

MISCELLANEOUS IMPROVEMENTS.

Other improvements to the telephone-exchange equipment during the year included the following :—

- The installation of new secondary batteries at the Remuera and Ponsonby Automatic Exchanges.
- The installation of main distributing-frame equipment at Ohaupo, Te Kauwhata, and Piopio.
- The replacement in the Auckland and Gisborne Districts of a large number of privately-owned earth-working lines by departmentally-owned metallic circuits.
- The installation of additional trunking equipment at the Napier Automatic Exchange.
- A thorough overhaul of the switching equipment at Feilding, and the provision of additional facilities for the handling of toll traffic.
- The installation of answering-jacks on the New Plymouth branching multiple switchboard for the purpose of facilitating the work of the operators.
- The replacement of the switching equipment at Patea by switchboards of a more modern type.
- The installation of a pole-changer at Greytown Exchange for the purpose of improving the ringing facilities at that place.
- The installation at Lower Hutt of a 900-line branching multiple switchboard as a temporary measure pending the conversion of that exchange to automatic operation.
- The installation at Wellington Central Exchange of special final-switch equipment to provide for direct incalling to some of the larger private automatic exchanges; also the installation of additional equipment for relieving congestion on the regular private-branch section of the exchange switching equipment.
- The overhaul of the switching equipment at the Blenheim Automatic Exchange, the rearrangement of the jack and lamp field, and the installation of a third toll position.
- The installation of a frequency-converter ringing-set at Blenheim, and a motor-driven ringing-set at Picton.
- The installation at Timaru and Waimate of new distributing-frames.
- The extension of the main distributing-frames at Greymouth and Temuka.
- The installation at the Dunedin Central Automatic Exchange of an automatically operated crude-oil burner for heating purposes in connection with the air-conditioning plant.

EXTENSION STATIONS PER 100 MAIN STATIONS.

Appended hereunder are two interesting tables showing the number of extension telephones per 100 main stations (business and residential respectively) at some of the principal exchanges, as well as the average figures at all exchanges, on the 30th September, 1928. Extension-telephone service in *business* premises is most highly developed at Wellington, Christchurch, and Napier, the smallest development being at Whangarei, Masterton, Gisborne, Palmerston North, Nelson, New Plymouth, Timaru, and Hastings, at all of which places the figures are below the average for the Dominion. Extension-telephone development in *residential* premises is comparatively low generally, the average figures for the Dominion being only three extensions per 100 main stations, the highest development being at Hastings, Christchurch, Masterton, Timaru, Auckland, Gisborne, Napier, and Wellington. The fact that only one out of every thirty-three residential subscribers has an extension telephone seems to indicate that subscribers generally, and more particularly those who occupy two-storied houses or houses with a comparatively large number of rooms, do not appreciate the fact that an additional telephone can be obtained for £1 10s. per annum.

TABLES SHOWING THE NUMBER OF EXTENSION TELEPHONES PER 100 BUSINESS AND RESIDENTIAL STATIONS RESPECTIVELY.

Exchange.	Number of Extension Telephones per 100 (Main) <i>Business</i> Stations.			Exchange.	Number of Extension Telephones per 100 (Main) <i>Residential</i> Stations.		
	Number of Business Stations.	Number of Extension Telephones in <i>Business</i> Premises.	Number of Extension Telephones per 100 <i>Business</i> Stations.		Number of Residential Stations.	Number of Extension Telephones in <i>Residential</i> Premises.	Number of Extension Telephones per 100 <i>Resi- dential</i> Stations.
Wellington ..	4,953	4,635	94	Hastings ..	1,592	117	7
Christchurch ..	3,215	2,628	82	Christchurch ..	5,234	311	6
Napier ..	736	601	82	Masterton ..	1,227	77	6
Dunedin ..	2,172	1,597	74	Timaru ..	1,010	61	6
Auckland ..	5,955	4,026	68	Auckland ..	7,731	381	5
Invercargill ..	835	569	68	Gisborne ..	1,626	80	5
Hamilton ..	731	394	54	Napier ..	1,239	56	5
Wanganui ..	1,000	542	54	Wellington ..	7,885	359	5
Hastings ..	546	260	48	Dunedin ..	3,963	170	4
Timaru ..	636	301	47	Palmerston North	1,569	56	4
New Plymouth ..	573	260	45	Wanganui ..	2,050	78	4
Nelson ..	438	190	43	Hamilton ..	1,644	43	3
Palmerston North	951	406	43	Invercargill ..	1,211	39	3
Gisborne ..	668	273	41	Nelson ..	877	26	3
Masterton ..	445	179	40	New Plymouth ..	1,043	16	2
Whangarei ..	368	127	35	Whangarei ..	847	5	1
Other exchanges ..	13,440	2,884	21	Other exchanges ..	40,296	424	1
Dominion figures ..	37,662	19,872	53	Dominion figures..	81,044	2,299	3