Lahey's Canungra Tramway

by R. K. Morgan

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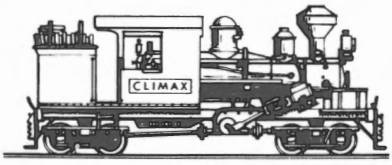

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Whilst every effort is made to ensure the accuracy of articles published in *Light Railways* errors may creep in. Additional information is being discovered all the time, and this sometimes contradicts previous information.

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.

Historical references to sums of money in *Light Railways* are in Australian pounds (£).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.

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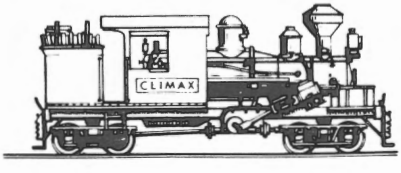
Recommended reading:

SAWDUST AND STEAM by Norm Houghton. A history of railways and tramways in the East Otways, including Forrest, Apollo Bay, Wye River, Kennett River, Lorne and Barwon Downs. 106 pages, 12 plans and maps, 60 photographs. $4.20

WEST OTWAYS NARROW GAUGE by Norm Houghton. The story of the Beech Forest 2 ft 6 in gauge railway and its connecting tramways. 52 pages, over 30 photographs. (LRRSA publication) $1.75



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Lahey's Canungra Tramway

by R. K. Morgan

All photographs from the George Bond collection

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Front cover:

Ex North Mount Lyell Railway (Tasmania) Shay locomotive (B/No. 697) of 1902 about to enter the 4½ chain tunnel just south of Canungra on Lahey's Canungra — Pine Creek logging tramway.

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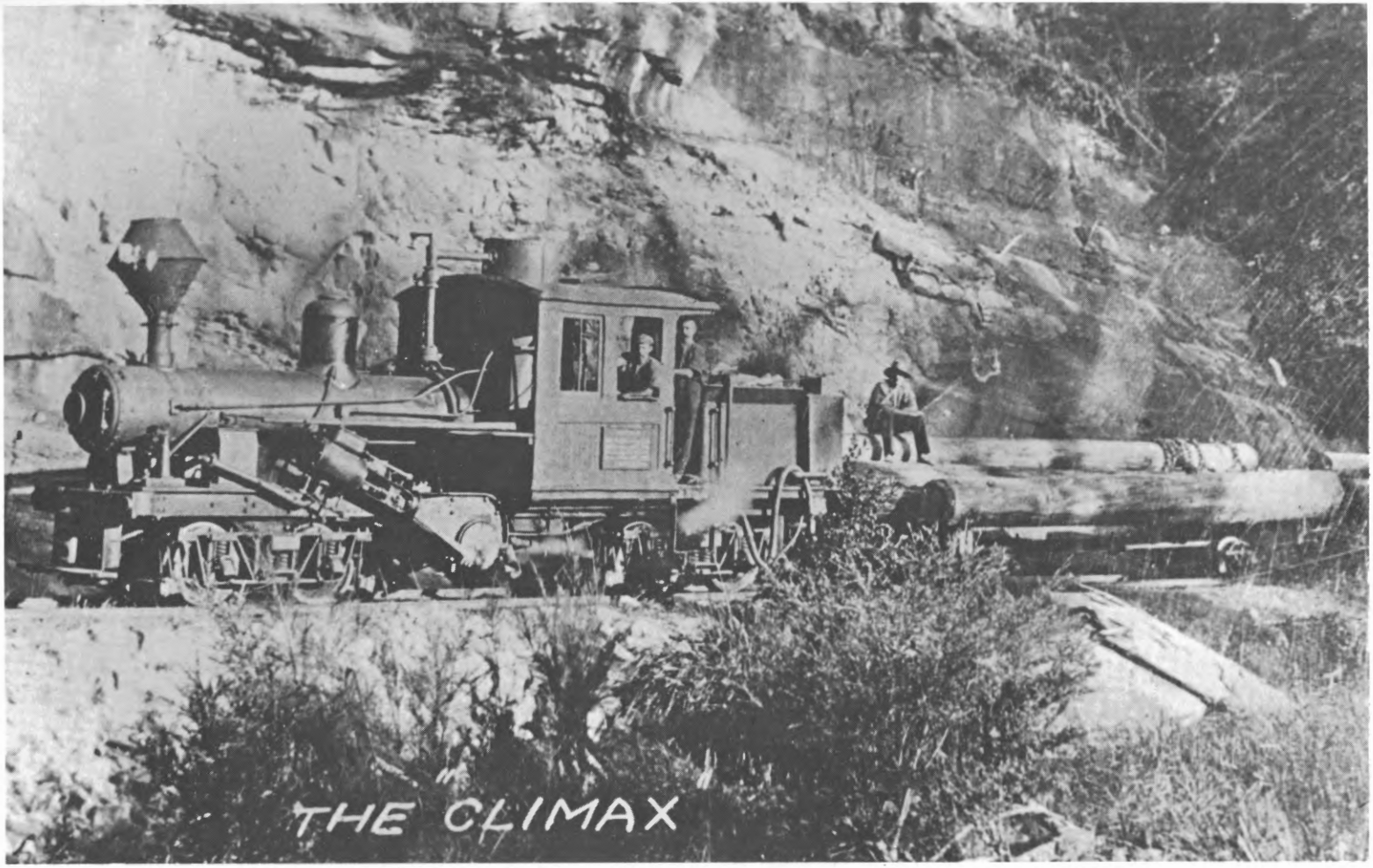

Lahey's Climax locomotive, as rebuilt with extended smokebox, just north of the tunnel.

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Lahey's Canungra Tramway

by R. K. Morgan

Canungra lies about forty miles south of Brisbane where the foothills of the rugged McPherson Ranges rise, with craggy peaks, deep gorges and high plateaux covered with dense rain forest. It was in this area that Laheys Limited developed a timber enterprise which was to become 'a huge undertaking, and one of the engineering wonders of the district'.[1]

White settlement of the area began about 1843, a big holding called *Tambourine* being taken up. (The name is a corruption of Dyambrin, the aboriginal name for the north-west end of Mount Tambourine).[2] Later, *Tabragalba* and *Sarabah* stations were taken up in the same area, and then *Pine Creek* of 25 square miles, by John Duncan, in the 1850s.[3] This latter name was taken from a stream that ran through a deep gorge. It later received the name of Coomera River.

About 1873, *Pine Creek* was sub-divided into smaller blocks, John Duncan retaining occupancy of three of these totalling 1,620 acres, the name *Pine Creek* still being used.

It was about this time that the timber industry was getting under way in Queensland. William Pettigrew had opened a sawmill in Brisbane in 1852,[4] and operations were getting established to the north. However, the ruggedness of the McPherson Ranges proved an effective hindrance to would-be timber getters although the ranges were known to contain many fine stands of valuable timber, both hard and soft woods.

It is said that the first person to go into the area after timber was one Hugh Mahoney in the 1860s. He cut and hauled cedar logs to Ipswich. The timber came from the Canungra Creek and Pine Creek valleys, and he made his own roads and bridges, including one over the Albert River.[5]

The Lahey family came into the Canungra scene in 1884. Francis Lahey, his wife and eleven children had come to Sydney from Northern Ireland in 1862, aboard the good ship *Bellissima*. Having landed in the new country, they immediately travelled north to Brisbane. In 1870 they moved to Pimpama, on the road to Southport, where they took up farming, and by 1880 were also operating a sawmill at Waterford, having a contract to supply sleepers for the Bundaberg-Mount Perry railway line.[6] At Waterford they came into contact with the aforesaid John Duncan, who used to ride over the mountains to the head of navigation on the Logan River to pick up stores shipped from Brisbane.

Duncan told Lahey's of the good timber round Canungra, and on 2 October 1884, David Lahey rode over Tambourine Mountain to commence work on the mill at Canungra. During that year, he and three of his brothers, Isaiah, Thomas and John, and a sister, Evangeline, had separately applied for and had been granted 'selections' (timber leases?) totalling 3,092 acres[7] round Canungra.

The mill they established flourished during the next sixteen years. It was built at the tiny settlement of Canungra, but such was the quantity of timber that large pine trees were growing right at the mill and in the immediate neighbourhood. In the early years of operation, therefore, transportation of logs presented no problems. The holdings at Canungra were named *Bellissima* by the Lahey's, after the ship on which they had come to Australia.

The firm expanded its activities in a remarkable way. They opened a Brisbane office in 1887, saw and planing mills at Beaudesert in 1888, and built a new mill at Canungra in 1897 after the first mill had been burnt down, and erected another mill at Widgee, near Hill View, which was then (1898) the terminus of the tramway operated by the Tabragalba Divisional Board (later to become the Beaudesert Shire, and hereafter in this article so called.) Lahey's also had fingers in timber milling pies in New Zealand.

Toward the end of the 1890s, the company was having to go further afield for timber for the Canungra mill, and bullock teams were hauling in logs over increasing distances. The land now acquired by the brothers was some 16,000 acres, both freehold and leasehold, in the Canungra and Pine Creek valleys. They had also been joined by R. Nicklin, who had married one of their sisters, Jane, and the firm was now called Lahey Brothers and Nicklin.

Tramway Planned

The transportation of logs was becoming an acute problem. The bullock teams were slow and expensive, so the company ventured into mechanisation in the form of a Fowler steam traction engine. It was a woeful failure, basically because of its weight. It wallowed in the mud and became bogged with monotonous regularity. It was dubbed 'Lahey's Folly', and was sold with no regrets to Abdul Wade, the Camel King, who took it to the drier climes west of Cloncurry.[8]

It was at this point that the firm decided to build a railway into the Pine Creek valley to bring the timber out, but owing to the rugged nature of the country, the burning question became, what type of railway. Ordinary adhesion seemed out of the question, as the textbooks said that this was not satisfactory on grades steeper than 1 in 25. A cable railway was considered, in which the locomotive hauled itself along on a cable - but straight lines are of the essence for such operation, and keeping the line straight in such country would be just as

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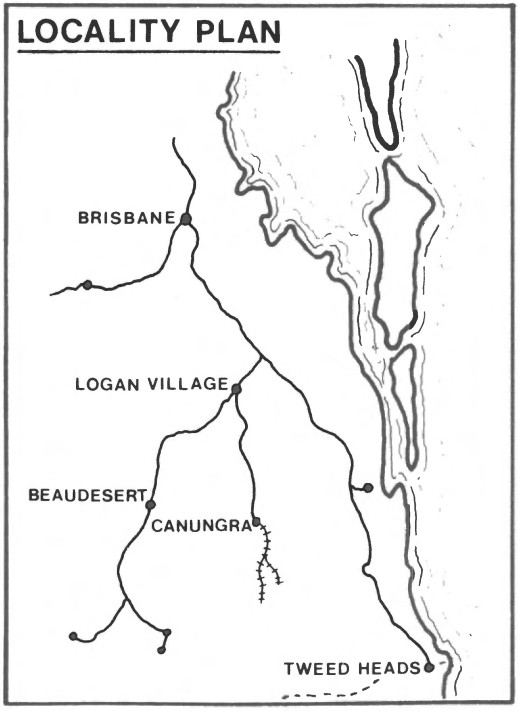
impossible as keeping the maximum grade to 1 in 25. A rack railway (such as had been introduced recently at Mount Morgan), and the Fell third rail system (as in New Zealand) were also considered. Lahey's felt the answer was in the geared locomotives used by many logging lines in America with great success. Climax were advertising that their engines were capable of going up and down inclines as steep as 1 in 10, and so Lahey's put business their way with an order, placed in 1900, for one only B Class locomotive.

Meantime the general route that the line was to take had been selected by Tom Lahey; and Mr George Phillips, civil engineer, was engaged to make a detailed survey. This was completed in February 1900.[9]

The gauge selected was 3ft 6in as it was envisaged, even at this early stage, that there would be an eventual connection with the Queensland Government Railways. This showed extraordinary foresight, for at that stage the closest the Government line came to Canungra was about 22 miles.

The first five miles of construction was let to one Clark, and immediately an engineering problem faced the builders. Separating the mill from the Pine Creek valley was a ridge of the Darlington Range that had to be negotiated. A long roundabout route involving heavy earthworks was considered, but was rejected in favour of tackling the hill head-on...up the hill, through a tunnel, and down the other side. As a result, the line climbed 244 feet in 54 chains to the tunnel, 43 chains in this section being laid at the incredible grade of 1 in 12½! Lahey's were taking Climax at their word! The survey called for curves as sharp as possible, but the general rule of thumb was that they be no sharper than 2½ chains radius. Even so, there was one bend on this grade of only 120 feet radius (less than 2 chains).[10] Because of excessive wear of both wheel flanges and rails, all curves were later eased to a minimum radius of 3 chains, and further improvements to curves followed in later years.



The tunnel at the summit was apparently originally planned to be higher up the hill, and only 88 yards long,[11] but when built it was about 4½ chains long through solid sandstone, straight (probably one of the longest straights on the whole line!) unlined, and roughly rectangular in section. The steep grade from this tunnel down to the mill was to prove the most hazardous part of the line, and a safety switch was laid in, of which more later. Suffice to say at this point that during actual operations there was no serious accident, although occasionally, due to greasy rails, there were some exciting moments.

Once through the tunnel, the next thing was to descend into the valley on the shortest possible route, while keeping as close as possible to the scrub where the timber grew, to save on snigging costs. At the same time, a reasonable grade had to be maintained, as this grade would be against loaded trains. The incline was kept to 1 in 16½, one section of this pull being 18 chains long. Such were the problems of this range section that by 1901 only 1¼ miles had been laid, and the five mile was not reached until September 1903. On the first day of that month the Climax - the first loco on the line - was steamed for the first time, and began running.

Originally, the straight rails were to have been of 5 in. by 5 in. hardwood, with the curves laid with steel rails. But it was soon found that the timber rails shrank, and so steel rails were laid throughout.

The rolling stock retained its broad tyred, deep flanged wheels (for timber rails) for some time, these causing some running problems.[12]

There were problems with the first steel rails, too. Coming second hand from the QGR, they were known as 'McIlwraith rails', because they had been imported for the QGR at the instigation of the then Premier, Sir Thomas McIlwraith. They were actually wrought iron rolled with a steel top. They proved faulty, as the tops would begin to peel away from the wrought iron, especially at the ends.[13] However, with the tops cut right off the rails gave reasonable service, although they were replaced later with new rails purchased from Belgium.[14]

There was no shortage of timber for sleepers, but the firm learned from experience that red stringy-bark had to be replaced after twelve months, and by trial and error, discovered that bloodwood was the best for the purpose.[15] At first sleepers were sawn to shape, but later they were simply split like oversize fence posts..

The line was gradually extended as needed. In 1905 David Lahey took over supervising the extensions to the line, and by 1907 the terminus was 6½ miles from Canungra.

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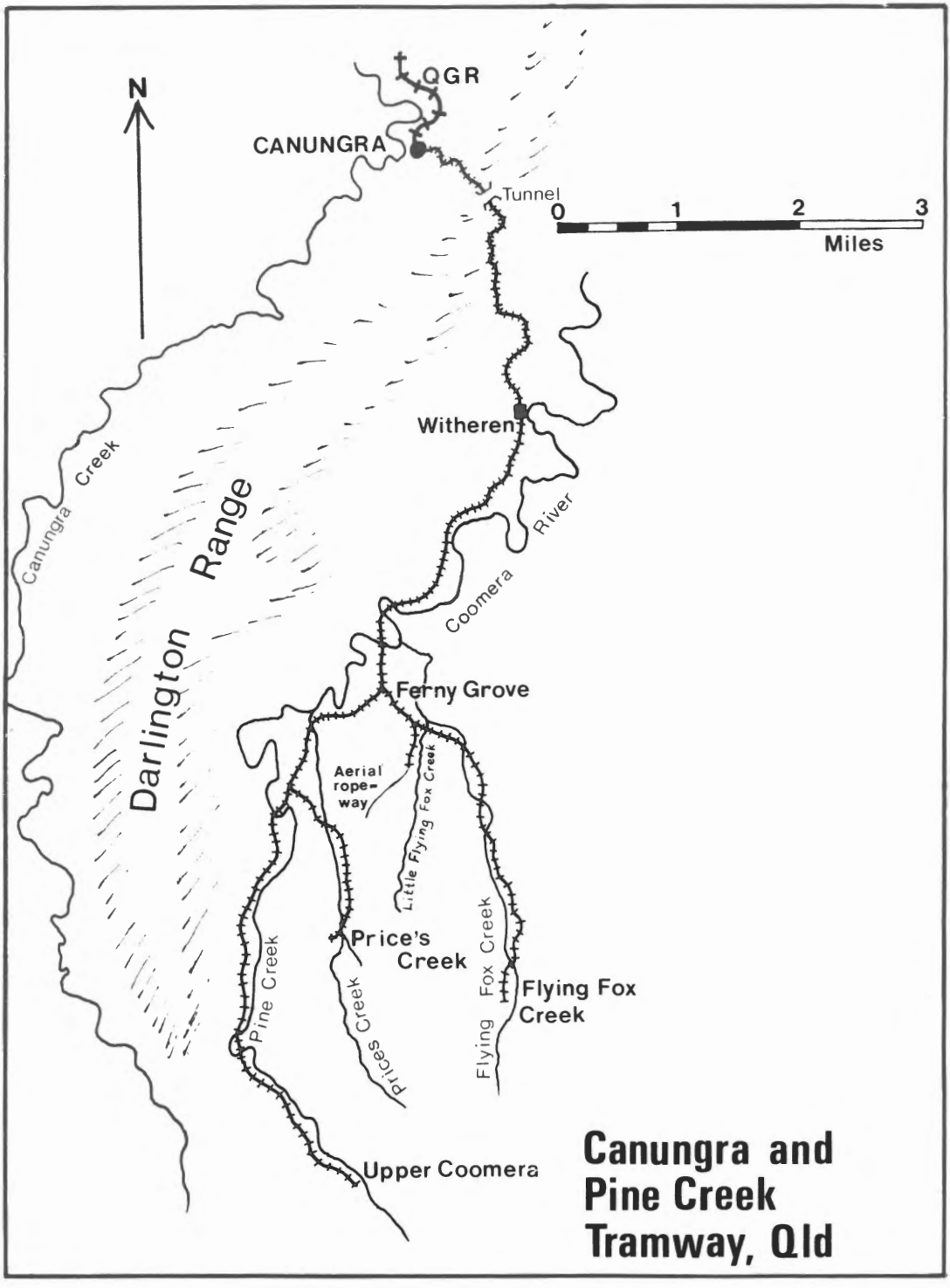

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Above The Canungra sawmill, from a photograph published in the *Queenslander* of 27 February 1909.

Below Shay B/No. 2371 of 1910 pushes and pulls logs on Lahey's tramway. From the *Queenslander* 25 November 1911.

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Canungra Railway Proposed

When the line was first begun, in 1900, negotiations began with the Government requesting them to build a line from Logan Village to Canungra to facilitate the transport of milled timber. Many representations were made by the firm, even to the extent of offering to lease the line for forty years, or alternatively, meeting the interest bill for the cost of the line as well as part of the redemption, but the proposals were refused.

The firm then approached the Beaudesert Shire Council, suggesting they should build and operate such a line. Phillips and Delpratt (civil engineers?) reported on the proposal. The cost at the time was estimated to be £37,323 using 30lb rail, the line being 22 miles long with a ruling grade of 1 in 40. This figure did not include the purchase of rolling stock, and it was anticipated that one second-hand locomotive, with 12 inch cylinders, one guards van, one passenger carriage seating sixty, two covered goods vans and five ballast trucks would be needed, to cost a further £2,550. A second locomotive would be required later, and trucks for timber haulage were to be hired from the QGR to save transhipping. It was suggested that trains run at a maximum speed of 10 miles per hour, and only during daylight hours.[16] At the time, output from Lahey's mill was 2,500,000 superfeet annually, mainly pine, with plans in hand to lift this to 4,000,000.[17]

In 1903 negotiations for this rail outlet having failed, Lahey's settled for an improved road, the company being required to guarantee a £4,000 loan from the Government to the Beaudesert Shire Council.[18]

By 1909 a rail outlet for their product had again become an urgent matter and the company again approached the Government about a rail link. To endeavour to persuade the men at the top, the firm invited the Premier and the Secretary for Railways to inspect the works in 1910, to see for themselves. A banquet was held, and no doubt these VIP's were suitably impressed. At that time eighteen bullock teams were employed taking sawn timber out to the railhead, and the effect of this traffic on the red and black soil roads can hardly be visualised in these far-off days, but it must have been something wondrous to behold. Another fourteen teams were employed to supplement the tramway in log hauling.[19]

Some idea of the difficulties involving transport that went on in those days can be gauged from this account, told by one of the Lahey brothers:

'The best combined pull (of bullock teams) I ever saw was at Canungra. The company had imported a big planing machine which weighed 14 tons. A special wagon had to be built to carry it from the railway at Jimboomba, for which special wheels with rims 24 inches wide had to be used. Two bullock teams in tandem managed to get it as far as Canungra, but as soon as it left the metalled road the wheels sank to the axles, and the bullocks could not shift it. Next morning they collected five teams and all the spare chains in the town, and placed three teams in line in front, with a team on each side attached to the back axle. Then having got all the bullocks well up in their yokes and all chains taut, the five drivers as one man yelled and swung their whips and without a pause they dragged that fourteen tons plus a very heavy wagon into position about two hundred yards with the axles scraping along the ground all the way.'[20]

The railway from Logan Village was eventually agreed to, and construction began on 22 August 1913, another banquet being held. It was opened the following year without ceremony (due to the war).

Meantime, other things were afoot elsewhere. The mill had been rebuilt for a second time, in 1906, after another serious fire. In 1908 the firm became 'Lahey's Limited', the principals being the four Lahey brothers and W.H. Nicklin, their brother-in-law's son. John was Chairman; Isaiah, the manager at Beaudesert; Thomas, the manager at Canungra; David, the manager of the tramway; and W.H. Nicklin, accountant.

Nine-thousand two-hundred tons of logs were handled on the tramway in 1909. A second locomotive had arrived in 1906, a Shay, acquired second-hand from the ill-fated North Mount Lyell Company in Tasmania, and in 1910 a third loco joined the company, another Shay, purchased new. That year a branch line was run up Flying Fox Creek for 1¼ miles, with a 25 chain sub-branch up Little Flying Fox Creek. The main line at this time was 8½ miles long. Another branch up Prices Creek for 1¼ miles was opened in 1914, and in 1915, fifteen thousand tons of logs were hauled on the tramway. Eventually the total length of line reached 16½ miles, and had cost the company £26,000 to build.

The nature of the country required many bridges. The total length of bridging is not known, but in 1907 when the line was 6½ miles long, the bridges totalled 2,615 feet. Mostly they were timber trestle built of locally cut iron-bark, and up to 40 feet high and 150 feet long. The Coomera River (Pine Creek) was crossed a number of times (six, according to an army ordinance map). Most of these bridges were low level, just a couple of feet above normal stream height to allow flood debris to be carried well over them. However, a couple were twenty feet above the stream, with sheeted piers.

All the tramways were laid in deep, steep-sided gorges, among jungle-clad mountains that rise over 2,000 feet above sea level. It was a most picturesque setting, the line curving among waterfalls, ferns and thick scrub. From the nine mile to the terminus on the boundary of the Lamington National Park, the company had reserved a strip of scrub along the line to preserve its natural beauty to the last. Here, the formation was cleared to only 10 feet wide. The result was a trip through fairyland. When the Royal Commissioner on *The Future Water Supply of Brisbane* was taken through it he was so impressed he immediately wired his mother in Melbourne to come and see it, which she did to her great joy.[21]

Sidings were located at Witheren (3 miles), Ferny Grove Junction (4½ miles) and Prices Creek Junction on the Coomera River line, and at Little Flying Fox Junction on the Flying Fox branch. A water tank for the engines was located at the mill, and another, filled by a hydraulic ram, at the five mile. However crews had plenty of opportunity to replenish the tanks from the creeks, using

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the syphon pumps fitted to the engines.[22]

The mill was a big concern, employing 112 men in 1913. The boilers feeding steam to the engines which drove the mill machinery were reconditioned locomotive boilers from the QGR.

The benefit of the tramway was felt soon after it began working - haulage costs fell from two shillings per 1,000 superfeet brought in by bullock team to three pence per 1,000 super brought in by rail over five miles.[23]

Aerial Ropeway

In 1912 Tom Lahey visited the United States to inspect timber operations in that country, and while there ordered an aerial ropeway. It was installed from the end of a spur on Beech Mountain to take logs down 1,000 ft. to the skids at the end of the Little Flying Fox Creek branch. The job of anchoring each end of this ropeway proved a formidable task.

'(The logs) were carried down this by gravity in a continuous procession about 100 yards apart, the operation being controlled by a powerful brake on the back-haul.'[24]

Although very satisfactory at first, it later became uneconomical and was dismantled and stored at Ipswich, being replaced by a road in 1918.

Another experiment by the Lahey's was the installation of the first electric logging winch in Australia, complete with its own powerhouse. It also proved uneconomical, and the dynamo and winch were later used on a travelling gantry for stacking logs at the mill. It made it possible for this work to be done even in wet weather when all other work had to stop.[25]

The railway served one useful purpose for which it was not designed. Each year several trucks were fitted with temporary decking and plank seats and the entire population of the district went by train for a picnic to one of the many lovely spots available along the line. In addition, people of the area served by the line made full use of it (at their own risk and inconvenience) to travel back and forth for business or pleasure. The greatest inconvenience arose from the showers of sparks emitted from the chimney of the engine when pulling flat out, and although many attempts were made to remedy this the problem was never satisfactorily solved.[26]

A lesser inconvenience was having one's derriere pinched by the pole of an empty truck, or the logs of a loaded one.[27] Either way travellers ran the risk of blood-blisters on tender parts.

Locomotives

The first locomotive on the line was the Climax. A code number of 2227 is given for this engine,[28] but it is not clear if this is the works number. It first ran on the 1 September 1903, although it was ordered in 1900, and presumably was completed soon after. It is interesting to note that this was the first Climax to come to Australia, and the locomotive builders, looking for more custom, engaged Lahey's as their Queensland agents. Either that, or Lahey's, who seemed to be eager to expand their activities, offered to become agents for Climax, and the offer was accepted. At any rate, Lahey's advertised themselves as agents in the *Annual Review of Queensland* published in 1902. It would be interesting to discover if any other Climax engines came to this country through their agency. As the first imported geared engine to operate in Queensland, it created some interest. In August 1904 it was inspected by the Chief Engineer of the QGR, and the NSWGR must have taken some note also, for in 1906 a report states that they were ordering a 25 ton engine through R.A. Harvey of Sydney.[29] The QGR Engineer, after his inspection, reported that while the boiler was designed to carry 150 psi., at the time it was carrying only 120 psi.

It was a Class B engine, with two bogies with a wheelbase of 3ft 9in each, and a total wheelbase of about 17ft. The QGR engineer gives the cylinder dimensions as 8½ in by 12 in[30] although elsewhere they are quoted as 10 in by 15 in.[31] The engine weight is given variously between 17 and 20 tons. The driving wheels were 28 in. in diameter.

There are some interesting observations on the operation of this engine. A correspondent of the *Courier* in 1905 wrote that the engine 'has enormous traction power for its weight'[32] More detailed is the report of the QGR's Chief Engineer referred to above: 'The engine took two empty timber bogie wagons up the steep incline...and...went out to the head of the road, bringing back two bogie wagons loaded with log timber, the estimated weight behind the engine being about 25 tons. The rails were greasy owing to... a heavy fall of dew, but... the engine took her load remarkably well, although she stuck in one place on a 1 in 16½ grade owing to the sand not running freely; but... after easing back slightly, started the train on this grade, which I considered an excellent performance.

'The track was very rough in places, but... the engine went up and down ridges in good style.

'... the capacity of the boiler was hardly equal to the tractive force of the engines (sic) when wood was used as fuel; but this... could be overcome by a slightly larger boiler or firebox'[33]

It is interesting to note here that the loco received both these modifications somewhere between 1905 and 1908. The boiler was lengthened, and a large T firebox[34] fitted, which had a cylindrical section protruding through the roof of the cab. These modifications considerably altered the appearance of the engine.

The report continues: 'In some places a speed of about 10 miles per hour was attained, but there was... considerable noise from the bevelled wheels [gears] when running at such a speed. The engine is, however, quite suitable for running at 6 miles per hour, and on comparatively easy grades would haul a big load; and on a level as much as 1,000 tons.

'[The] trains are manned by two men only, there being efficient brakes on all wheels of the engine and wagons. There seems to be no difficulty in taking the train of 25 tons safely down inclines, and only in one instance was it necessary for the fireman to come back and apply the wagon brakes. This was when coming down the ... 1 in 12½ near the mill.'[35]

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Ex North Mount Lyell Shay Locomotive No. 5 (B/No. 697) at work on Lahey's tramway. This photograph is believed to have been taken in 1919.

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Concerning the brakes on the Climax, a quite technical report in the *Courier* in 1905 read: 'The brake power is so arranged that its effectiveness is undoubted. A brake cylinder is attached to the centre of the iron channel on each section of the undergearing, and the brake lever is connected to the piston rod of the brake cylinder making the brake complete on each truck, swinging with the undergearing on curves and holding the brake shoes as tightly as on a straight line without corner binding.'[36]

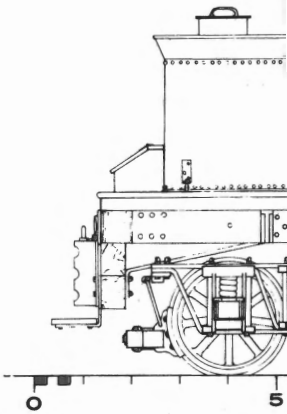
This is not too clear to follow, but obviously means that each bogie on the engine had an independent (steam?) brake.

After 1910 the Climax was costing money in repairs, and was placed out of service in 1912. However, it was reconditioned by Walkers Ltd, Maryborough Queensland, prior to 1914, with iron 'rotten as carrots'— to quote Edith Lahey.[37] This iron may have been that used in the first rebuilding referred to earlier, there is some doubt on this. Did Walkers do two reconditionings of the engine? Or was the second a local patching up? The dates of the two suggested reconditionings are indefinite.

In 1922 it is described as derelict.[38] It was then sold to Pines and Hardwoods, Simmsville, NSW., and from there went to Coffs Harbour. It is reported that the boiler was seen there in a derelict condition.[39]

The second locomotive arrived about 1906. It was a two-truck Shay, and had been built by Lima, USA, for the North Mount Lyell Mining Company in Tasmania, where it was their No. 5. At Canungra it continued to carry this number on the large circular plate on the smokebox door. Built in 1902, it carried works number 697. It had two cylinders, of 9 inch bore and 8 inch stroke, set in the usual Shay position just forward of the cab. It had a rangy look about it, brought about by its slim boiler, and tall chimney topped by a squat diamond spark arrestor. The wheels were 27 inches in diameter and it weighed 16 tons. It was fitted with a bell and large oil headlamp after traditional American practice, but a photo of the engine shows both these items removed (although the brackets used to hold both are still in place). This photo also shows the large T firebox which was fitted to the engine. This firebox was like a large drum of about 3 ft diameter and about 7 ft long mounted vertically against the cab, the boiler extending from its centreline so that the overall effect was roughly like a capital T on its side.

The third locomotive was the heavyweight of the fleet, although there is some conjecture as to whether it was 24 or 27 tons ... both figures are given in various documents. At any rate, it was a Shay, and quite a powerful one, with three cylinders 8 by 8 in. Wheels on the two bogies were 27½ in. in diameter, and it came new to the company in 1910 from Lima, USA, their works number 2371. It had a much more solid appearance than the first Shay, with a highset running plate, two large round domes, the front one for sand, oil headlight, bell mounted in front of the cab, and a large cab. Being three cylindered, the housing over the cylinders extended well in front of the cab, and the rods and gearing to the wheels were of robust construction, the gears being covered with plates to give



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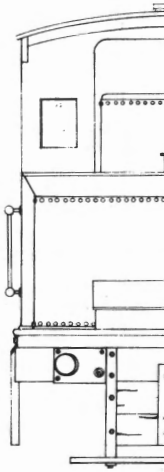

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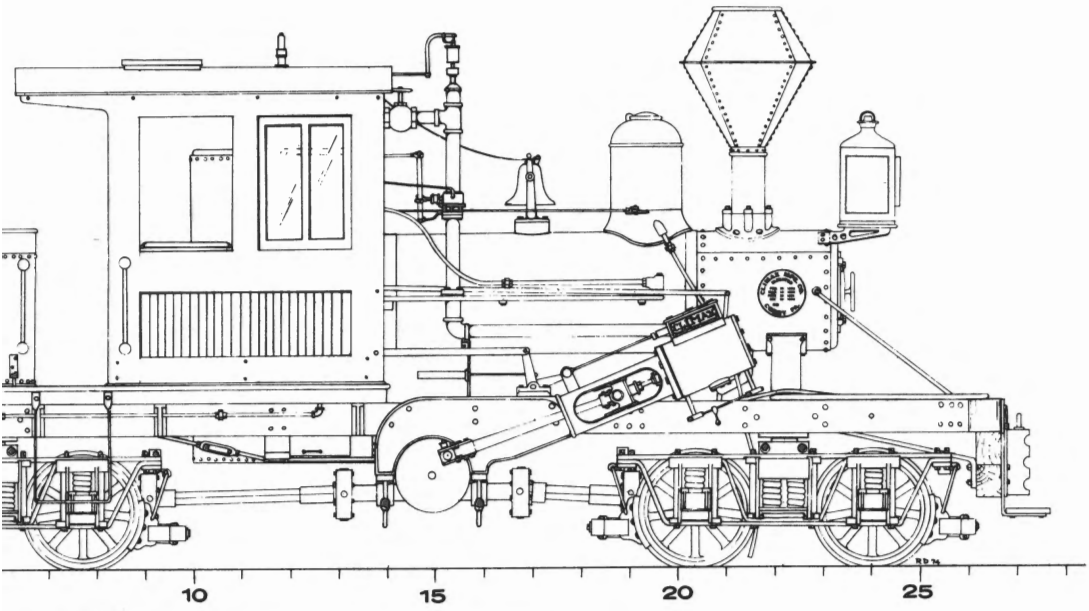
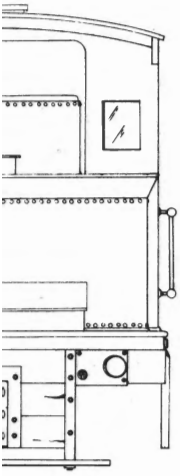


omotive

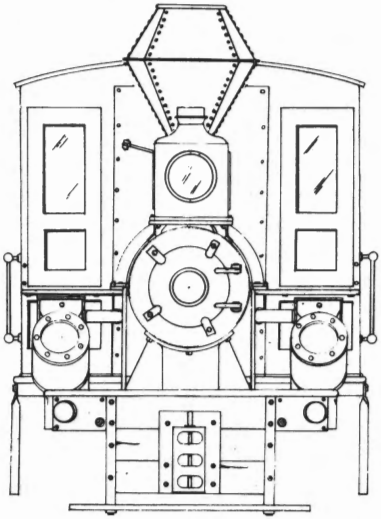
CLIMAX PATENT GEARED LOCOMOTIVE



Built 1900

Cylinders 8½ x 12 in

Weight approx 18 tons



Drawn by Richard Dunn

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The Climax and ex-North Mount Lyell Shay (still with its bell and headlamp) meet at one of the junctions on Lahey's tramway.

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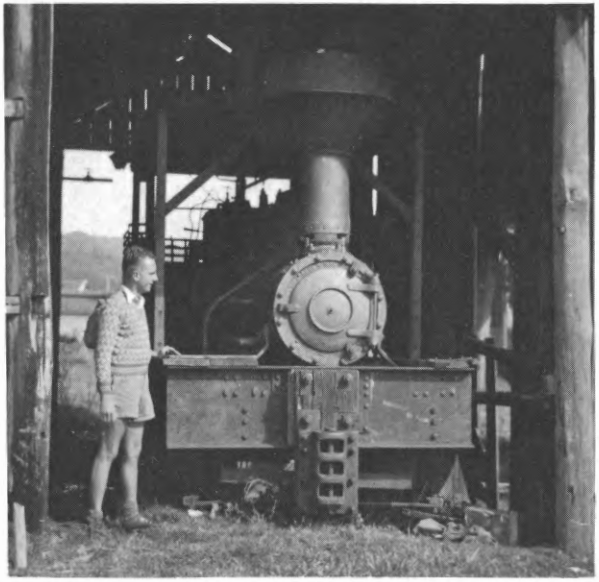

Above Ex North Mount Lyell Shay in the loco shed at Canungra, 8 June 1934.

Photograph: late K.J.C. Rogers

Left A Shay hauls a load of logs to Canungra.

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some protection from the elements and dirt. From observation of a photo, the pinions appear to have fifteen teeth, but the crown wheels are hidden too much to get a count. The bell of this engine is now at the Binna Burra Guest House.[40]

The fourth locomotive may have been Lima Shay B/No. 2478, built in November 1911 for Lahey Bros, but it appears that it saw little or no use on Lahey's tramway, as it was apparently bought in 1912 by Hampton-Cloncurry Mines Ltd.[41] It may have been sold by Laheys before even being landed in Australia. This was a two cylinder locomotive with 6 in x 10 in cylinders driving 22½ in wheels.

The final locomotive was Lima Shay, B/No. 2135, built in February 1909 for the British Australian Timber Company, Coffs Harbour, from whom it was purchased in the 1920s. It had two cylinders, 8 in x 12 in and weighed approximately 20 tons. Driving wheels were 26 in. in diameter. It had a slim boiler somewhat disguised as such by two very large domes and a chimney with a very bulky spark arrestor shaped like a couple of basins turned top to top. It is certain from ample photographic evidence that this loco was left derelict at Canungra, but the disposal of the other two Shays is not known to the writer. One photo of this locomotive, taken in 1935, shows another loco behind it. This would appear to be the first Shay, with a new cab roof extending well forward toward the steam dome.

The Shays were described by one of the Lahey brothers as comical to watch in action, but very efficient 'except when going round sharp curves when Rooke's Law took its toll.'[42] [Has Rooke's Law any relation to Flanagan's Law which says, 'If its possible for anything to go wrong it will"?]

The engines were painted green with yellow lining and carried the legend 'Lahey's Ltd. Canungra and Pine Creek Logging Tramway' on the sides.[43]

Fuel used was cordwood, some being offcuts from the mill, but as this was generally much too green, dead timber from the bush was brought in. By 1915 the cost of procuring this timber was rising, so the company converted to coal firing for the locos, and this change was very successful.[44]

The loads for the engines at first were: the Climax, two trucks; two cylinder Shays, three trucks; the three cylinder Shay, four trucks. Eventually, with improvements made periodically to gradients and curvature on the line, only 1½ miles of the tramway was limited to these figures.

Rail-motors

Henry Ford's contribution to motor transport had an effect upon the line in that one T-model Ford was converted to run on the rails by provision of standard 24 in flanged wheels set at the appropriate gauge. The reduction in wheel diameter on the T-model had the result of lowering the gearing, enabling it to be driven throughout the length of the line in top gear. One wonders if they ever used the reverse brake pedal for a brake as they often did with T-models on the roads.[45]

This vehicle proved invaluable, as it gave quick access to all the areas being worked. In its time it carried many distinguished visitors, including the Governor of Queensland, Sir Matthew Nathan.

It was still being used up till 1930, when an issue of the *Courier* of that year carried a society column called 'The Passing Show', edited by 'Verity'. This writer told of a recent trip on this vehicle, and a photo shows four people (at least two of them women) occupying all seats. On this trip, a large carpet snake was run over with no damage to the motor, and not too much damage to the snake.[46]

This vehicle had no roof or canopy, and no sides, passengers perched in what appears to be a most precarious position. Only the radiator, bonnet and steering wheel betrayed its origin. It was of spartan appearance, and apart from the engine, seemed to consist only of chassis, wheels and seats made from boxes. The steering wheel protruded from the back of the bonnet, looking incongruous on a rail vehicle and was presumably either locked or disconnected. At least it gave the person sitting behind it something to hang on to!

A Commer truck of ancient vintage was similarly converted, but with driver's seat only. The engine protruded well beyond the front axle. All the photographs show it in the mill yard, and it could be that it was only used for shunting this yard. I can find no written reference to it.

The Climax locomotive stops for water.

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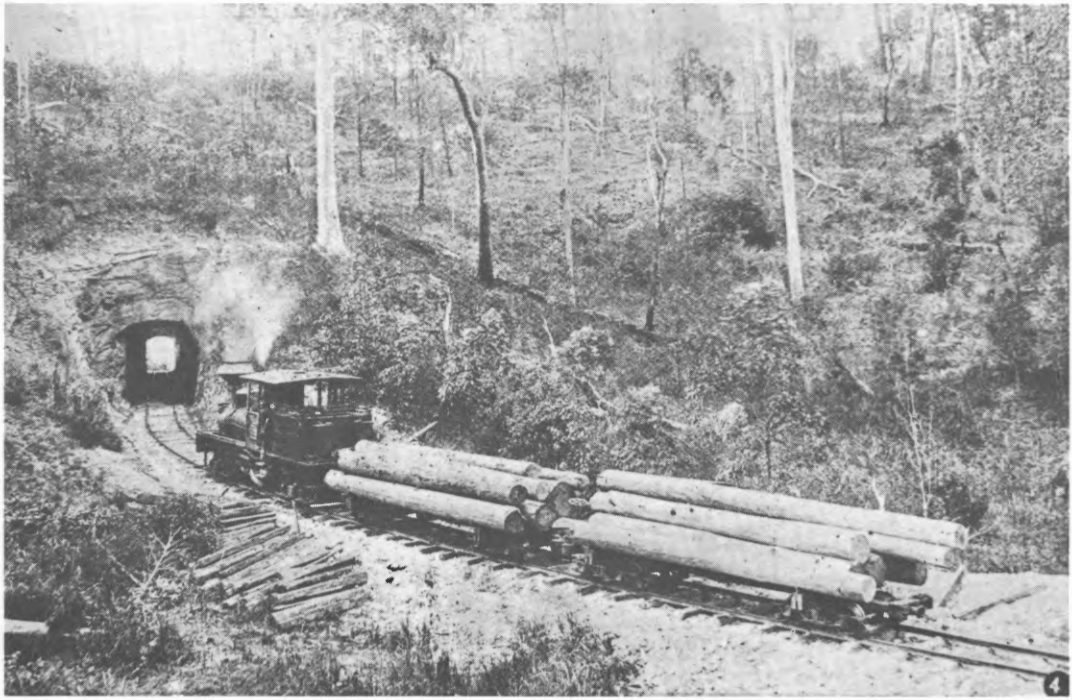
Above A party of tourists on board the Ford railmotor.

Below Ex North Mount Lyell Shay about to enter the tunnel. Note the steel framed log bogies.



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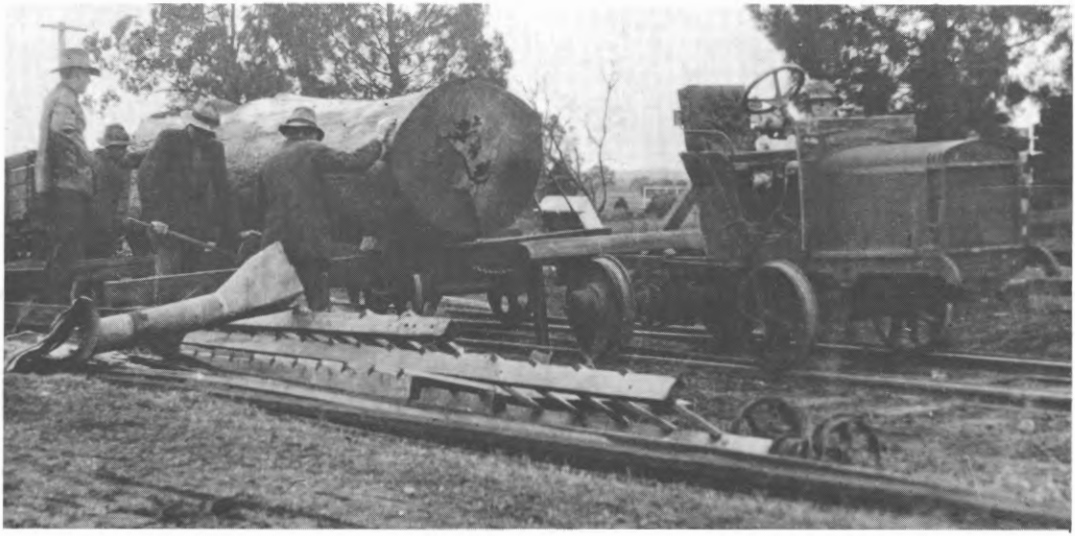
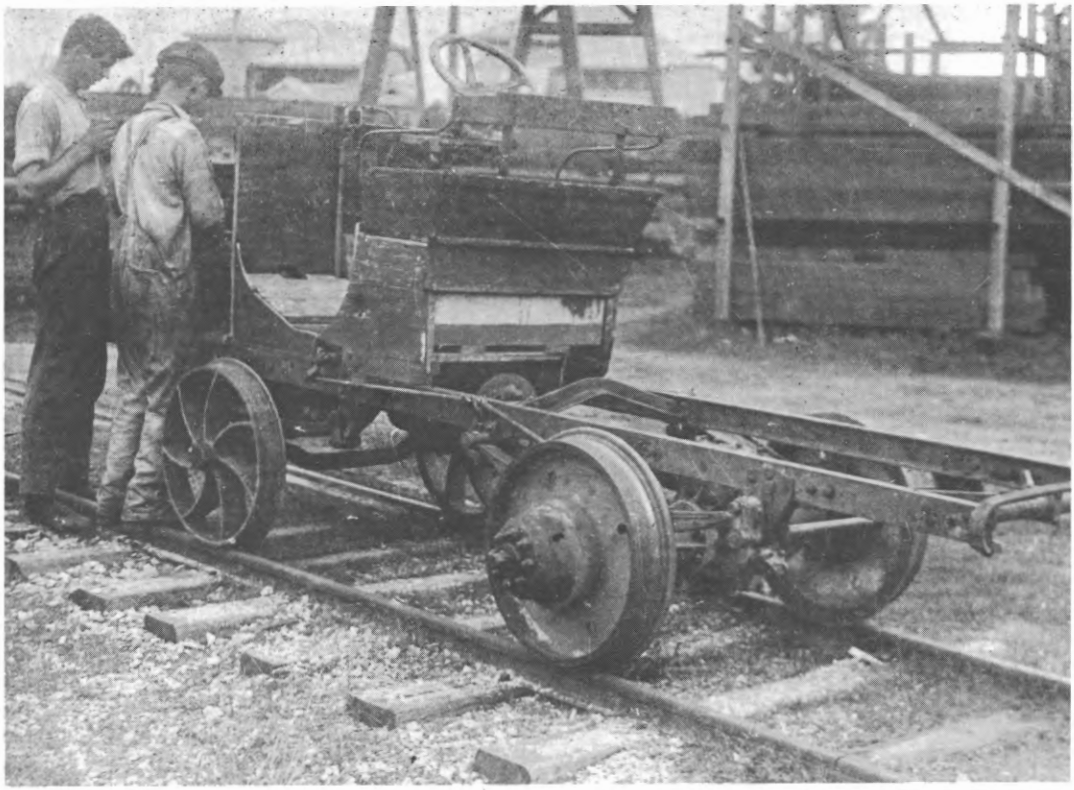


Two views of the railcar which had been converted from an old Commer truck.



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Above Shay locomotive (B/No. 2135) with a train.

Below One of the many bridges on the tramway.

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Above The Climax locomotive hauls a picnic train in the early days of the line.
Below Shay (B/No. 2135) with a picnic train. Note the temporary seating fitted to the flat trucks.

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Rolling Stock

The timber trucks were wooden framed with steel wheels. One of the brothers related: 'They were models of simplicity, consisting essentially of two bogies, each having a bolster over its centre to carry the logs, and connected by a pole, the length of which could be varied according to the bottom layer of logs. This meant that each skeleton truck could carry the same load of logs as a Government S wagon, but was only about half the weight.

'These trucks had a separate brake for the four wheels of each bogie, so every wheel on the train could be braked. To make quite sure of their effectiveness, the loco had one dome always filled with dry sand, and a sand box for each rail at each end. There used to be a building called the "Sand Shed" where large quantities of sand were dried and stored, and which afterwards provided the roof for the kitchen at Binna Burra.'[47]

In 1914 a roller-bearing timber wagon was constructed and it was such a success that five more were built.[48] They were more substantial than the 'skeleton wagons' previously described, having a full decking. From this time on the average load handled was six trucks.

In 1906 a flat truck was fitted up as an inspection car, with seats, boxes and rugs, etc. Then in 1910, a 'carriage' was also referred to, built on a truck with a roof, sides and six cross seats. Apart from sketchy references, nothing more is known about these vehicles by the writer.

Operation

'In working the line, the general procedure was to bring a full load to the Cave siding, pushing half in front of the engine and pulling the other half, then take the first half on to the 1½ mile, and after that bring up the other half. The full load would then be brought up to the top of the last down grade which was at the tunnel. All brakes on the train were then put on, and the train started, the loco sounding a whistle which could easily be heard half way along the top of Tambourine Mountain. As you can imagine, five or six trucks of logs plus a loco careering down a ¾ mile long grade of 1 in 12½ would have produced something at the bottom that Hollywood would have envied. So about eight chains down from the tunnel a safety switch was put in, running up a side spur on a grade of 1 in 4½ (!) with a huge pile of sand at the top. The points were loaded so that they were always open to the safety switch, and were never allowed to be open to the main line except by the fireman, and not until the train, fully under control, reached them. To make sure [the switch] would operate successfully in an emergency, a truck fully loaded was let go as soon as it got through the tunnel. The result was spectacular. The truck took the points like a flash, raced up the switch and ploughed deep into the sand heap; but, though they were chained, the logs kept on going, and speared onto the road on top of the ridge.'[49]

'Although the grade was so steep, and although more than 100,000,000 superfeet of logs were carried down it, not one serious accident occured, although several times the driver was sorely tempted to "let her go alone". These occasions usually arose from carelessness from the greaser. It was early found that it greatly reduced the friction on the curves if the inside of the head of the outside rail was lightly greased with a mixture of grease and graphite. But unfortunately, employees ideas of what constituted "lightly greased" varied considerably; the driver's opinion of the man who allowed the grease to get on top of the rail, however, never varied!

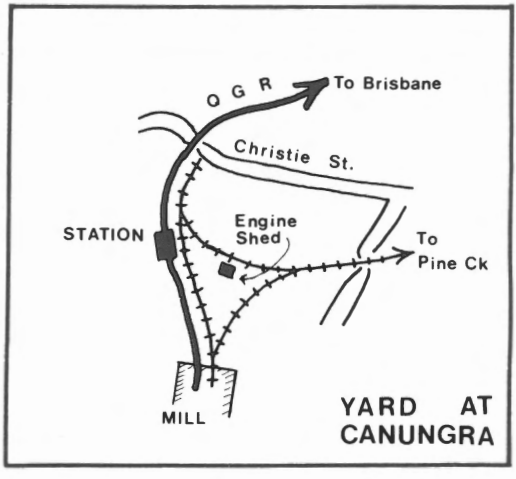
'Several trials were made at automatic greasing by the loco, but none was successful. At each time of the year, too, the grass was very luxurient along the line, and was a constant cause of skidding, so it was necessary to keep a gang continually chipping each side of each rail on the steep grades.'[50]

It is evident that Lahey's were progressive in their thinking and planning and as early as 1918 saw the effect that motor transport was to have. They then put their efforts into road building. In fact, Tom was nicknamed 'Main Roads Lahey', and the roads the firm built into the ranges cost them the huge sum of £80,000.[51]

By 1920 much of the timber had been worked out. The Commonwealth War Service Homes Department purchased the whole concern that year, and Lahey's Limited went into voluntary liquidation soon after. However, the CWSH closed the works down completely after only a few months operation. This closure was disastrous to the community at Canungra.[52]

Brisbane Timbers Ltd then tendered and took over the concern. Significantly, David Lahey had become Chairman of Directors of this firm. However, trains were worked only spasmodically in the next few years. There are newspaper accounts right up to 1930 of trips up the valley in the T-model rail-motor by sightseeing journalists, but it was more than the beginning of the end of the line. 1935 saw the very last of it, with the rails and bogies being sold to a Brisbane scrap merchant. As far as is known, at least two Shays were left to rust and fall apart at Canungra.

In its lifetime, the railway hauled out nearly 130 million super feet of timber. It was a remarkable concern, the inspiration of a remarkable family.



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I acknowledge with thanks the generous help of Mr George Bond of Brisbane in compiling this story. He provided a vast swag of material and photographs for me to sift through, so the credit for this article really belongs to him.

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4. As for 2
5. As for 2
6. *Australian Railway Historical Society Bulletin,* Nos 151 and 152
7. As for 2
8. As for 6
9. *The Laheys of Bellissima Forest,* by Edith M. Lahey
10. Report of Mr. Alex Raff, District Engineer of the QGR
11. Report of Phillips and Delpratt on the proposed Logan Village to Canungra Railway, prepared 1 June 1900
12. As for 2
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14. As for 2
15. As for 2
16. As for 11
17. As for 11
18. As for 9
19. As for 2
20. As for 1
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22. As for 6
23. As for 9
24. As for 2
25. As for 2
26. As for 1
27. As for 1
28. Personal files of G. E. Bond, Brisbane
29. As for 28
30. Report of Mr H. Horniblow, Chief Engineer, QGR to the Secretary to the Commissioner, QGR, 1904
31. As for 28
32. *Courier,* 28 February 1905
33. As for 30
34. As for 28
35. As for 30
36. As for 32
37. As for 9
38. As for 28
39. As for 28
40. As for 2
41. Based on photographic evidence. None of the locomotives appearing in photographs of Lahey's tramway answer the description of this locomotive, whereas the locomotive used at Hampton-Cloncurry is of the same description as B/No. 2478 and went into service there in 1912.
42. As for 1
43. As for 9
44. As for 9
45. As for 28
46. *Courier,* 9 January 1930
47. As for 1
48. As for 9
49. As for 1
50. As for 1
51. As for 9
52. As for 6

Lahey's third and largest locomotive, three-cylinder Shay, B/No. 2371 of 1910.

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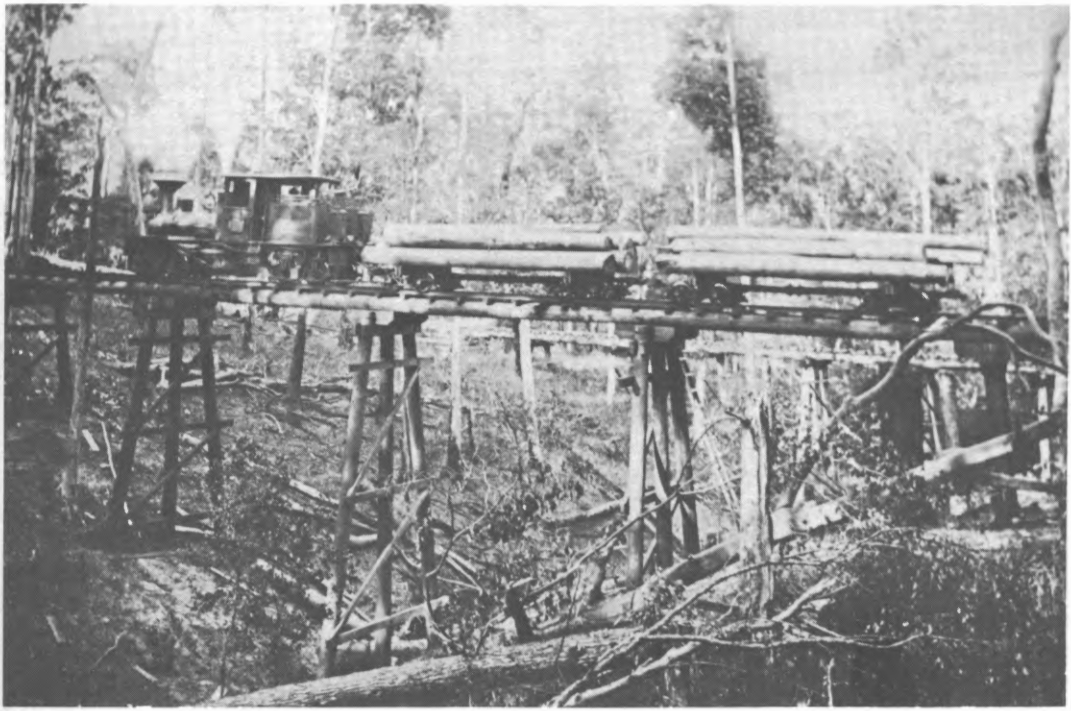
Above Ex North Mount Lyell Shay stops at a log landing. From the *Queenslander* 27 February 1909.
Below The same locomotive crosses a bridge. Note a parallel trestle bridge on a branch line in the background.



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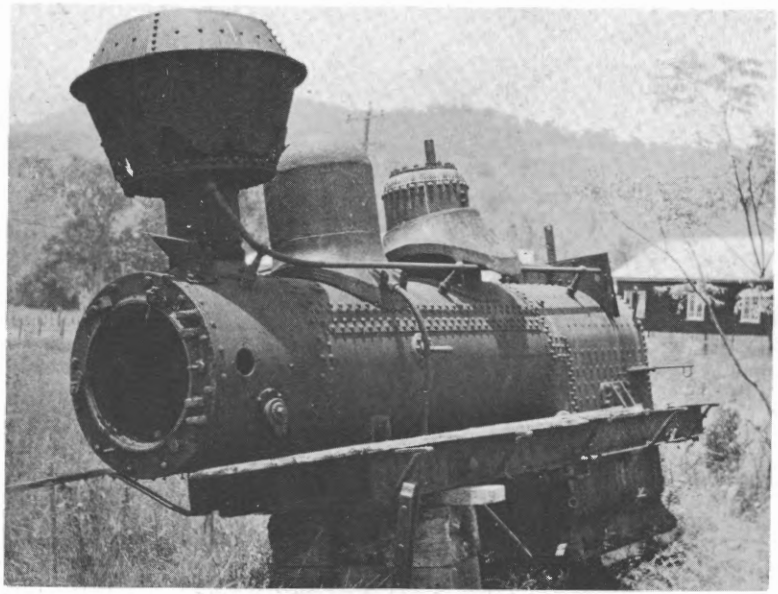
Above Shays B/Nos 697 (ex North Mount Lyell) and 2135 derelict at Canungra, 30 September 1937.
Phone: late K.J.C. Rogers

Below In the 1950s this was all that remained of Shay 2135.



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