

This phase of construction work was a feature of the year's operations at Gisborne, and on the 31st March, 1928, approximately 60 per cent. of the work in that connection was completed. Other features of the year's operations in connection with the telephone system in the Gisborne district included the installation of more modern switchboards at Ruatoria, Tikitiki, and Te Karaka; the providing of additional switchboard accommodation at Gisborne and Tolaga Bay; and the erection of two miles of new aerial cable in Gisborne. In addition, a commencement was made with the systematic overhaul, and the replacement of all worn parts of the switchboard equipment at Gisborne.

In the Nelson district, owing to the demand for telephone service having exceeded the capacity of the switchboard, which is of the branching multiple type, provision is being made for an extension having a capacity of 450 lines, thus increasing the capacity of the switchboard to 1,550 lines, and providing ample accommodation for new subscribers for a number of years.

During the year the outside plant in connection with the Takaka Exchange system was modernized by the installation of an underground-cable system and by the conversion of a number of long-distance subscribers' lines from earth-working to metallic. Although the reconstruction of the outside plant involved a fairly heavy outlay of capital, it is confidently expected that the saving in maintenance charges will more than justify the expenditure.

Canterbury Engineering District.—The list of applicants waiting for telephone connections in the Canterbury District has been reduced to normal dimensions. This was achieved by the installation at Christchurch of an extension of 780 lines to the branching multiple switchboard, which was rendered possible by the conversion of the Dunedin Exchange to automatic working and by the forward condition of the underground-cable plant. In all, 1,858 new subscribers were given telephone facilities, 1,093 being at Christchurch, 156 at Timaru, and 609 at other exchanges in the district. Although there is still a fairly keen demand for telephone connections, both in the urban and rural areas, it is not as great as formerly. It is expected, however, that when the Christchurch Exchange is converted to automatic working and suitable provision is made at Timaru for future growth by the installation of an underground-cable system, applications for connection will be received from many people who have delayed action owing to the inability of the Department to provide service within a reasonable time.

Good progress has been made with the installation of a new underground-cable system at Timaru. The ducts have been laid and the manholes completed. A considerable amount of cable has been pulled into the ducts, and jointing operations are now in progress. A similar underground-cable system, but on a much smaller scale, is being provided at Temuka, where cable and jointing operations are proceeding. The ducts used for the Timaru and Temuka works are of the earthenware type, and were manufactured in the Dominion.

A modernized multiple lamp-signalling switchboard with a capacity of 750 lines has been installed at Greymouth. This switchboard, which was improvised from switching equipment released from some of the exchanges converted to automatic operation, is giving excellent service. Additional switchboard accommodation has also been provided at Timaru, Ashburton, Hokitika, Rangiora, and Leeston.

Otago Engineering District.—Consequent upon the conversion of the Dunedin Exchange to automatic working on the 28th May, 1927, the old manual switchboard and telephones were dismantled, and all serviceable plant was reconditioned for use elsewhere. A number of old aerial cables which were superseded by underground cables were also dismantled and suitably converted for sale as scrap lead and scrap copper.

During the year a commencement was made with an entirely new underground-cabling system for Invercargill. Owing to delay in delivery of the earthenware ducts, which are being manufactured in the Dominion, the progress made was not as rapid as was anticipated. Supplies of ducts are now coming to hand more freely, and unless some unforeseen circumstances arise it is expected that all the cable will be laid before the end of 1928. Concurrently with the installation of the underground-cable system, provision is being made for the installation of an extension to the Invercargill switchboard, the line-capacity of which is at present fully taxed.

In order to provide cable accommodation for waiting applicants at Invercargill pending the installation of the underground system, it was necessary to erect additional aerial cables to serve the more congested areas.

An increase in the number of subscribers at exchanges in the Otago District necessitated the provision of additional switchboard accommodation at Balfour, Clinton, Duntroon, Heriot, Outram, Port Chalmers, Portobello, Pukerau, Otautau, and Waikaka.

The control of the Heriot Exchange has been taken over from the Railway Department, and the non-permanent exchanges at Outram and Portobello have been converted to permanent status.

SUMMARY OF YEAR'S OPERATIONS.

A brief summary of the year's operations in regard to the development and maintenance of telephone-exchange systems in the Dominion is as follows:—

The conversion to automatic working of the magneto exchanges at Dunedin, Napier, Dannevirke, and Stratford.

The opening of a new automatic branch exchange at Miramar.

The installation of a multiple lamp-signalling switchboard at Greymouth.

The opening of new magneto exchanges at Katikati, Leigh, Paihia, and Te Mata.

The reduction of the waiting-list of applicants for telephone connection from 2,241 to 659.

The extension of the switching equipment at five automatic exchanges and twenty-eight manual exchanges.

The erection of 1,086 miles of pole-line and 8,305 miles of open aerial wire for telephone-exchange subscribers' circuits.

The laying or erecting of 168 miles of lead-covered cable, containing 39,991 miles of wire, for subscribers' circuits.

The connection of 12,159 new subscribers' stations.‡

The maintenance of 139,740 telephone-stations.