

CARRIER-CURRENT TELEPHONE SYSTEMS.

Additional toll facilities between Wellington and Christchurch were made available in August by the establishment of a further three-channel carrier telephone system. The installation of this system, which is operated over the submarine coaxial telephone cable between Wellington and Seddon and thence over one of the open aerial metallic circuits to Christchurch, has enabled the Department to increase from nine to twelve the number of inter-Island telephone circuits.

Increased facilities between Christchurch and Dunedin were provided by the establishment of two three-channel carrier systems which were brought into commission in December. One of the six channels thus provided has been permanently connected to a Christchurch-Wellington circuit, to give a direct toll outlet between Wellington and Dunedin, and speedier and more efficient service between these two centres is now assured. Consequent on the provision of this Wellington-Dunedin direct toll circuit, the twelve telephone channels available across Cook Strait have been allocated as follows: Wellington-Christchurch toll service, 6; Wellington-Christchurch voice-frequency telegraph service, 1; Wellington-Dunedin toll service, 1; Wellington-Blenheim toll service, 2; Wellington-Blenheim voice-frequency telegraph service, 1; Wellington-Nelson toll service, 1. As the toll and telegraph business expands, additional carrier equipment will be installed to provide further facilities over the coaxial telephone cable for inter-Island traffic.

A three-channel carrier system was brought into operation between Seddon and Greymouth during the year, and the three channels have been extended to Christchurch by way of Seddon-Christchurch circuits in order to provide temporary toll facilities between Greymouth and Christchurch pending the rearrangement of the toll and telegraph lines via the Otira route necessitated by the enlivening of the Canterbury-Westland 66,000 volt transmission-line.

Other carrier systems brought into service during the year are as follows:—

Wellington - Palmerston North	..	..	..	One three-channel system.
Wellington - New Plymouth	..	..	..	One three-channel system.
Auckland - New Plymouth	..	..	..	One three-channel system.
Auckland-Hamilton	..	..	..	One three-channel system.
Hamilton Napier	..	..	..	One three-channel system.
Gisborne-Napier	..	..	..	One three-channel system.
Wellington-Napier	..	..	..	One three-channel system.
Dunedin-Invercargill	..	..	..	Two three-channel systems.
Nelson-Takaka	..	..	..	One single-channel system.
Dunedin-Cromwell	..	..	..	One single-channel system.
Dunedin-Heriot	..	..	..	One single-channel system.

Incidentally, the establishment of these systems has enabled the Department to provide a high-grade direct toll outlet between Wellington and Gisborne and additional direct toll outlets between Wellington and Auckland and between Wellington and Hamilton.

Further three-channel carrier equipment is now being installed in various parts of the Dominion, and seven additional systems will be brought into commission within the next five or six months. When these seven systems have been installed the Department will have a total of thirty-three-channel and twenty-eight single-channel carrier telephone systems in operation. These fifty-eight systems will provide the backbone for a substantial long-distance toll network and will assure an adequate number of high-grade toll circuits on all important sections. This will undoubtedly stimulate further the general development of toll business.

EXTENSION OF TOLL AND TELEGRAPH SYSTEMS.

That the public is appreciative of the toll facilities available is evidenced by the steady increase in the number of calls made; and the demand for the provision of new outlets, either by the erection of new lines or by the adoption of carrier-current systems, is ever present. During the year additional facilities were provided between the following offices:—

Kaitiā-Awanui, Kaikohe-Okaihau, Hikurangi-Whananaki, Whangarei-Piipiwai, Henderson-Karekare, Auckland-Hamilton, Auckland-Rotorua, Auckland-Napier, Auckland-New Plymouth, Auckland-Wellington, Huntly-Mercer, Ngauawahia-Huntly, Hamilton-Huntly, Hamilton-Taupiri, Hamilton-Ngaruawahia, Hamilton-Napier, Hamilton-Wellington, Te Kuiti-Piopia, Te Kuiti-Awakino, Wairoa-Walton, Rotorua-Taupo, Gisborne-Te Karaka, Gisborne-Nuhaka, Gisborne-Wairoa, Gisborne-Napier, Gisborne-Wellington, Wairoa-Napier, Napier-Wellington, New Plymouth-Eltham, New Plymouth-Hawera, New Plymouth-Wellington, Inglewood-Stratford, Stratford-Eltham, Eltham-Hawera, Wanganui-Raetihi, Wanganui-Ohakune, Raurimu-The Chateau, Patea-Waverley, Palmerston North-Bulls, Palmerston North-Rongotea, Palmerston North-Pahiatua, Palmerston North-Wellington, Levin-Waitarere Beach, Pahiatua-Eketahuna, Pahiatua-Masterton, Masterton-Featherston, Greytown-Featherston, Wellington-Nelson, Wellington-Christchurch, Wellington-Dunedin, Blenheim-Nelson, Nelson-Takaka, Wakefield-Thorpe, Kekerangu-Kaikoura, Kaikoura-Waiāu, Parnassus-Conway, Hawarden-Amberley, Kaiapoi-Rangiora, Christchurch-Amberley, Christchurch-Greymouth, Christchurch-Dunedin, Mayfield-Ashburton, Ross-Waiho Gorge, Lake Tekapo-Hermitage, Timaru-Dunedin, Oamaru-Dunedin, Clyde-Omakau, Lawrence-Miller's Flat, Dunedin-Cromwell, Dunedin-Balclutha, Dunedin-Gore, Dunedin-Invercargill, Balclutha-Gore, Gore-Mataura, Gore-Invercargill.