

KAWAKAWA TO MONGONUI.

This line, which is 53 miles in length, was completed in September last, and stations established at Whangaroa and Mongonui. A general description of the route adopted was given in the last report. The total cost of line, under various headings, is shown in Table H.

LINES AND WORKS PROJECTED AND FINISHED DURING THE YEAR.

BLENHEIM TO TOPHOUSE VIA WAIRAU VALLEY.

The insecure condition of the existing line between Blenheim and Nelson, as well as the increased work on the West Coast, necessitated the addition of a third wire. It was therefore deemed advisable to erect a new line carrying two wires to the Tophouse from Blenheim, adopting a route through the Wairau Valley. The adoption of this route avoided the clearing of a large extent of bush, which would have been necessary had the line been carried upon the old route, and avoided, moreover, the strengthening which would have been required to render it capable of carrying a third wire. The section is 60 miles in length, 57 miles of which run through open country, the remaining 3 miles passing through bush, which has been felled $1\frac{1}{2}$ chains on either side of the line to insure its safety from falling timber. The cost of this section is shown in Table H.

THIRD WIRE, NELSON TO GREYMOUTH.

The erection of this wire was commenced in September, 1877, and completed in March, 1878. The addition of this wire affords to Hokitika, Greymouth, and Reefton direct communication with the Blenheim transmitting station on the south side, and places Nelson and the Wakapuaka cable station in direct communication with Blenheim on the north side, thus relieving Nelson of the transmission of a large amount of work from the West Coast for the North. The cost of this work will be found in Table H.

CHRISTCHURCH TO WAITAKI RECONSTRUCTION.

This section has been carefully examined, and all necessary repairs effected. Every pole has been tested, and all unsound ones removed and new ones substituted. The cost is shown in Table H.

CHRISTCHURCH TO GREYMOUTH RECONSTRUCTION.

This section has received attention during the past year. Between Bealey and Taipo, a distance of 10 miles, the line has been entirely repoled, and the general route at various points altered to render it safer and more durable. Other alterations, shown under the heading of "Maintenance," have been effected. The cost of repairs, alterations, &c., is shown in Table H.

WINTON TO LOWTHER.

This line, which is 37 miles in length, was completed in November last. The extension of railway communication rendered the work necessary, and the wire is used almost solely for railway purposes. Stations on this line were established at Oreti, Elbow, and Lowther, the two former being also public offices. The latter was for some time kept open for the convenience of the public, but, as the business performed by it was of so trifling a nature, it was deemed desirable to close it and use it simply as a "flying station," the instrument being worked by the railway guard. This line will be eventually extended to Kingston, at the south end of Lake Wakatipu. The cost of erection is shown in Table H.

WELLINGTON PILOT STATION.

It was deemed advisable to remove the telegraph station from the Signal Station to the Pilot Station; two additional miles of line had therefore to be erected. An additional wire from the pilot's house to the Look-out Station was at the same time erected, and communication by telephone established.

THIRD WIRE, WELLINGTON TO WANGANUI.

The increasing work on the West Coast line, North Island, rendered this work necessary. A direct wire for the New Plymouth work is now available when necessary, and the pressure upon the wires between Wellington and Wanganui is relieved by placing some of the intermediate stations upon another wire. Cost of erection of this wire is shown in Table H.

WELLINGTON TO WAINUI RECONSTRUCTION.

This portion of the Wellington to Napier section has been reconstructed, new poles having been inserted almost throughout, angles strengthened, and all necessary repairs effected. The cost is shown in Table H.

WAIPUKURAU TO KOPUA.

This line, which is 19 miles in length, was completed in January last, and a station opened at Kopua the following month. The line was erected for the purposes of the Railway Department, and the telegraphist at Kopua also acts as stationmaster. A guaranteed station upon this section at Takapau will shortly be opened. The cost of line is shown in Table H.