the creek bank to finally emerge through a narrow defile near mid-point of the loop. This was a pleasant escape from the smoky discomfort of the tunnel with its continuous five chain curve and 1 in 25 grade.

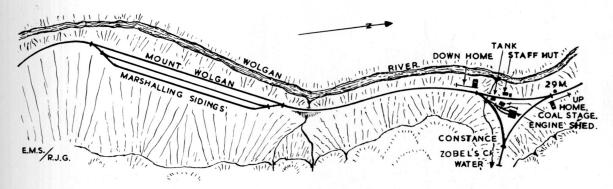
Outside the northern tunnel portal the creek passed beneath the railway through a two-span culvert with stone abutments and concrete centre pier, the running waters being loud in their gurgling music as they tumbled over the rocky bed in a series of short leaps. The creek and the railway, side by side, shared the twenty-foot opening between the opposing cliffs. The place was a natural fernery, with giant tree-ferns lining the side drains and Todea Fern shooting its fronds from each and every cleft where its roots could gain a tenacious hold. The cliffs widened to about one hundred feet apart, allowing the stream to divert its course to the western side of the railway, running through a five-foot diameter boiler-shell flanked with ashlar masonry on the up-stream side to prevent washaways, and with log abutments on the down stream side. Huge gum-trees cast a sombre shadow over the enclosed gully floor, adding contrast to the wet brightness of the profilic fern growth which formed, with the associated rain forest, an ideal habitat for Whipbirds, the beautiful crimson coloured Mountain Lowries, and the cautious Lyrebirds.

The railway now huddled against a huge vertical

crag known as Cape Horne, where it was necessary to construct stone faced embankments to give stability to the track formation. It was also deemed necessary to remove shale strata, replacing same with concrete at several places to enhance the stability of the cliff face. The talus slope on the southern side of the line bordered the East Wolgan Valley with its mountainous surround of cliffs overlooking undulating grazing country dotted with shady gum-trees, and marked by a solitary homestead in the far distance. The prominent Donkey Mountain is to be noted in the mid-distance, backed by cliffs confronting the West Wolgan Valley and its access road to Newnes from Lidsdale via the Wolgan Gap. The railway followed the base of the cliffs known as THE BLUFFS, in a north-westerly direction for about one mile to where a huge bastion, named FORGE POINT was reached at about the 25m. 10c. mark. Here the line curved to the north-east and followed in this general direction for about two miles, winding in and out of the numerous intervening gullies to maintain the ever descending gradient of 1 in 25. The company's construction road was crossed on the level at about 26m. 40c., this bush track came out from Clarence, more or less following along the line of Cardew's survey. It followed the crest of the dividing ridge for about twenty miles and then descended into the Wolgan Valley by a natural pass, crossed the location of the projected railway,

## WOLGAN VALLEY RAIL WAY.

NOT TO SCALE.



Opposite:

Return of the Parliamentary train from the charging of the first retorts, 11th June, 1911, taken in Penrose Gorge.

N.S.W. Goyt, Printer.

Next Page:

Shay locomotive No. 3 taking water at 241/2 mile dam.

E.M. Stephens Colln.