



## Mount Morgan's Razorback

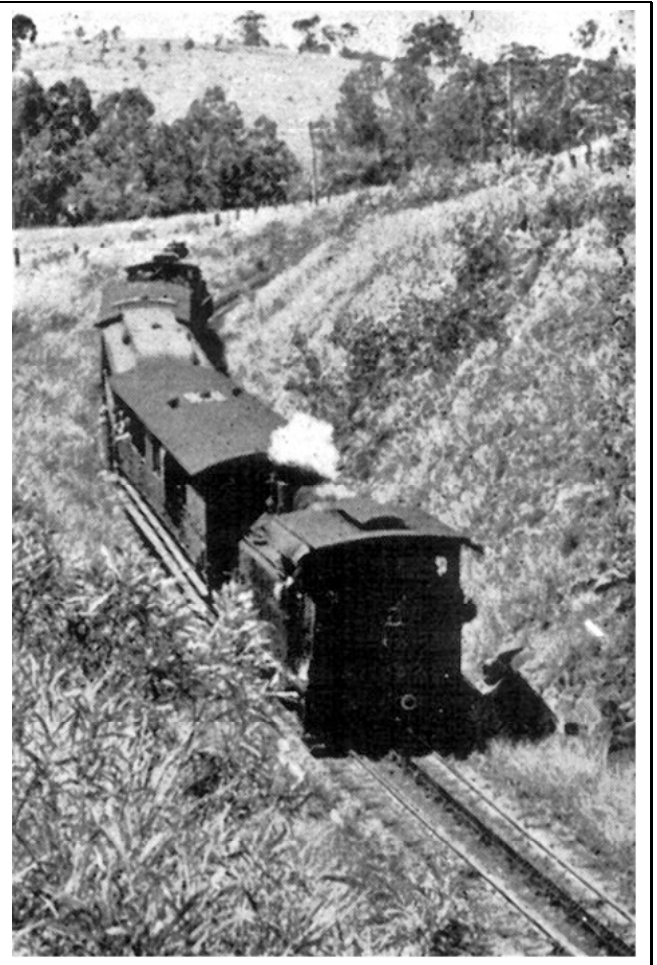


The 1898 route, rack section, extension (started 1911) to the Dawson and Callide Valleys and 1952 diversion; from Knowles (1982), p 4.

From 1882 to 1898 the mine and miners in the Ironstone Mountain area (later named Mount Morgan) relied upon horse teams operating out of Rockhampton using either of two routes up the steep 900' (~300m) high range. Several railway proposals were mooted but the Queensland Government Railways finally built via Kabra, Boongarry and Moonmera.

The use of sharp curves on range sections, with the lines clinging to mountainsides, rounding promontories and avoiding valleys, was established [by the QGR] on the first line to Toowoomba. ... The ascent of the Razorback Range to Mount Morgan, built in 1898, used an even cheaper method of construction – a rack railway, with grades of 1 in 16 – but this was replaced by a conventional range line [deviation] in 1953. [Knowles (1965), p 234]

While railways were only built where there was some hope of profitability, over the years there were a number of schemes *to ensure that losses were borne by those who benefitted from their construction, thus the mining company at Mount Morgan was required to give a guarantee on the operation of the branch.* [Knowles, p 238]



Rack railway train to Mount Morgan, 1950, ARHS Bulletin: 12/1950; from Wikipedia, 13 April 2012.

Eight Abt rack locomotives, with pinion gears between their driving wheels to engage the rack, were used as helpers on the rack section but the two lighter class locos (0-4-2T) were abandoned relatively early in the working life of the rack railway. Regular maintenance was carried on in Mount Morgan, but the locomotives had been erected, received major maintenance and were scrapped in Rockhampton.





Close-up of section of the patented Abt rack railway on display at Mount Morgan, 2012. The teeth on one side were opposite the indentations on the other, and steel alternated with timber sleepers. [Iz 0396]

While load limits varied, circa 1914 the load for a passenger or goods train hauled by a PB15 and banked (pushed) by a 6D13.5 (0-6-0T) Abt was 100 tons. Traffic on the line included men and materials to and from the mine, coal and firewood for the mine's furnaces, general goods for townspeople, and residents travelling to Rockhampton or the seaside. In drought years it

also included millions of gallons of water for the railway, mine and town.

Following WWII the weekday passenger service to and from Rockhampton was replaced with a rail motor which had just enough adhesion to slowly climb the 1 in 16 grade without engaging the rack. At the same time agricultural and mining activity in the Dawson Valley area was increasing, eventually leading to the diversion which eliminated the rack section in 1952.

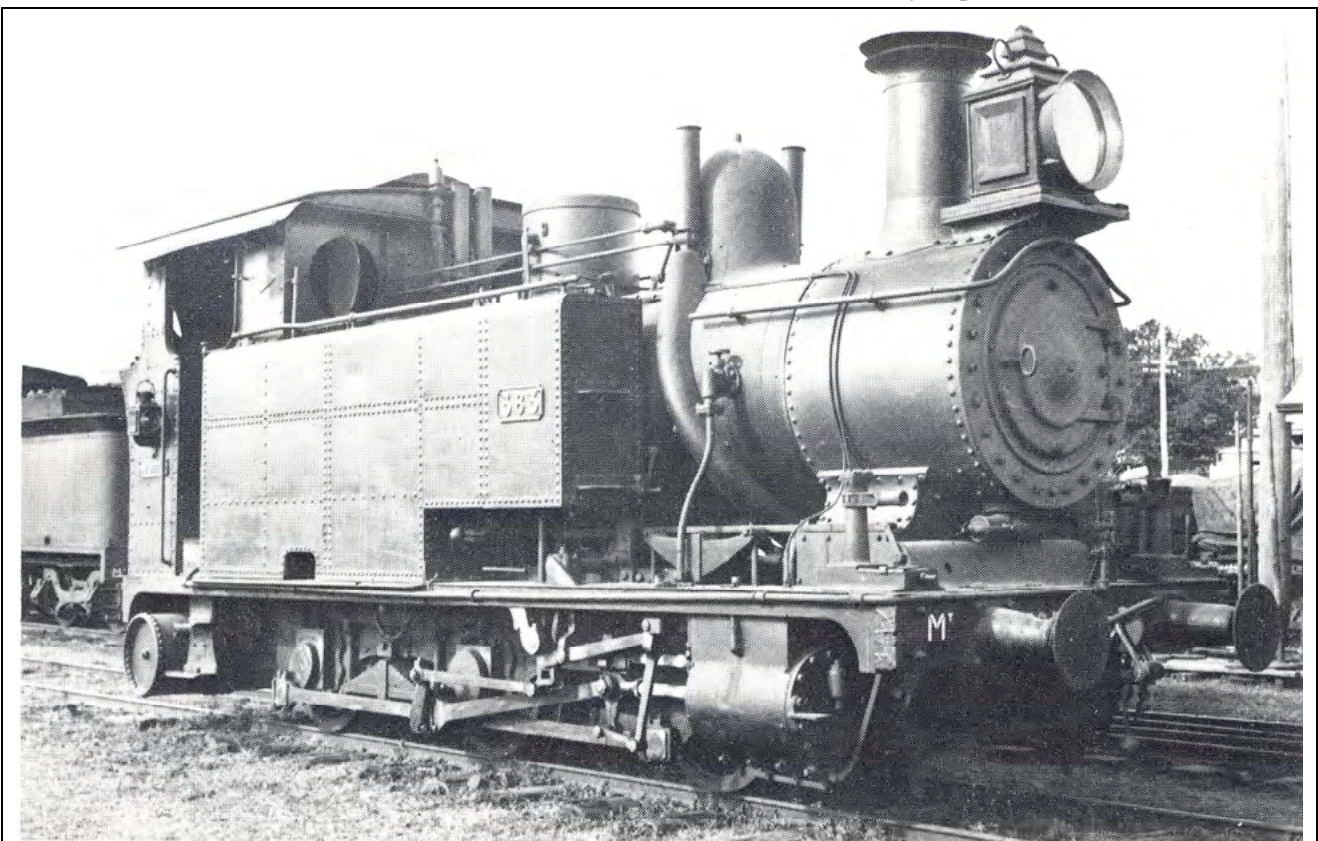
### References and Further Reading

Kerr, John (1990). *Triumph of Narrow Gauge: A history of Queensland Railways*, Brisbane: Boolarong Publications.

Knowles, JW (1965). *One Hundred Years of Railways in Queensland*, ARHS Bulletin, 338: December, pp 229-247.

Knowles, JW (1982). *The Mount Morgan Rack Railway*, self-published, and distributed by ANGRMS. Highly recommended, this book was the primary source of information for this note.

Patterson, BG (1952). *The Razorback: The road from Rockhampton to Mount Morgan and the introduction of the rack railway*, North Rockhampton: Rockhampton & District Historical Society, reprinted 2003.



*6D13 1/2 Abt No. 383 at Mt Morgan in September 1939. The Mt on the buffer beam stands for Mt Morgan depot.*  
J.L. Buckland

One of the larger Abt locomotives, from Knowles, JW (1982). *The Mount Morgan Rack Railway*, p 30.