

The Tie tamping-machine has been used on this line with marked success. The ballast is tamped quickly, tightly, and evenly, thereby producing an even running-track, and minimizing the cost of maintenance—which has hitherto involved heavy and constant expenditure when hand-packed. A contract has been let for the girder spans of bridges from Portland to Waiotira.

The goods traffic has been exceptionally heavy from Portland (cement and coal) and from Oakleigh, where a wharf gang had to be constantly employed discharging and loading cargo.

Most of the traffic was in connection with the Main Trunk Railway, but the goods and produce of trades-people and settlers were carried. A passenger service has now been inaugurated, and is increasing to an extent necessitating additional carriages. It is anticipated that this class of traffic will still further develop during the coming summer.

WAIPU BRANCH.

Ruakaka and Waipu Sections.—The principal work on the former section consisted of formation over the mud-flats, about a mile of which is now complete. One steam-shovel was engaged continuously excavating from a borrow-pit. No work was done on the Waipu Section.

NORTH AUCKLAND MAIN TRUNK.

Huarau Northwards.

Paparewa Section.—Second and third lifts of ballast have been placed on the main line throughout, which completes this section, with the exception of plate-laying, ballasting, and buildings in Paparoa station-yard, clearing up northern approach cutting to Huarau Tunnel, and general cleaning-up.

Mareretu Section.—Workmen were concentrated on this section during the year, and considerable progress was made. Fifty horses were transferred from the Whangarei end for plough and scoop work, with excellent results.

Enlarging and lining Golden Stairs Tunnel (south end) was commenced last July, the position now being that $12\frac{1}{2}$ chains of lining are completed.

Work was delayed during the months of October and November by a strike of workmen for higher rates of pay. During this suspension of work the "Chicago" compressor plant was extensively overhauled and repaired. Both plant and men are now working satisfactorily, and during the last three months $4\frac{3}{4}$ chains of lining has been completed.

At the north end a commencement was made in October with the bottom heading. Lining, however, was delayed till January of this year as a result of difficulty in procuring experienced men.

A subsidence in the first length caused further delay. Working-conditions at both ends of this tunnel are good. The men appear to be contented, and at the present rate of progress the remaining $11\frac{1}{2}$ chains of lining should be finished by the end of November. Only 5 chains now separate the bottom heading faces.

During the year a second and third lift of ballast was laid over the whole length from Paparoa station-yard to Golden Stairs. The Mareretu Section is well in hand and should be ready for service about February next.

Waikiekie Section.—Suitable labour was concentrated on the erection of Mangawai River Bridge. Considerable difficulty was experienced with pile-driving on account of the soft ground, which necessitated pile cradling and splicing: this portion of the construction, however, is practically finished.

Temporary staging and other preliminary work has been done in connection with Kikowhiti Bridge erection, and pile-driving is being commenced. This bridge should be completed in three months.

Between 102 miles 48 chains and 103 miles 9 chains a deviation had to be made, as practically the whole locality was slipping, so much so that large cuttings were completely filled. The Waiotira station-yard was completed with two steam-shovels, which excavated 30,000 cubic yards to make up the required filling.

The Mareretu Tunnel was completed last April, $13\frac{1}{2}$ chains having been lined during the year and one portal built. Owing to the treacherous nature of the