

The rail motor as rebuilt to provide protection against the winter elements.

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although Summit continued to be used as a timber loading siding.

Messrs McKenzie and Holland Semaphore signals, mounted on wooden posts, were provided as Home Signals in both directions at each crossing place. These were worked from centrally placed Stevens and Sons Pull-over levers, which had a weighted wire tensioning device incorporated in their mechanism. Traces of this equipment were still visible in 1935, although at that time there had been little traffic for at least fifteen years.

At the approach to each crossing station a location board or landmark in lieu of a Distant Signal was provided. These were double fish-tail boards horizontally mounted on a vertical post, the boards being painted yellow and lettered "WARNING" in red. They carried a red light at night and were located on the right hand or driver's side of the track at about half a mile in advance of the Home Signals.

At each crossing place a small hut housed the Staff-box and the Train-working telephone. The line was paralled by two metallic telephone circuits connected with Lithgow Exchange and the Oilworks at Newnes. Telephones were also provided on the Train-working circuit at the 12 mile Siding and at the road level crossing at 26m 40c.

To conform to the conditions imposed by the New South Wales Railway Department for the exchange of rolling stock and the operation of passenger services, the Staff and Ticket system of Safe-working was installed. This installation prob-

ably dated from February 1910 to coincide with the commencement of the official passenger service. Ordinary Staff-working had been in force between the original Newnes Junction and the adjacent Exchange Sidings since 1906, but the instructions were re-issued in April 1910, and the shape of the Staff altered. This would seem to confirm approximately, the date of the introduction of the Staff and Ticket System over the greater part of the length of the Wolgan Railway. The Staff sections were as follows:- Newnes Junction -Exchange Loop, (signalled in the Up direction only) Exchange Loop - Summit, Summit - Deane. Deane - 24m 10c Loop. 24m 10c Loop - Constance - Newnes Town Station. The continuation of the line between Newnes Town Station and the Oilworks was worked by the shunting locomotive, evidently on a Yard Limit system or perhaps by "Smoke Signals" in the parlance of America.

There was at least one Speed Limit Board along the railway, the one noted being in the Penrose Gorge, facing in the Up direction at the entrance to No. 2 Tunnel, which specified "Five miles per hour", in white lettering on a red ground.

Interlocking was a missing refinement insofar as the Wolgan Railway was concerned, all points being worked by immediately adjacent Ball-levers. There was some evidence of the use of Thumbscrew bolts and clips on the main line points but it has been stated that these were installed in 1930 by the Railway Department in an abortive attempt