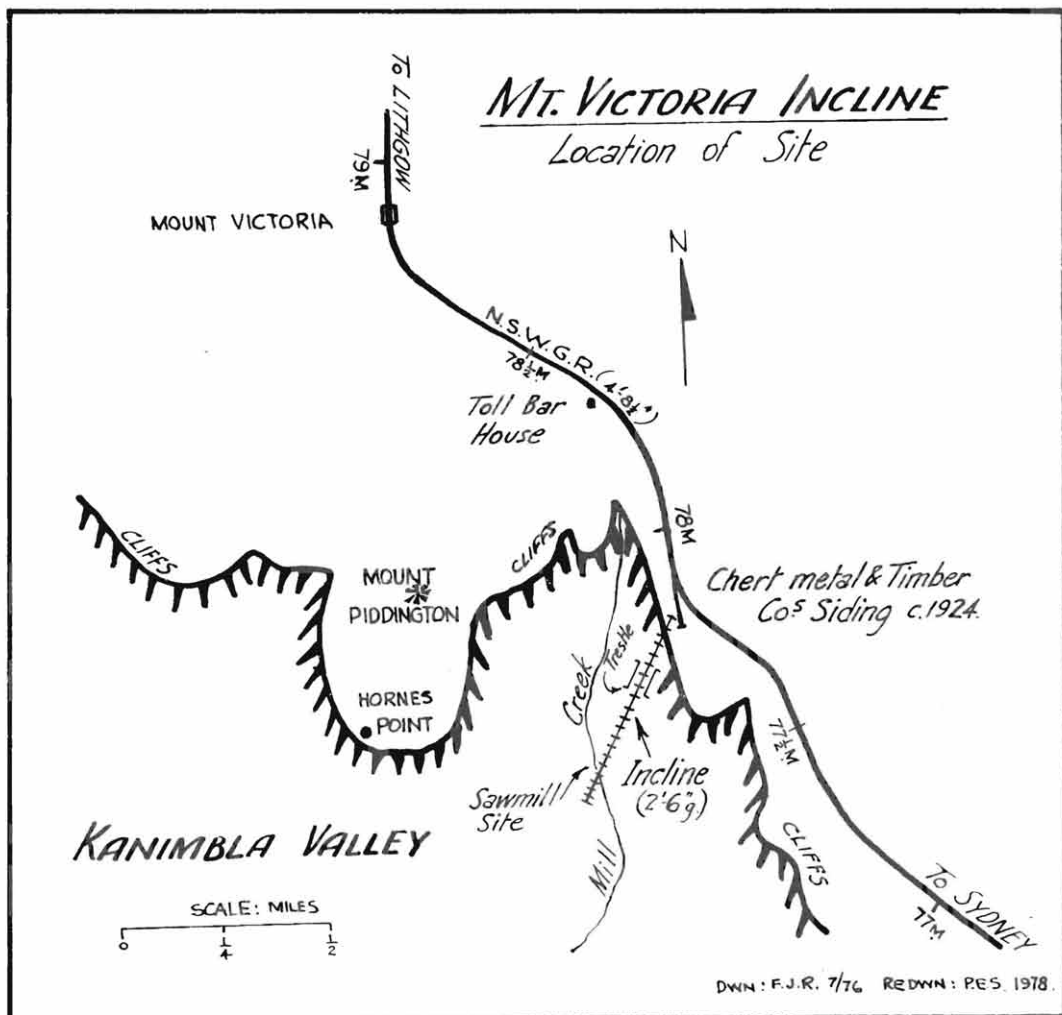


the work had been particularly costly especially when it was considered that over 20,000 tons of cliff had to be blown away to enable the half-mile incline tramway to be laid down. Even at this stage of the company's venture the chairman mentioned that a "modern saw-milling plant was on its way to Mount Victoria, and in a very little while would be in full working order ("8")."

The chert venture carried out by the company appears to have been known locally as Williamson's quarry. Within 12 months the quarry was in financial difficulty as a new company the Mountain Industries has been formed with a capital of £1,000 to take over Williamson's quarry. The Mount Victorian Correspondent for "The Lithgow Mercury" stated "it is hoped their venture will be successful" ("9").

We will now look at two other aspects of the company's activities, "The Blackheath Bulletin" of Tuesday, March 24, 1925 mentioned that "a small drive has been opened into the coal seam that the company intends working when the machinery is installed". A coal mine was in use but from questions asked in the local area it would appear that once the whole venture was abandoned the mine, for safety factors was blown in.

**Timber:-** At the base of the incline timber was felled and a sawmill established adjacent to the terminus for cutting of same. On a personal visit to the incline terminus on Saturday, January 17, 1976 it was possible to see on the timber mill sight an anchor block still "in situ". Timber felled in Kanimbla Valley included stringbark, box timber, red gum and ironbark. On the western side of the



incline terminus rested 30 foot poles. It is thought that as well as sawn timber being transported up the incline the 30 foot logs were also and could have been used for harbour piles.

Besides chert and timber being hauled to the incline summit from the valley it is worth mentioning that firewood was also conveyed. Mr. H.J. Hammon ("10") in a personal letter writes "when I was aged 15, in 1926, my father and I were engaged in cutting firewood in that section of the Kanimbla Valley, and the operators of the incline would, for a fee, cart our firewood to the top".

### Incline Today

The top section ("Chert Siding" end) of the incline can still be inspected today. Leaving the Toll Bar you follow the railway line till you reach the two concrete blocks mentioned previously. Arriving here you will find a path that will lead you down to the cliff face overlooking Kanimbla Valley. The formation is steep and it was in March 1975 that the Blue Mountains City Council under the Labor Government's RED Scheme made a fire trail in from the Chert Siding to the cliff face.

The bottom section of the incline is considerably overgrown and can only be undertaken in clear weather and it is necessary to approach it from the valley end.

Details of the Mount Victoria incline are as follows:

Length — half a mile.

Width of incline formation — approximately 9 feet.

Gauge — thought to be 2 ft. 6 ins.

Distinguishing feature of incline — two wooden trestles. Larger trestle thought to be about 300 to 400 ft. in length. This trestle started at the cliff face where the blasting occurred and enabled the tramway to reach the valley.

The smaller trestle was built across Mill Creek at the incline terminus and was probably about 30ft. in length. Both trestles were subsequently destroyed by bushfires that swept up the Kanimbla Valley in 1952. The same fire destroyed the timber mill at the incline terminus.

Elevation of incline at Chert Siding approximately 3,250 feet.

Elevation of incline at terminus in Kanimbla Valley approximately 2,400 feet. Drop from summit to floor 850 feet approximately.

Average gradient 2 in 3.

The construction cost was £15,000.

Access to N.S.W.G.R. — Chert Siding opened Sunday, 22nd June, 1924 and closed on Sunday, 22nd February, 1931.



View of where the cliff was blasted away to enable the trestle to be constructed so that the incline tramway could reach the Kanimbla Valley floor. Photo taken Friday 23rd May, 1975.

F.J. Reid photo

### Any Photos

Concluding Remarks: —

No doubt a lot of information has been lost about this short lived tramway incline. This article has not given the full story. It would be interesting to know if somebody somewhere has a photo of the incline when it was operational.

Gone forever is the sight and sound of a steam locomotive working a passenger or goods train past the long abolished Chert Siding. Perhaps some loco crew may still remember doing a shunt at the siding in the late 1920's. And as a final remark gone also are the activities associated with the Mount Victoria incline.

Tonnages (see reference "II"). The following is a record of the minerals out of Mt Victoria covering the period 1925 -1931:-

1925 -	7,633.72 tons.
1926 -	10,900.54 tons
1927 -	4,531.52 tons.
1928 -	517.44 tons.
1929 -	1,230.88 tons.
1930 -	1,828.64 tons.
1931 -	463.54 tons.

As coal and shale tonnages are dealt with in the Commission's Annual Reports the above figures therefore would be for minerals from the Chert and Timber Siding only. No details are available regarding timber removed from the siding.

### References

1. The Railway Crossing of the Blue Mountains by R.F. Wylie and C.C. Singleton. Bulletin No. 248 June 1958 mentions Chert Siding and tramway incline on page 90.
2. The Lithgow Mercury, Friday, August 29, 1924.
3. The Blackheath Bulletin, Tuesday, March 24, 1925.
4. Same reference as for 3.
5. Advertisement regarding Grand Carnival appeared in The Lithgow Mercury, Wednesday, September 22, 1926.
6. The Lithgow Mercury, Wednesday, October 20, 1926.
7. Same reference as for 6.
8. Same reference as for 6.
9. The Lithgow Mercury, Monday, November 28, 1927.
10. Personal letter from Mr H.J. Hammon dated 21st January 1975. Mr H. J. Hammon is Managing Director of Katoomba Scenic Railway Pty Ltd.
11. Figures supplied by Mr J. H. Forsyth, Archives Officer, P.T.C. of N.S.W.

### Acknowledgements

Thanks are extended to the following persons who helped with information:-

Mrs A. Dwyer of Mount Victoria.

Mr E. Barden of Mount Victoria.

Mr R. Hatswell of Blackheath.

Mr W.V. Tanner of Little Hartley for information concerning timber and the location of the timber mill in Kanimbla Valley at the incline terminus.



Lever as used on Mt. Victoria Incline. Inscribed on concrete portion of lever is "NL 1926". There were three (3) of these levers on the incline. When this photo was taken, this lever near the incline summit was still "in situ". Since being taken the lever has since been removed, by no doubt vandals. Photo taken on Sunday 27th April, 1975. The two (2) other levers were located and are still in their original positions about halfway on the incline.

Staff of Lithgow Regional Library for their kind assistance with back issues of The Lithgow Mercury.

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# Two 1886 Kimberley Railway Proposals

by David Whiteford



In the light of recent proposals for railways in the Kimberley District of W.A., I think that the following two proposals of 1886 would be of interest to readers. The Kimberley gold rush began in 1885 with the discovery of gold in what is now the Hall's Creek area (named after Charles Hall who, along with John Slattery, discovered the main gold load). Following the establishment of the Goldfield, numerous railway proposals were put forward to provide transport from an ocean port (usually either Derby or Wyndham) to the inland fields.

Some of the proposals were very well organized and their plans very specific - right down to rolling stock descriptions. However, the Kimberley goldfields did not produce much gold and within a few years the fields had vastly reduced in population and importance. So, no railway ever was constructed inland from the coast but the proposals themselves provide very interesting reading and here I feature two of the more interesting and detailed Kimberley Railway proposals. The information has come from the 1886 Votes and Proceedings of the W.A. Legislative Council with some historical background from Malcolm Uren's *Glint of Gold*.

## The Pioneer Railway to Hall's Creek.

The proposal for this railway was put forward by John Waddington of London and it was to be constructed from Derby or Cambridge Gulf (Wyndham) to the goldfields. The 'Pioneer' railway was a single line iron and steel rail strengthened or supported where necessary on girders resting on uprights about four feet from the ground. Wooden or steel sleepers would be used.

Carriages would run on central wheels on top of the track with an even overhang on either side, 'pannier fashion', and would be kept in position by horizontal wheels bearing against guide rails placed on each side of the uprights or posts. No more than 2½ tons wheel load was to be placed on any axle.

There were to be a number of train sets, each of ten cars. Cars 1, 5, 6, 7, 8, 9 and 10 would be freight and passengers cars. Numbers 6 to 10 would weigh one ton and would carry four tons of freight and

passengers. They would have continuous brake. 1 and 5 would be freight only but with a 1 ton 15cwt engine each. They would carry 4 tons 5cwt in freight. Cars 2, 3 & 4 were to carry boilers, fuel and water and would each weigh 5 tons. The loaded weight of each train was 50 tons with 26½ tons being paying load. The power of the locomotives would enable a train to travel on a 1:20 grade at 6 to 8 miles per hour.

The total length of the line would have been around 300 miles at an estimated cost of £1,500 per mile as a maximum. The cost was low because the line would follow the nature of the ground even to grades of 1:12. There was no need for surface drainage work as the line would be above ground and there would be little need for earthworks. Derailments were 'practically impossible' even if there was a minor land subsidence. The driving system would permit greater payload than conventional railways.

This proposal seems to be a version of the Lartigue system which was used to construct a few monorails in the late 19th Century. The most notable was the Listowell and Ballybunion in Ireland.

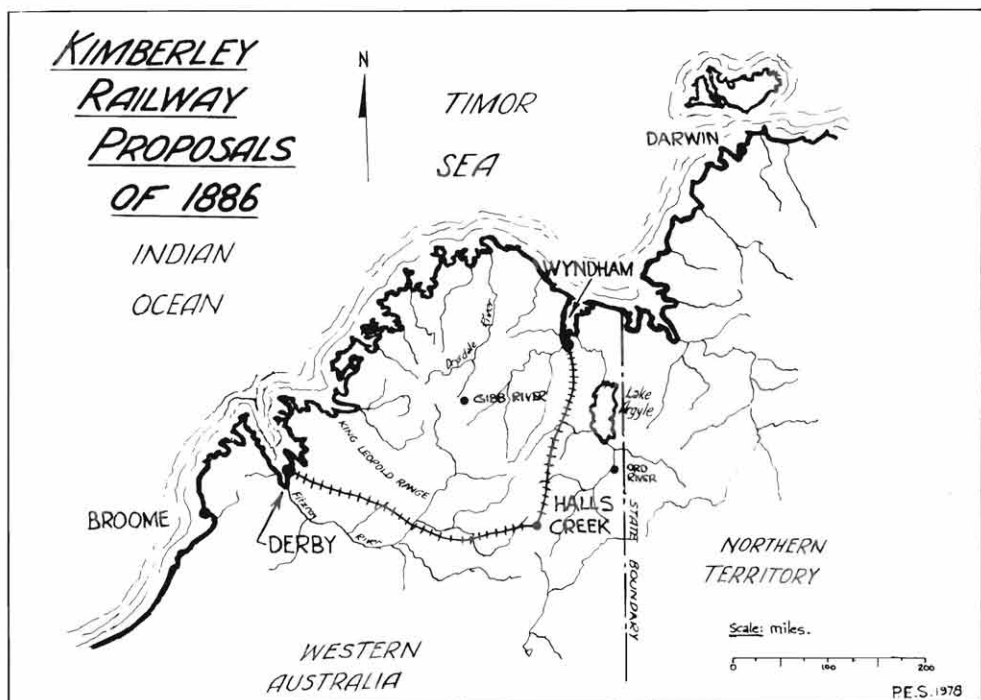
This line, if constructed, would certainly have been a 'pioneer railway' as no monorail system had been anywhere near the length of 300 miles at that time - and that is still the situation. Diagrams of the track and rolling stock accompanied the proposal to the Legislative Council but they appear to have been lost over the years and unfortunately they were never printed along with the proposal letter.

The 'pioneer railway' proposal followed the mention of an alternative 3' 6" railway proposal from Mr Waddington from Derby to the goldfield, and should the proposals not be accepted, the syndicate was willing to construct a line in any other part of the colony. John Waddington was later involved in the construction of the Midland Railway Company line between Midland Junction and Walkaway.

## Kimberley Tramway and Trading Association.

In 1886, A.F. Wileman representing the Kim-





berley Tramway Construction and Trading Association placed the following proposal with the Western Australian Colonial Government. The Association proposed to construct a 2' gauge tramway from Cambridge Gulf or any other Northern Territory or Western Australian terminal point to the Kimberley Goldfields. The estimated length was 300 miles with a minimum number of three stations, being the two termini and one intermediate. A telegraph line was to accompany the tramway and an office to be provided at each station.

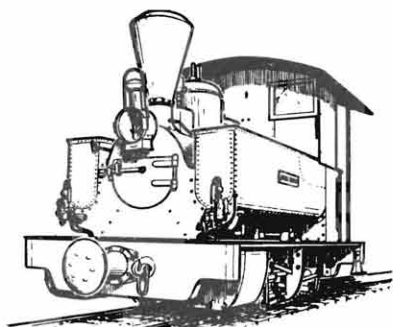
The tramway was to be constructed with steel rails of not less than 26lb per yard and the total cost of the line including all expenses was not to exceed \$2,500 per mile. Fencing costs along the line were to be paid for by landowners. Six steam locomotives with tenders suitable for hauling 20 tons up a 2% grade were to be provided as motive power for the line. Five composite carriages, ten open passenger cars, twenty covered freight wagons and thirty low sided wagons were the estimated required rolling stock. A workshop for servicing the stock was to be provided at Cambridge Gulf or whatever coastal terminus was chosen.

The association proposed the following arrangements with the Government. The Government was to provide guaranteed six monthly payments of gold (tax free) over 15 years with an annual interest of

4% per annum on the £2,500 per mile cost. All land fifty yards each side of the tramway was to be granted to the company with 200 acres for the terminal stations and an 880 yard coastal frontage at the port terminus.

A maximum of 500 cooloes were to be imported into W.A. for construction work if local labour was difficult to obtain. The Government was to pay a bonus of £5 per head should the need to import labour arise. Construction was to commence within six months of signing a contract with the Government and was to be completed within three years. The Association was to have the right to construct branch lines. All material for construction that was imported into the colony was to be duty free and also colonial or miniciple tax free.

As with the first proposal, this one did not get past the initial submission stage and it lapsed to become just one of the many official proposal to construct a tramway to the Kimberley goldfields that are now just very interesting to read in retrospect, and to ponder upon what it would have been like if one or more of the proposals had eventually borne fruit. Now, with the discovery of silver loads in the Kimberley, there are new proposals for a railway to serve what could be a new booming mineral field. However, no more will a monorail or a 2' gauge line be suggested as the best means of rail transport in the Kimberley District of W.A.



### MUNRO'S HAMPTON TRAMWAY (LR 61)

R.K. Morgan's absorbing article on the Perserverance Tramway mentions Lord Lamington's visit (of which I was unaware) but does not mention that the tramway had an official opening on 1 April 1905, and recorded in the *Queenslander* of 8 April 1905 page 38. On this occasion, the Premier, Arthur Morgan, was present, and he and a large party enjoyed the novelty of a trip to Perserverance on the timber wagons, and also visited the mill and the cable hauled section. After luncheon served in a marquee, member of the Government present spoke on the politics of the day.

The company letter head included a block showing a Shay locomotive hauling one truck of sawn timber.

One man who worked for the Munro's in 1909, then aged only nineteen, was Percy Skinner. He came from the Northern Rivers of New South Wales, and was employed bullock driving, hauling timber in the Perserverance Forest. When nearly blind and writing his memoirs in 1972, he briefly mentioned this period. Although he had been a cane-cutter, meat-worker, contract cane hauler and a worker on railway and Council construction works, as well as prominent in Union affairs, he remarked of working for A. & D. Munro, "As I look back over the years, they were the worst employers I ever worked for, most arrogant, no reasoning at all." Regrettably, he had no comments about the tramway; it was a common-place in those days.

J.D. Kerr  
St. Lucia, Qld

Whilst in Toowoomba in 1974, a visit to the Public Library revealed a book entitled "Toowoomba 1860-1910" by Alex L. Holte, in which was a reference to Munro's as under,

## LETTERS

### "A & D Munro

Sawmillers and timber merchants established in 1874 with 25 men and in 1910 had three mills and 100 men, 40 teams and teamsters".

No mention was made of any tramway.

However, as mentioned in LR62 the I.L.R.M.S. group acquired the remains of the two Munro's Shays, whilst inspecting these on arriving at Albion Park an oval plate was discovered attached to the main frame of B/N906, the plate reads "Property of the Lima Locomotive and Machine Works".

As the attachment of such a plate was not a normal procedure one wonders if the loco had been bought outright and that maybe Duncan Munro had arranged to lease or buy it on terms, being the true Scotsman that he was reported to be, this may have been the case.

Alternatively, was it just a "good deal" and Duncan purchased a loco made for stock or for subsequent lease by Lima.

P. Simpson  
Panania, NSW.

K. McCarthy has forwarded the following list for publication. It features the major dimensions of the Munro Shay locomotives (see "LR" No. 61) taken from the relics retrieved by the ILRMS from Palm Tree, Qld.

So far, no major differences have been detected between the two units (numbers 906 and 2097) but some variations may emerge as restoration progresses.

K. McCarthy  
Mt. Keri. NSW

See Page 21 for list.

Principal Dimensions taken from Lima Shays Nos. 906 and 2097

Length over headstocks (buffer beams) .....	25ft-10in (does not include couplers)
Width over buffer beams .....	6ft-10ins.
Boiler diameter over smoke box .....	2ft-8ins.
Length of boiler from smoke box door to rim of fire box door plate .....	14ft-6ins.
Bunker length .....	6ft-10ins.
Bunker width .....	6ft-7ins.
Main frame RSJ members .....	8ins x 4ins.
Gross frame members, channel .....	8ins. x 2½ins.
Space between main frames .....	3ft
Cylinders .....	2 x 7 in. diam. x 12 in. stroke
Centre line of boiler above top of main frame .....	1ft-4ins.
Bottom of fire box below boiler centre line .....	3ft-4ins.
Wheel diameter .....	2ft-3ins.
Over flange .....	2ft-6ins.
Flange width .....	¾in.
Tread width .....	4¼ins.
Driving level gears .....	Max. diam. 8½ins.
Min. diam. .....	5½ins.
Length of teeth .....	5ins.
Pitch of teeth .....	2ins. at crown
No. of teeth .....	14
Driven level gears .....	Max. diam. 2ft-1in.
Min. diam. .....	1ft-2ins.
No. of teeth .....	43
Distance between bogie king pins .....	16ft-4ins.
Wheel base of bogie .....	4ft-2ins.
Boiler centre line offset from loco centre line .....	1ft-3ins.
Axle diameter at centre .....	4½ins.
Axle diameter at wheel centre .....	3¾ins.
Axle diameter at bearing journals .....	2.7½ins.
Width across bogie frames .....	4ft-4ins.
Gauge .....	2ft-6ins.

## RESTORATION OF TWO TRAILER CARS

In 1975 Bruce and Phil Belbin made the decision to buy a couple of carriages to go with the Perry locomotive, being restored at their home, for the possible railway at St. Ives showground. Enquiries were made in Queensland if smaller type carriages were available from the Queensland Government railways, for other State's cars of 3ft 6in gauge were regarded as being too large.

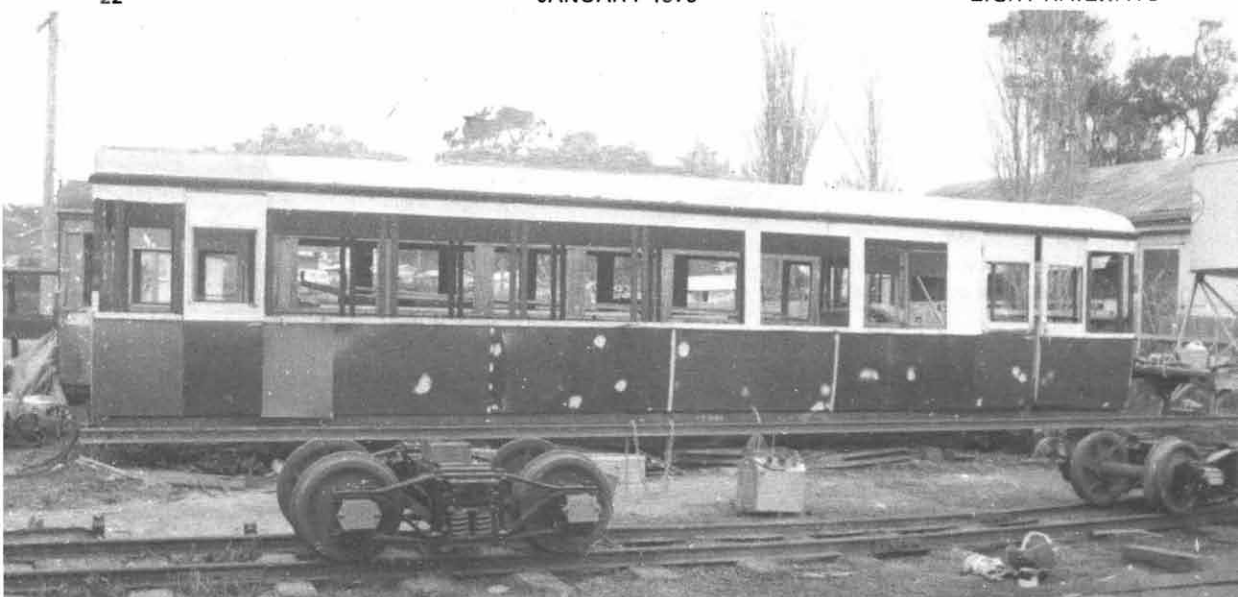
Enquiries eventually lead to the acquisition and transport to Sydney of two ex-railmotor trailers, PL121 and PL122. Storage was provided for a short period at Hornsby, before transshipment to Forrester's Beach in late 1976.

Mid-August that year, I was asked to have a look at the two cars to see what was needed in the way of renovation. After several ideas were aired by the Belbin family, it was decided to strip off the body panels and old roof and rebuild.

From September 1976 till the move from Forrester's in mid 1978 one carriage was stripped of all timber and sheet metal, leaving a bare steel U-shaped framework.

Then a new galvanised metal roof was refitted, followed by outside sheeting up to window height; masonite suitably treated and painted was fitted to the inside walls, ends and ceilings, and for the interior severe curvature of the ceiling, more sheet metal was bolted and screwed in place, making a neat fit with masonite sheets suitably shaped. All doors (3 each side and two on the ends) had to be rebuilt, as they were extensively rotted out along the bottoms.

Glazing has been fitted to both ends and small side windows at the ends have yet to be finished. A combined arm-rest/window sill is being fitted, as no glazing will be fitted along the sides.



The floor has been removed, owing to its poor condition, and to provide access to clean the chassis and fit the 2ft gauge bogies which were imported from South Africa, there being no suitable ones in Australia to the Belbins' knowledge.

At the time of writing this article, as reported in "Light Railway News", the carriages along with the Fowler and Hudswell-Clarke owned by the group, are stored at Kurrajong. Restoration continued from late November, for in the intervening period,

Panelling fitted to one side, note trial fitting of stretchers to bogies, at Central Park, 18-9-1977.

facilities for storage and work area, power, etc., had to be set up.

Time only will tell when the first carriage is fully restored, ready for use, then the second car, PL122, will be started on.

L. King, N.S.W.

## FEDERAL TIMBER COMPANY - WARBURTON VICTORIA.

by K. McCarthy

Some time ago access was gained to part of the photograph collection of the late K. Train of Sydney. Amongst the gems in these albums was a series of photos taken of the Federal Timber Company tramway at Warburton during October 1941. A selection of these prints are presented here.

On page 38 of the LRRSA publication "Tall Timber and Tramlines" it is stated that the Warburton Timber Company built a four mile steel railed tramway from the Victorian Railways La La Sidings at Warburton to Big Pat's Creek over which it operated four steam locos.

After 1934 The Federal Timber Company, who had built an 11½ mile extension beyond Little Pat's Creek took over the operation of the Warburton Timber Company's 3 ft gauge tramway between Big Pat's Creek and La La Siding using its "Day's" tractors. A photo of this operation appears on page

43 of "Tall Timbers and Tramlines".

"Railways in Australia" for June/July 1950 mentioned that the 3ft gauge Federal Tramway at Warburton closed in January 1950. On page 15 of the December 1950 issue of that same publication Mr. L. Robinson, in a letter to the editor, explained that it was now some months since workmen pulled up the last rail of the Federal Mill timber tramway to Big Pat's Creek. Mr Robinson continued that all metal gear along the tramway, which could be salvaged without too much effort, had also been removed and stacked at La La siding.

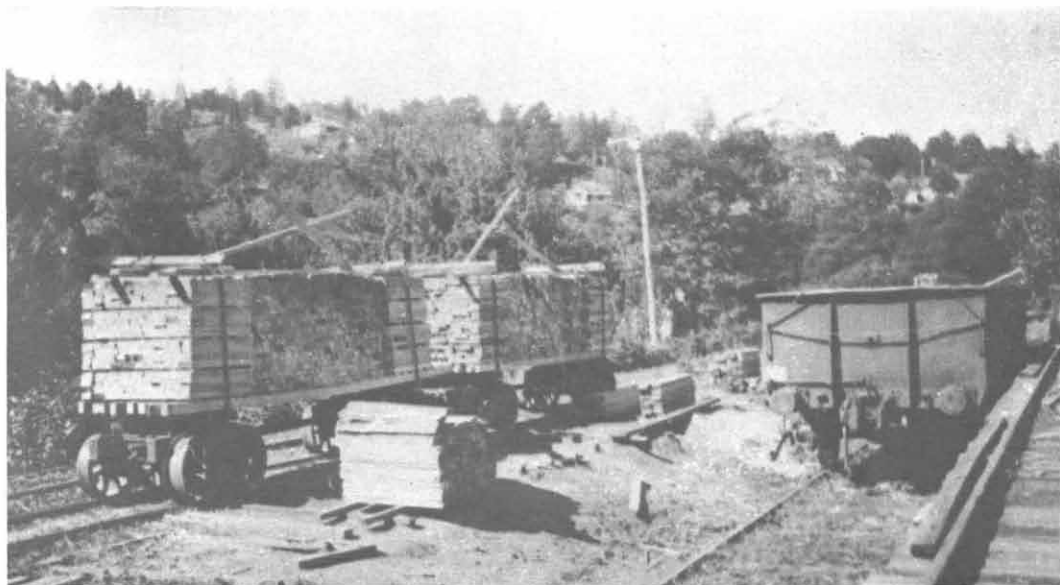
Unfortunately the letter was undated but the correspondent mentioned that "about four months ago" the timber bridge across the Yarra at La La gave way when one of the timbers supporting the track snapped and pitched the 0-6-0 ("Day's") loco into the river. It was recovered little the worst for



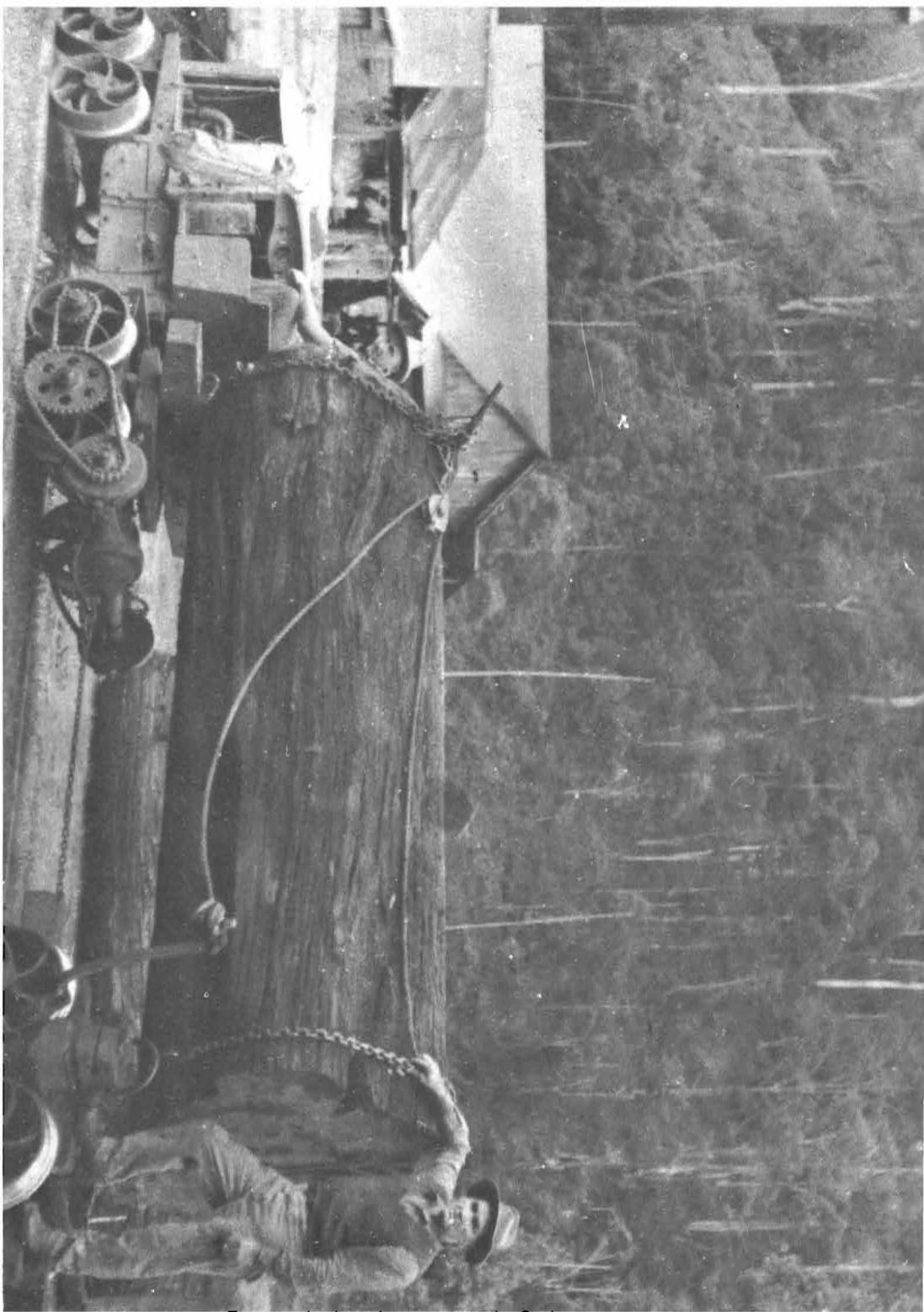
wear and was placed on sale.

The writer of "Tall Timber and Tramways" stated that little serious research has been undertaken on the tramways around Warburton and this is a project which would offer a most worthwhile project for an historian. Mr. Robinson's letter of 1950 closed with the interesting clue:- "An Auctioneer and Insurance Agent at Warburton had three large photos on show in his window" of the loco and material placed on sale.

The October 1941 set of views show 3ft gauge trucks stacked with newly milled timber at La La, yet the "Day's Tractor" is in a sorry state and photos taken of the railway just beyond these sidings show it overgrown. The hand written captions on the photos read "now disused — rails stack from the dismantled line — disused track — etc." Here also exists an untold tale .... was the railway closed after the 1939 bushfires and reopened during World War II?







The 2nd prime mover and trailer seen here hauling a large Red Cedar log designed and assembled by Jack Lever himself from a battered 1928 Chevrolet 4-cylinder car. Note the kerosene tin full of sand in the cabin next to the driver. The sand was sprinkled onto the rails on mornings when they were wet and slippery from rain or heavy dew.