The percentages of the total wire-mileage in underground and aerial cables, and open aerial wire respectively, for the year ended 31st March, 1925, are as under:

Telephone-exchange wire in underground cable	s	 • •	 56.75
Telephone-exchange wire in aerial cables		 	 22.49
Telephone-exchange wire in open aerial wires		 	 20.76

In the telephone statistics of the world (compiled on the 1st January, 1923) the United States leads as regards density, with 13·1 telephones per 100 of population; Canada is second, with 10·4 telephones; Denmark is third, with 8·3 telephones; while New Zealand takes fourth place, with 8·1 telephones. Australia and Great Britain occupy seventh and twelfth places respectively, with 4·6 and 2·3 telephones per 100 of population. The number of telephones per 100 of population of the world is 1·3.

## AUTOMATIC-TELEPHONE-EXCHANGE INSTALLATIONS.

## AUCKLAND METROPOLITAN EXCHANGE AREA.

The installation of five of the seven automatic exchanges in the Auckland telephone-exchange area was completed during the year, and on the 14th March these exchanges, comprising Wellesley Street (4,731 main stations), Remuera (949 main stations), Mount Eden (1,066 main stations), Ponsonby (881 main stations), and Onehunga (267 main stations), were brought into operation. The cut-over to automatic was satisfactorily effected, and a greatly improved service has resulted. The Devonport and Takapuna Exchanges are now being proceeded with, and when completed the whole of the Auckland Metropolitan Exchange area will comprise a homogeneous full-automatic telephone system. The initial capacity of the five exchanges mentioned is as follows:—Wellesley Street, 10,000 lines; Remuera, 2,000 lines; Mount Eden, 2,000 lines; Ponsonby, 2,000 lines; Onehunga, 400 lines; while the ultimate capacity of the equipment is 200,000 lines. Already arrangements are being made to extend the buildings at Mount Eden and Remuera, and to increase the equipment in the different exchanges to meet the growth of the service.

The new automatic-exchange building at Stout Street, Wellington, has been completed, and excellent progress is being made with the installation of the automatic equipment. It is expected that the new exchange will be ready for operation before the end of this year, when the remainder of the manual subscribers' stations in Wellington — some 4,600 in number — will be converted to automatic working. The automatic exchanges at present working in the city have given satisfactory service throughout the year, and continue to be extended to meet the growing demands for telephone service in the districts in which they are situated.

The greater part of the equipment for the new automatic exchange at Christchurch is now to hand, and the installation work will be commenced at an early date. An extension of the present manual switchboard will shortly be made in order to relieve some of the present overload, and also to make provision for about five hundred new connections.

The auxiliary automatic apparatus installed at Christchurch has worked satisfactorily during the year and has been well maintained. In service, however, it suffers by comparison with other automatic exchanges because of the complication of providing intercommunication with a manually operated exchange. For this reason the subscribers' opinion of the service is not always complimentary, but the installation demonstrates that the automatic exchange, under normal conditions, is capable of giving the very best service.

A commencement was made during the year with the installation of automatic equipment in the new central exchange in Dowling Street, Dunedin, and also at the suburban exchanges, Roslyn and South Dunedin. The greater part of the equipment is on hand, and the work is being proceeded with as energetically as the numerical strength of the installing staff will allow. An extension of the present manual switchboard is now being made to provide accommodation for applicants at present awaiting telephone connections, and also to meet the Exhibition requirements.

Tenders have recently been accepted for the installation of new automatic exchanges at Hawera. Stratford, and Dannevirke, and installation work will commence at these places as soon as sufficient supplies of equipment come to hand.