

## KAIHU RAILWAY EXTENSION.

Owing to the limited number of men offering for employment consequent upon the conditions then prevailing as the result of the war, and the absence of a large proportion of my engineering and clerical staff with the Expeditionary Forces, work on this railway was temporarily suspended in 1916. I am pleased, however, to record the fact that in January last a resumption of work was possible, and at 31st March forty men were employed. Three washouts caused by floods have been repaired, and stone walls have been renewed and strengthened.

Formation is completed to 20 miles 40 chains, and work is proceeding as far as 22 miles 25 chains. A stone-crushing plant is being procured for the ballast-quarry, and it is hoped to commence platelaying and ballasting at an early date.

## NORTH AUCKLAND MAIN TRUNK.

*Ranganui Northwards.*

*Bickerstaffe Section* (83 miles 75 chains to 86 miles 67 chains).—This section has been kept open for traffic, but considerable difficulty has been experienced with the maintenance of two embankments, which necessitated cutting out portions of one bank, repacking with stone, extending culvert outlet, &c. Slips have been cleared and fences maintained.

*Maungaturoto Section* (86 miles 67 chains to 88 miles 48 chains).—Station buildings in Maungaturoto station-yard have been completed by contract, and general maintenance work has been carried out.

*Huarau Section* (88 miles 48 chains to 90 miles 27 chains).—A deviation has been made between 88 miles 17 chains and 89 miles 70 chains, siding in Huarau station-yard completed, and station-buildings contract finished. A considerable amount of work has been undertaken in constructing cattle-stops and providing proper access to cattle-yards, including fencing, gates, and metalling. Slips have been removed, and cutting at 88 miles 40·5 chains has been stone-drained throughout.

The whole of these three sections—Bickerstaffe, Maungaturoto, and Huarau—from 83 miles 75 chains to 90 miles 27 chains, will shortly be in a satisfactory state of completion for handing over to the Working Railways Department.

*Paparoa Section* (90 miles 27 chains to 92 miles 15 chains).—Formation on this section is completed for the first 13 chains to Huarau Tunnel. One bank, however, is still settling and spreading, and will require further attention.

Huarau Tunnel on this section when completed will be  $16\frac{3}{4}$  chains long.

Approximately 8,000 cubic yards of crushed metal and boulders were taken from the Hoteo quarry during the year, although the output was limited for several months owing to the shortage of labour, and particularly during October and November, when it was practically idle on account of the influenza epidemic.

*Waiotira Southwards.*

*Waikiekie Section* (96 miles 45 chains to 107 miles 28 chains).—A commencement was made in July, 1918, the most important works being two tunnels; one of these, the Waikiekie, is well advanced. Formation between the junction station at Waiotira and this tunnel is being pushed on. One platelayer's cottage was erected.

*Waiotira Northwards.*

*Kirikopuni Section* (107 miles 28 chains to 121 miles 40 chains).—A commencement was made on this section simultaneously with the Waikiekie, but work has been almost entirely confined to the approach cutting at Tokatoka Tunnel. This cutting has so far proved very troublesome on account of heavy slips.

*Ngapuhi Northwards.*

*Okaihau Section* (16 miles 25 chains to 24 miles 45 chains).—Work on this section, although continuous throughout the year, has been difficult owing to the slippery nature of the country. Between 16 miles 25 chains and 19 miles 45 chains 18,000 cubic yards of slips were removed. The bank just beyond the  $19\frac{1}{2}$ -miles peg