

the line will then be from the Black Bridge, crossing the Kerikeri River by the Upper Falls, thence across the Waipapa Stream to Kukuparere, thence down the Kaeo Valley to the head of the navigation of the Kaeo Stream. From this point a loop-line of about 6 miles in length will require to be erected, to connect the Whangaroa Township. Leaving Kaeo the main line will run under Taratara Hill, through the Waihapu settlement, and by the north side of Omaiiti across to the island in Mongonui Harbour, thence round the western side of the harbour to Mongonui Township. The total length of line from Black Bridge, including loop to Whangaroa is 53 miles.

MAINTENANCE AND REPAIRS.

RIVERTON TO BALCLUTHA.

In July last the line between Invercargill and Winton received an overhaul, and the whole of the section extending from Invercargill to Dunedin was gone over by the repairing party; all broken insulators were replaced, and every necessary repair effected. Near Matura it was found necessary to shift about $1\frac{1}{2}$ miles of line from town sections to the main road. The section between Clinton, Tapanui, and Switzers has also been overhauled, but no repairs of any importance were found necessary.

BALCLUTHA TO WAITAKI.

This section has been overhauled, broken insulators being replaced and other minor repairs effected. A new line has been erected on Waitaki Bridge, superseding the old one, which consisted of a few long spans supported by ordinary poles, bolted to piles driven into the river-bed. This alteration will prove advantageous, as it places the line thoroughly safe in the time of floods, as well as giving it a neat and uniform appearance. The wires passing through the Dunedin Botanical Gardens have been heightened by the erection of 30-foot poles. Between Palmerston and Clyde the line has been examined, and sundry alterations and improvements effected. At the exposed parts, where the line is liable to sustain injury from snow, the spans have been shortened, and at the Kyeburn and Manuherikia Rivers precautionary measures have been taken to guard against interruption in the event of floods.

TOKOMAIRIRO TO QUEENSTOWN.

The whole of this section has been gone over, and some alterations made. In and about Lawrence one mile of line was shifted to the line of the streets. Between Lawrence and Alexandra several new poles have been inserted where the angular nature of the line rendered such necessary. Owing to the use of iron poles for nearly the whole of the distance between Queenstown and Lawrence, the casualties on that section are not numerous. The whole of the lines south of Waitaki are now in thorough repair and first-class working order.

CHRISTCHURCH TO HOKITIKA AND GREYMOUTH.

This section has during the year received a thorough overhaul, and all necessary repairs effected. At the Ashburton and Rangitata rivers, improvements have been made at the former by fixing the wires to the bridge, which insures greater safety to the line, and facilitates repairs. At the Rangitata four groups of tubes, carrying poles, have been inserted at the crossing. This precautionary work was rendered necessary by the shifting of streams, and the need of shortening spans, which were formerly too long to carry with safety the number of wires at that particular point.

Between the Christchurch Telegraph Station and Railway Station two wires have been erected in readiness to connect with the railway telegraph system generally, when the amalgamation already referred to has been effected.

BLENHEIM TO WHITE'S BAY.

Upon this section a fourth wire was erected to meet the second Cook Strait cable, and the line was then strengthened throughout. Three miles of wire which had become corroded by proximity to the sea were replaced.

GREYMOUTH TO REEFTON.

The number of interruptions on this section caused through falling timber, owing to the original bush-clearing not being of sufficient width, necessitated further clearing, and all timber liable to endanger the line has been removed. Where the line does not follow the dray road, the track made along the line for purposes of maintenance has at several points been repaired.

REEFTON TO LYELL.

On this section stouter poles have been erected at most of the angles, and at such points where the wires were carried on trees they have been removed to totara poles.

WELLINGTON TO NEW PLYMOUTH.

This section has during the year received attention. Between Wellington and Wanganui the line is now receiving a thorough overhaul, and all necessary repairs are being effected. The advantage of removing the line inland between Paikakariki and Otaki, thereby removing it from the influences of the sea, has, during the past year, been amply proved. Upon this