

Messages received from international stations increased by 32.42 per cent., and there was a decrease of 2.87 per cent. in the traffic received from Australia.

230 Press telegrams were sent via Pacific and 1,316 via Eastern, compared with 492 and 1,423 respectively last year.

The number of cable messages sent as "deferred" during the year shows an increase of 5.9 per cent. over the previous year's figures.

The number of week-end and Expeditionary Force messages forwarded from New Zealand shows a decrease of 15.77 per cent.; the total number of messages for the years 1917-18 and 1916-17 was 23,818 and 28,277 respectively.

During the year 1917-18 the number of free casualty remittance messages forwarded was 2,730, representing 63,768 words, and the payment by the Department to the Atlantic cable companies amounted to £664 5s.

For 1917-18 the number of casualty messages (messages regarding the condition of wounded or sick soldiers) forwarded via Pacific was 408, containing 42,344 words, and the number received 723, containing 279,285 words.

WIRELESS TELEGRAPHY.

The five wireless stations of the Dominion continue to work satisfactorily. The volume of traffic is not great, owing to the exigencies of the times. Attentive watch is kept at all the stations to meet any shipping emergencies that may arise.

The erection of a wireless station at Rarotonga was completed, and the first official message sent on the 2nd September, 1918.

The Apia station is generally in good condition, and maintains touch with the Awanui Station, north of Auckland.

In regard to the improved methods of detecting wireless signals referred to in the last report, by which the area from which signals can be received has been greatly extended, patent litigation in the United States has established the fact that the apparatus there mentioned is that invented by Dr. Fleming, of the Marconi Company.

On the 21st February, 1918, Captain Percival Henry Hall-Thompson, Government Naval Adviser, was by warrant appointed by the Minister of Telegraphs to take possession of all apparatus for wireless telegraphy on board any foreign merchant ship or any British merchant ship not registered in New Zealand, while in the territorial waters of New Zealand, and by warrant dated the 6th March, 1918, was given similar authority with respect to ships registered in New Zealand. This action was taken as it was considered desirable in the public interest to transfer to the naval authority the control of all wireless traffic in New Zealand during the time of war. Such control has been virtually in existence since the outbreak of the war. Regulations for the control of wireless-telegraph stations on merchant ships while in New Zealand waters were issued by Captain Hall-Thompson on the 9th March, and gazetted on the 14th March, 1918.

As far as shore stations are concerned, they remain under the administrative control of the Post and Telegraph Department, and carry out their work in accordance with the requests of the naval authority.

TELEPHONE EXCHANGES.

The expansion of the telephone-exchange system continued steadily throughout the year. Thirteen new exchanges were opened, and the number of subscribers increased by 4,415 and connections by 5,240. The total number of exchanges is 280, of which 62 are central exchanges—*i.e.*, self-contained—and 218 sub-exchanges.

The total number of connections of all kinds amounts to 67,763, of which 53,501 are direct-paying connections, 10,567 extensions, and 3,695 bureau and service connections. The increase in the connections during the year amounted to 8.38 per cent.

The telephone-exchange system includes 4,403 miles of line and 154,799 miles of wire.

The total revenue received was £344,368, an increase of £27,093 on last year's figures.

The conversion of earth-working exchanges to metallic circuit is steadily proceeding, and 20 exchanges have been changed to the latter system during the year. Of the existing exchanges, 228 are on the metallic-circuit system, 44 on the single-line system, and 8 are in course of conversion from single line to metallic.

The party-line system has been effective in greatly extending the radius of subscribers' lines and in reaching country settlers. Its popularity and success have been maintained, and resulted in the opening of several new exchanges and the extension of others. There are now 3,749 party-line circuits, with a total of 12,786 subscribers, an increase in this particular branch of exchange work of 600 lines and 2,125 subscribers.

The proportion of exchange connections of all kinds to the population of the Dominion on the 31st March, 1918, was 6.09 per cent. The percentages in each of the four principal centres are as follows: Wellington, 8.56; Auckland, 6.17; Christchurch, 6.85; Dunedin, 7.33.

The number of telephone connections at the ten principal telephone exchanges on the 31st March, 1918, was as follows: Auckland, 8,246; Wellington, 8,169; Christchurch, 6,366; Dunedin, 5,148; Wanganui, 1,790; Gisborne, 1,785; Napier, 1,627; Hastings, 1,561; Invercargill, 1,527; Palmerston North, 1,362.

AUTOMATIC-TELEPHONE INSTALLATIONS.

At Wellington the Courtenay Place Exchange, with equipment for 2,500 lines, is expected to be completed in a few months. Wellington South Exchange is also well advanced. The quantity of material now wanting for these exchanges is small, and is expected early. When