

Auroa Section (7 m. to 12 m.).—Nothing has been done during the period.

Manaia Branch (0 m. to 5 m. 50 ch.).—Fencing has been completed for over 5 miles. Eight culverts of various sizes were constructed, two creek-diversions were cut, and a considerable amount of earthwork was carried out.

Owing to acute shortage of labour, work on this railway was suspended in December last.

SOUTH ISLAND MAIN TRUNK RAILWAY (NORTH END).

Kekerangu Section (56 m. 6 ch. to 63 m. 6 ch.; length, 7 miles).—There being practically no labour available, work on this section was closed down in August, 1917. Prior to that date a little formation and river-protection work, and some marram-grass planting, had been done.

MIDLAND RAILWAY.

Nelson—Westland (North End).

Kawatiri Section (59 m. 17 ch. to 63 m. 10 ch.).—Work on this line was suspended in February, 1917, and nothing has been done since.

ARTHUR'S PASS TUNNEL.

There has been a further falling-off in the number of men employed, and a consequent reduction in the rate of progress. About three weeks were lost through a labour dispute. Very little enlargement or lining could be done, all the men available being required to push on the advanced headings. At the Otira end considerably over 70 per cent. of the shifts were "wet"—i.e., six-hour shifts—and at the Bealey end all shifts were "wet." The rock is slate and greywacke, as before, and the greater part of the length driven required timbering. The total length of bottom heading driven at both ends of the tunnel during the period is about 57 chains; lining completed, 15½ chains. The total length of heading driven to date is 5 miles 22 chains 50 links; lining completed, 3 miles 75 chains 56 links. Distance between headings, 2 chains 68 links; between completed portions of tunnel, 1 mile 29 chains 62 links. Total length of tunnel, 5 miles 25 chains 18 links.

(N.B.—Since the above report was drafted the advanced headings have met. The meeting was very accurate indeed, the error in levels being about 1½ in., in alignment ¾ in., and in the chainage about 1 yard—a most remarkable performance and highly creditable to the officers concerned, particularly the Assistant Engineers entrusted with the first survey and the subsequent setting-out of the work.)

CULVERDEN-WAIAU RAILWAY.

(Length, 13 miles.)

Formation is completed to the terminus, and rails are laid throughout, except some short lengths of dead-end sidings in Waiau station-yard. Ballasting is still in progress, and is practically the only work remaining to be done. The second lift of ballast is about completed, and the third lift is proceeding. Delay has occurred during the last two or three months owing to the ballast-pit being partly flooded. Station buildings have been erected by contract at Achray (5 m. 15 ch.), Rotherham (7 m.), and Waiau station-yards, and in addition the Department has constructed loading-bank and gates at Achray, and stock-yards, 50-ton coal-store, engine-pit, and windmill at Waiau. An engine-shed is nearing completion. A combined culvert and cattle-stop was constructed at 5 m. 23 ch., and the fencing has been finished. Station-approach roads were formed and metalled at Rotherham and Waiau. A goods service has been maintained between Culverden and Waiau.

WAIMATE BRANCH RAILWAY EXTENSION.

No further work has been done on this section during the period.

OTAGO CENTRAL RAILWAY.

Cromwell Section (44 m. 52 ch. to 57 m. 3 ch.; length, 12 miles 31 chains).—Formation was practically completed during the period, and rails were laid for a distance of 1 mile 59 chains, nearly completing the main line. The siding at Waenga Station (53 m. 51 ch.) was laid and ballasted. First and second lifts of ballasting were completed throughout, being about 2 miles of first lift and 3 miles of second lift for the period. The platform and turntable at Cromwell, and a 6 ft. culvert at 48 m. 18 ch., are under construction. The Italian Creek Bridge (49 m. 21 ch.) is more than half-finished. Cromwell station-yard was formed and ballasted, and the approach roads formed and gravelled. A goods-shed and Stationmaster's residence were erected at Cromwell, and a platelayer's cottage is nearing completion. Goods have been carried between Clyde and Cromwell throughout the period.

OREPUKI-WAIAU RAILWAY EXTENSION.

Work on this line is still suspended owing to shortage of labour.

SURVEYS OF RAILWAYS UNDER CONSTRUCTION, NEW LINES OF RAILWAY, LAND-PLANS, ETC.

KAWAKAWA-HOKIANGA RAILWAY.

A trial survey has been made between 39 m. and 46 m. The permanent line has been pegged from 36 m. to 45 m. 20 ch., and plans were completed from 28 m. to 42 m. Soundings were taken in connection with a proposed wharf at Te Tio Point (45 m. 20 ch.) on Hokianga Harbour, and a station-site and approach roads at the same place were surveyed.