

SLOT TELEPHONES.

The installation of slot telephones for public use has been fully justified by the results, and the experience of the Department has been that wherever there is a fair population or a public centre the machines are appreciated by the public, and an extensive use made of them. During the year 59 new slot installations have been made, bringing the total number up to 198.

The revenue derived from these machines amounted to £6,343, an increase of £1,984 over the receipts during the previous year. The reduction from 2d. to 1d. on instruments within one-half mile from telephone exchanges at Auckland, Wellington, Christchurch, and Dunedin, introduced during 1914, has been extended to cover the distance of two miles from these exchanges. The reduction applies also to several other towns in the Dominion. The result has been that wherever there is a busy centre the reduced rate has had the effect of promoting the use of the service to such an extent that the revenue is well maintained. A check on the business done shows that these telephones are not much availed of between the hours of 11 p.m. and 7 a.m.—in fact, the distribution of business accords fairly well with that of the general working of an exchange.

There are numerous applications for the establishment of these slot telephones under consideration, and the workshops have in hand the manufacture of a large number of machines. A considerable number of micro-telephones continue to be stolen from the various cabinets.

AUTOMATIC EXCHANGES.

The opening of the automatic exchanges has been seriously delayed on account of materials not coming to hand owing to the war. The transfer of the manufacture from Antwerp to London, mentioned in last year's report, did not prove successful, owing partly to the scarcity of skilled craftsmen, and also to the fact that the factories were required for the manufacture of munitions of war. To meet the Department's requirements the company then transferred its tools for the manufacture of these automatic appliances to their extensive works at Chicago, and although this was done as promptly as possible there was necessarily a considerable time occupied in fitting up the appliances and adapting the staff to the new requirements. The latest advice is that matters are now progressing as well as can be reasonably expected in the unique conditions, and that a much more rapid delivery of the equipment may be looked for.

The necessary buildings for automatic exchanges have been completed at Blenheim, Hamilton, Ponsonby, Mount Eden, and Remuera. In all these places some of the apparatus is to hand, as well as for the exchange at Oamaru. Plans have been prepared and approved for the erection of a building in Wellesley Street, Auckland, which, while providing accommodation for a post-office, will also be the site of the automatic equipment for the principal exchange. In this connection it may be well to remark that provision for improved communication between Devonport, Takapuna, and Onehunga and the principal exchange in Auckland City is necessarily deferred owing to the difficulties that have arisen owing to the war. Before these places can work into the city exchanges it is necessary that the latter should be first completed, and such completion is entirely dependent upon the arrival of apparatus.

The installation of automatic equipments has necessitated considerable alterations in the outside plant. In some places, such as Blenheim, Hamilton, and Masterton, the existing exchanges are single-wire earth-working systems. It was necessary, therefore, to introduce metallic circuits for any new system of switchboard, and this led to a good deal of underground work, which has already been completed at Masterton and Blenheim and is nearing completion at Hamilton.

The Auckland and Wellington metallic circuits had existed in overhead lead cables. It has been found desirable to place these in ducts under ground, and also to extend the area over which such underground protection and facilities should be afforded. The work has progressed satisfactorily.

At Christchurch the switchboard accommodation has been exhausted for some time, and new subscribers have been accommodated upon detached standard switchboards. While this arrangement gives the necessary service, it is not without serious disadvantages. It can only be availed of to a limited extent—that extent has now almost been reached. About two years ago an order was placed for a new toll-board for Christchurch, but owing to the war the last lot of this material is only now arriving, and it is hoped that the use of it will enable the Department to carry on until better provision is made. Some automatic equipment has been ordered, to be installed in a new exchange building at St. Albans and at Sydenham, and when these installations are complete the strain on the main switchboard will be relieved, and leave accommodation for growth until a new main automatic exchange is erected in Hereford Street.

At Dunedin also the switchboard accommodation is practically exhausted. It has been decided to install automatic equipment on the Western Electric system throughout the whole area. This can not be done at once, and to relieve the present switchboard it is proposed to install automatic exchanges of the ultimate capacity of 2,000 lines in South Dunedin and Roslyn. When these two exchanges are in service they will relieve the present main exchange and render it capable of meeting future growth until a new main exchange can be erected, equipped, and brought into service.

The Strowger automatic apparatus at Wellington and Auckland continues to work satisfactorily. The whole 1,000 lines at Wellington are in operation. At Auckland there are 747 lines in use, leaving 553 still available, a number which will enable new business to be handled until one or more of the outlying automatic exchanges is brought into service.

At Wellington there is very little spare switchboard accommodation of any kind. It is expected, however, that the Courtenay Place and Wellington South automatic exchanges will be ready for operation about the end of the year, and it is thought that it will be practicable to provide for all new connections in the meantime.

It is anticipated that the equipment for all the exchanges for which the Department now has buildings in readiness will be shipped from America during June.