

operator. Thus in many cases subscribers will have their calls completed immediately without the necessity of hanging up the receiver. The convenience of being able to place calls direct with the toll-line operator and the increased speed which should result will, it is anticipated, have a stimulating effect on the use of the toll service generally. The new method will be tried at a number of exchanges as soon as the necessary changes in equipment can be effected.

The policy of introducing modern types of exchange switching equipment is being proceeded with as it becomes necessary to replace existing systems. Action will be taken shortly to provide certain new exchanges in replacement of those which are now becoming obsolete and which are incapable of further extension. In this connection the needs of the rural communities as well as of the cities are being carefully studied in order that the telephone requirements of the different sections of the community shall be fully met.

In consequence of various extensions to the exchange systems in the matter of switching facilities and cable accommodation, the waiting-list of prospective telephone subscribers has practically disappeared, and considerable progress has been made in reducing the interval between the time of acceptance of an application and the time of providing service. The number of new subscribers connected during the year was 12,159, a total that has been exceeded on but two previous occasions.

An important development in radio-telephone operations was the inception on the 30th August, 1927, of commercial short-wave signalling between the Dominion and Samoa. This new service, for which Wellington and Apia are the present terminal stations, has effected several marked improvements over the previous service. Consideration is now being given to the inclusion in the scheme of other Pacific islands in which New Zealand is interested both commercially and politically. The work, when completed, should ensure a quick and reliable means of communication with the islands.

Of the works upon which capital expenditure was incurred during the year the following were the more important: The erection of new metallic circuits between Wellington and Seddon, Wellington and Palmerston North, Wanganui and Hawera, New Plymouth and Hawera, Marton and Taihape, Kaikohe and Rawene, Murchison and Inangahua, Lumsden and Kingston, Balclutha and Owaka; the improvement and extension generally of toll facilities; the installation of short-wave apparatus at Radio-Wellington; 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 switch-board at Greymouth; the opening of new magneto exchanges at Katikati, Leigh, Paihia, and Te Mata; the installation of 113 new public call offices (coin-in-the-slot telephones); the extension of the switching equipment at five automatic exchanges and twenty-eight manual exchanges; the erection of 2,513 miles of toll and telegraph wire, and 8,305 miles of aerial wire for telephone-exchange subscribers' circuits; the laying or erecting of 169 miles of lead-covered cable, containing 39,991 miles of wire, for subscribers' circuits; and the connection of 12,159 new subscribers' stations. In addition, 1,916 new extension telephones were installed; while 8,093 telephones were installed in new locations on account of subscribers' removals. The total number of telephone stations in the Dominion at the 31st March, 1928, was 144,552. This represents approximately ten telephones for every 100 of population, a density exceeded only by the United States of America and Canada.

RIVER-IMPROVEMENT AND LAND-PROTECTION WORKS.

Under this head work has been continued on three schemes of river-improvement and land-protection. Brief particulars of work done during the year are as follows:—

Wairoa River: The work of protecting the foreshore alongside the Tokatoka stop-banks by the laying of a rock-spall carpet was continued, 32,000 cubic yards of spalls being spread during the year.