

Steam locomotives on Victorian timber tramways – Part 3

by Frank Stamford

Rubicon and Yarra Valley

Another 2ft gauge timber tramway to use steam traction was the Alexandra–Rubicon tramway, owned by the Rubicon Lumber & Tramway Company, but its purpose was to carry sawn timber, not logs. The first locomotive was a Krauss 0-4-0WT (B/No. 2459 of 1891), which had had a number of previous owners including the Victorian Public Works Department and Tasmanian Government Railways (as H class No.3). This was the sole motive power until 1919 when a second Krauss 0-4-0WT was obtained (B/No. 2591 of 1891). It was identical to the first loco, and had already worked for at least six owners in Tasmania, Victoria and South Australia. The third locomotive came in 1926, again a Krauss 0-4-0WT (B/No. 4387 of 1900), but slightly bigger this time. This one had been purchased new by the Mount Lyell Mining & Railway Company for use in Tasmania, and had subsequently operated in South Australia before coming to Rubicon.

These three locomotives operated the tramway until 1935 when the RL&T Co.'s lease expired. The new lessees, Clarke & Pearce used purpose-built internal-combustion locomotives, and the three Krauss locomotives remained at their shed at Alexandra until the late 1950s, when they were cut up for scrap.¹

In 1912 the Victorian Powell Wood Process Ltd (VPWP) was established to exploit the Powell wood preservation process at a large modern sawmill they were building at Powelltown.

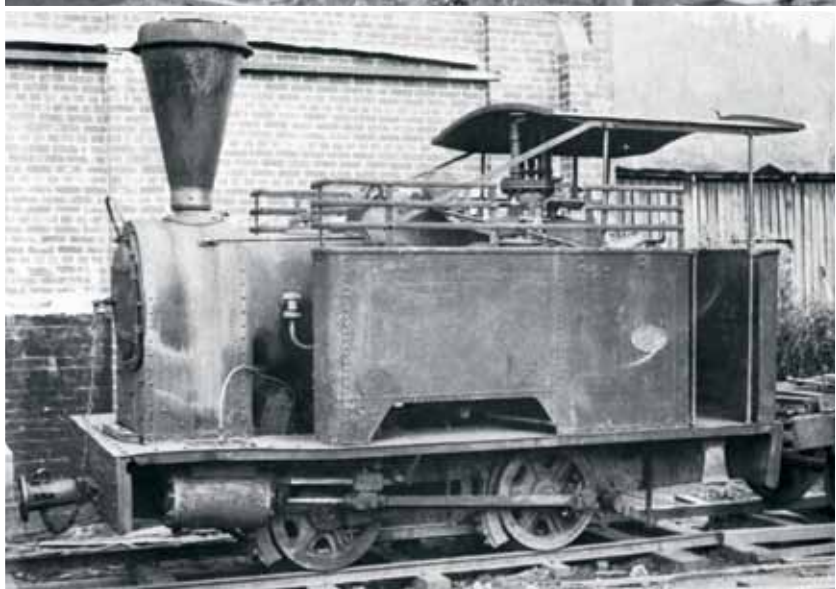
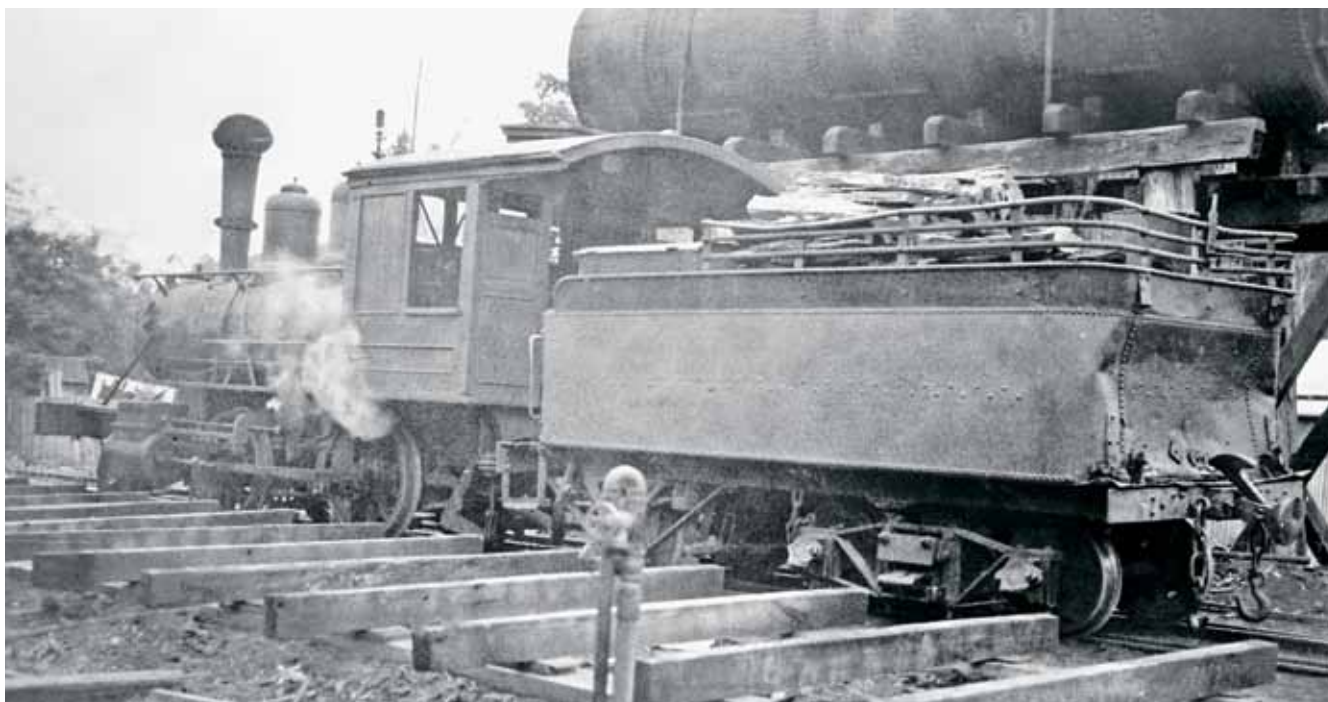
To carry the mill's output to the VR's Yarra Junction station, the company built a 10½ mile tramway, which for various reasons also ran a public passenger and freight service. The company also built tramways to reach their log supply beyond Powelltown.

The VPWP Company was mostly owned by Western Australian and New Zealand interests, and its management was primarily based in Western Australia. Like most sawmilling operations in the west (and unlike most in Victoria) it was a large-scale operation, and very well-financed. To all intents and purposes the Yarra Junction–Powelltown tramway was a Western Australian timber tramway transplanted to Victoria, and its standard of construction was more akin to a railway than a timber tramway. One would have expected the gauge to be 3ft 6in, as in WA, but as all the other timber tramways in the Yarra Valley were 3ft gauge, that gauge was chosen for the Powelltown tramway. To work the new line, the company purchased two brand-new purpose-built locomotives. The first was Baldwin 2-4-0 (B/No. 37718 of 1912) *LITTLE YARRA*, which was primarily intended to run the passenger trains (which always had freight attached). The second was Bagnall 0-6-0 (B/No. 1965 of 1913) *POWELLITE*, primarily intended to handle sawn-timber trains, but also used on log trains in the bush. *POWELLITE* was not delivered until 1914, and this delay in delivery may have been the reason the company purchased Andrew Barclay 0-4-2ST (B/No. 311 of 1888), apparently from the Warburton–Big Pats Creek tramway. This very small (4 ton) locomotive would have been surplus to the Warburton tramway company's requirements once their new Fowler (B/No.13576) was delivered. At Powelltown the Andrew Barclay was known by a number of



Krauss 2ft gauge 0-4-0WT (B/No. 2459 of 1891) takes water on the Rubicon – Alexandra tramway in 1934. The driver, Bob Rees attends to the engine, while brakeman Hayden looks on.

Photo: W Jack



Baldwin 3ft gauge 2-4-0 LITTLE YARRA (B/No. 37718 of 1912) at Powelltown, c. 1937. The back of the tender has been dented as a result of a shunting accident, and the rails on the top of the tender have become very battered. Photo: JCM Rolland □ Kerr Stuart 3ft gauge 0-4-0T locomotive Coffee Pot (B/No. 643 of 1898) at Powelltown c.1937. The loco was painted green and traces of lining on the tank sides appear to be visible. Photo: JL Buckland □ Bagnall 3ft gauge 0-6-0 POWELLITE (B/No. 1965 of 1913) at Powelltown c.1937. The oversized funnel was fitted in the late 1930s by the Victorian Railways when the loco was overhauled at Newport Workshops, and in this view the pancake shaped object on top appears to be a Cheney spark nullifier. Photo: JCM Rolland





3ft gauge Shay locomotive (Lima B/No.2575 or 2576 of 1912) at Powelltown c.1937.

Photo: JCM Rolland

names, many unprintable, but 'Squirt' was the most widely used. Despite its small size, the locomotive was capable of hauling empty log bogies uphill to the logging area, and the logs were then gravitated back to Powelltown.

The Powell wood preservation process failed in 1914 and the company became insolvent. Its assets were taken over by the Victorian Hardwood Milling & Seasoning Company, which had far less capital than its predecessor. As a result future locomotive acquisitions were second-hand. In April 1916 a Kerr Stuart 0-4-0T locomotive (B/No. 643 of 1898) was obtained from the Tasmanian Gold Mining Company, Beaconsfield, Tasmania. This was followed in 1919 by a Shay loco, (Lima, B/No. 2575 of 1912) from the Abercrombie Copper Mines Limited of Burruga, NSW. In 1927 another Shay locomotive was obtained (Lima, B/No. 2576 of 1912), from Hoskins Steel Works, Lithgow, NSW. This was identical

to B/No. 2575 and both had originally also been owned by the Lloyd Copper Company. Whilst at Lithgow it had been involved in a fire, destroying all the wood work and bending the frames. The workshops at Powelltown were sufficiently well set up to be able to repair it. The damaged section was cut out of the frames, and as a result it was slightly shorter than 2575, with less room in the cab. At Powelltown it was known as 'Green Beetle'. Apart from 'Squirt', which was taken out of service and dismantled in the 1930s, all the other locos survived until the closure of the tramway in 1944. The only one to see any further service was *POWELLITE*, for a few years on the phosphate railways of Nauru.²

It is reported that at Higgs Mill near Whittlesea an attempt was made to convert a traction engine into a locomotive around 1916, but it was apparently not very successful due to frequent derailment.³



Baldwin 3ft 6in gauge 0-4-0ST (B/No.9086 of 1888 or 12007 of 1891) working on the Loch Valley Timber Company's tramway at Noojee station, c.1923. The working life of both locomotives ended in 1926 when they were badly damaged in a bushfire. Photo: LRRSA collection



Ex-South Australian Railways 3ft 6in gauge 0-4-4WT (James Martin B/No. 67 or 69 of 1893) at Goodwood, c. 1934. Photo: LRRSA collection □ Sharp Stewart 3ft 6in gauge 0-6-0ST (B/No. 2030 of 1870) on the Elphinstone tramway c.1925. It had been rebuilt from a 4ft 6in gauge 0-4-0ST originally built for the Mersey & Deloraine Tramway in Tasmania. Photo: LRRSA collection □ Goodwood tramway 3ft 6in gauge 2-6-0 at Noojee in 1936. The Beyer Peacock 2-6-0 with leading Bissell truck was a very successful type, which was used in every Australian state and the Northern Territory. This (B/No. 2245 of 1882) was the only one to work in Victoria. It was an extreme example of the rough life experienced by steam locomotives on timber tramways. At some time it had lost its tender and ended its working life in a bridge collapse in 1936. But it had already experienced at least one bridge collapse on the Goodwood tramway, which was possibly when it lost its tender. Photo: John Buckland



Noojee 3ft 6in tramways

Following the extension of the Victorian Railways Neerim South line to Noojee in 1919 two steam operated timber tramways were established at Noojee. The first was the Loch Valley Timber Company, which built a 3ft 6in gauge tramway running north of Noojee in 1921. For locomotives it used two Baldwin 0-4-0STs (B/Nos 9086 of 1888 and 12007 of 1891). These had come from the Sorrento steam tram. They were similar to the Baldwin 0-4-0ST used near Wandong, and subsequently on Sanderson's tramway at Forrest.⁴

The Loch Valley Timber Company's operations were brought to an abrupt halt in February 1926 when bushfires destroyed the mill, tramways, and much of the forest they were cutting. The locomotives were badly damaged in the fires, and remained abandoned for many years before being cut up for scrap.

The second steam tramway to be established at Noojee was that of the Goodwood Timber & Tramway Company—the same company that operated the Port Albert–Mullundung tramway. The new tramway which commenced working around 1923, operated in much more rugged country than at Port Albert, and wisely the company adopted 3ft 6in gauge for the new line. It was a gauge with which the company's WA owners were very familiar, as that was the gauge of the Kalgoorlie & Boulder Firewood Company's main firewood tramway operations in the Kalgoorlie area. Locomotives for the new tramway consisted of two ex-South Australian Railways V class 0-4-4WTs (Martin & Co B/Nos 67 and 69 of 1893), and a Western Australian Government Railways A class 2-6-0 (No.5, Beyer, Peacock B/No. 2245 of 1882). For many years this had been on the roster of the Kalgoorlie & Boulder Firewood Company, before coming to Noojee. There was also a third ex-SAR V class (Beyer, Peacock B/No. 1599 of 1876) but this was without boiler, and appears to have been used as a source of spare parts. After the move to Noojee, the Goodwood company fell on hard times, and became financially very weak. In the 1930s the 2-6-0 became the only serviceable loco, but it was in appalling condition. It had lost its tender in a derailment, and a home made one was built to replace it. The regulator was jammed in the half-open position, the brakes were weak, and the locomotive

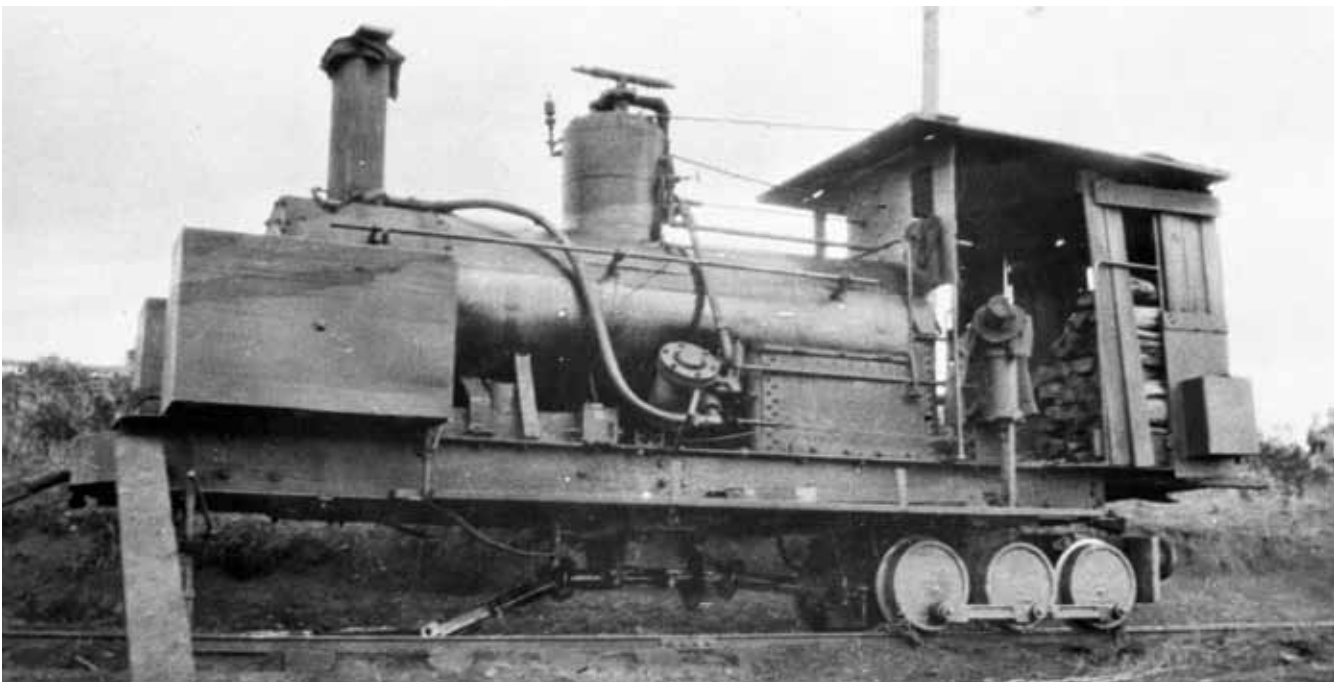
was controlled with the reversing lever. Its operation ended in 1936 when a trestle bridge collapsed under it, killing the driver. It was replaced by a Day's rail tractor.⁵

The last 3ft 6in gauge steam operated timber tramway to open was that of the Elphinstone Redgum Sawmilling Co. from Elphinstone to Granite Hill. The line was about 6km long, and the locomotive a Sharp, Stewart 0-6-0ST (B/No. 2030 of 1870), which had previously been used in Tasmania. This locomotive was originally built as a 4ft 6in-gauge 0-4-0ST for the Mersey & Deloraine Tramway, and was converted to 3ft 6in and rebuilt as an 0-6-0ST following the closure of that line. Following use on the west coast of Tasmania it came to Elphinstone. The tramway only lasted until 1928, the quality of the timber being much poorer than expected. The locomotive remained in its engine shed at Elphinstone until 1940 when it was sold to Dickson Primer Industries for scrap.⁶

The final fling – geared locomotives

In 1926 EAC Russell built a new 3ft gauge steel-rail tramway from Gembrook railway station along Black Snake Creek for about 14 km. It was to carry sawn timber from his own sawmill, and other sawmills in the area. He obtained a second-hand Kerr Stuart 0-4-2T loco, (B/No. 797 1902). It had been built to 2ft gauge, and had had an eventful life working on mining company tramways in the Northern Territory, Western Australia, and New Guinea. Miller & Co. of Melbourne purchased it, and re-gauged it to 3ft before selling it to Russell.

After a few trials, Russell considered it a total failure, as it was grossly underpowered. Much of the tramway had a grade of 1 in 29, with the steepest 1 in 14, and much of the grade was against the load. Apart from being underpowered, the locomotive also derailed at the slightest provocation, including on bridges. It was little used, and was finally cut up at Gembrook around 1953. To solve his immediate motive power problems, Russell bought two 6-wheel Day's rail tractors, which performed very well. But he needed something more powerful. As a result Day's Engineering built for him a steam geared locomotive running on two 6-wheel bogies with outside coupling rods – much like a normal Day's rail tractor. Two cylinders were arranged in a vee fashion under the boiler driving a central



3ft gauge 0-6-6-0 geared locomotive built by Day's Engineering for Russell's tramway. It is seen here at Gembrook in 1936, with the front bogie removed for maintenance.

Photo: Ray Pearson



Kerr Stuart 3ft gauge 0-4-2T (B/No. 797 of 1902) abandoned at Gembrook. Photo: Andrew Lyell

shaft, similar to that of the American Heisler. It was geared 3.5:1 giving a top speed of about 5 mph. It performed very well, not being taken out of service until 1939, and was cut up for scrap in the early 1950s.⁷

In 1928 the 2ft gauge Orenstein & Koppel locomotive 'Amy' from the Port Albert–Mullundung tramway was purchased by Jack Ezard. He arranged with Day's Engineering Company in conjunction with Messrs George & George to produce a 3ft gauge geared locomotive, using parts from the Orenstein & Koppel. The resulting locomotive ran on two 4-wheel bogies with coupling rods, using the O&K's boiler, which had been extended. The design of the locomotive was broadly similar to a B-class Climax, except for the outside coupling rods on the bogies, and the cylinders being horizontal instead of steeply inclined. The locomotive worked successfully between Big Pats Creek and Starvation Creek and could cope with the extremely sharp curves and steep grades on Richard's Tramway just beyond Big Pats Creek. On occasions, it also ran from Big Pats Creek to La La Siding. The locomotive remained in use on the Starvation Creek tramway until 1934, when it was stored for some years at La La Siding, Warburton. However, in 1938 Ezard moved it to his Erica–Rocky Knob tramway, where he used it until around 1944.⁸

The success of Ezard's geared locomotive may have given Bill Richards inspiration for his extraordinary creation – the aptly named 'Lumbering Liz'. It was a geared locomotive consisting of a Davey Paxman portable engine, with cylinder on top of the boiler, two large flywheels just behind and on each side of the chimney, and drive transmitted by three chains. It also had changeable gears. It looked incredible, but worked, and remained in use until about 1934. It mainly worked in the McMahons Creek logging area east of Warburton, but occasionally ventured to Big Pats Creek. It was out of use by 1937 and scrapped at about that time.⁹

And finally the last steam operated timber tramway to open was the 2ft 6in gauge Tyers Valley Tramway, which was covered at the start of this article.

One thing is clear from this history; Victorian sawmillers were prepared to improvise and experiment to lower their transport costs. Many of these experiments took place in remote places. As a result it is quite likely there were other examples of the use of steam locomotives on Victorian timber tramways. For example, there is a reference to Byrne & Gracey experimenting in 1926 with 'a steam haulage system suitable for use on wooden rails' in the Black Range.¹⁰

Acknowledgments

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End Notes

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7. McCarthy, Mike, *Bellbrakes Bullocks and Bushmen*, LRRSA 1987, pp.38-41, 52, Appendix III.
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9. McCarthy, Mike; *Mountains of Ash*, LRRSA 2001, p.232
10. Victorian Public Records Office FCV file 25/1369



3ft gauge 0-4-4-0 geared locomotive built by Day's Engineering seen on Jack Ezard's Starvation Creek tramway, east of Warburton. The driver is N Hooper, and the fireman is T Hill. Photo: LRRSA collection