The offices between which improved facilities have been provided by the erection of new lines

and/or the rearrangement of existing lines are set out hereunder:-

Broadwood – Kohukohu, Kaikohe – Whangarei, Otiria – Motatau, Whangarei – Auckland, Whangarei – Broadwood – Kohukohu, Kaikohe – Whangarei, Otiria – Motatau, Whangarei – Auckland, Whangarei – Bayaroa, Waihu-Dargaville, Dargaville–Auckland, Dargaville–Paparoa, Tinopai–Paparoa, Paparoa–Wellsford, Maungaturoto–Wellsford, Kaiwaka–Wellsford, Wellsford–Auckland, Kaiwaka–Mangawai, Milford – Wairangi Bay – Campbell's Bay, Auckland – Waiheke Island, Papakura–Clevedon, Auckland–Hamilton, Te Aroha–Hamilton, Waihi – Waihi Beach, Tauranga – Te Puke, Tauranga–Whakatane, Whakatane–Rotorua, Hamilton–Matamata, Morrinsville–Matamata, Tikitiki–Tokomaru Bay, Napier–Hastings, Waipukurau–Takapau, Waitotara–Makakaho, Palmerston North–Feilding, Paraparaumu–Wellington, Wellington–Eastbourne, Picton–Whatamango, Picton–Havelock, Nelson–Wakefield, Richmond–Wakefield, Brightwater–Wakefield, Wakefield–Korere, Murchison–Reefton, Reefton–Greymouth, Greymouth–Otira, Hokitika–Ross, Kaikoura–Waiau, Culverden – Hanmer Springs, Christchurch–Darfield, Waimate–Oamaru, Maerewhenua – Livingstone, Kurow – Otematata, Omakau – Matakanui, Cromwell–Nevis, Edendale–Wyndham, Otautau–Nightcaps, Bluff – Stewart Island.

Edendale-Wyndham, Otautau-Nightcaps, Bluff - Stewart Island.
In addition to the foregoing, 113 miles of toll and telegraph pole-line were reconstructed during the

year. This work involved the replacement of 375 miles of wire.

Other improvements to the plant and equipment used in connection with the toll and telegraph services include the following:—

The provision of a separate switchboard at Wellington for the handling of overseas toll traffic and traffic to the "Awatea."

Increased facilities for the direct dialling of toll communications between Avondale and Auckland, Palmerston North and Wellington, Napier and Hastings, Waimate and Oamaru.

Additional facilities for the handling of toll calls at Hamilton, Te Awamutu, Tauranga, New Plymouth, Blenheim, Nelson, Christchurch, Timaru, and Invercargill.

Improved facilities for the telephoning of telegrams at Auckland and Masterton.

### POLES AND WIRES.

During the year 47 miles of pole-line and 813 miles of wire (including wire in submarine cable) were erected for telegraph and telephone (toll) purposes, while 82 miles of pole-line and 407 miles of wire were dismantled or, in localities where no longer required by the Department, sold to settlers for use as private telephone-lines.

The lengths of pole-line and wire (including wire in submarine cable) in use for telegraph and

telephone toll purposes on the 31st March, 1936 and 1937, respectively, were as follow:—

Pole-line and Wire.				Year ended 31st March,		Year ended 31st March,	
1 old-line and vyne.					1936.	1937.	
Miles of pole-line		• •			12,129*	12,094	
Miles of wire					65,206*	65,612	
		$* R\epsilon$	evised fig	ures.			

### COOK STRAIT CABLES.

In last year's report it was stated that the Cable-steamer "Recorder" would be chartered to undertake repairs to No. 5 Lyall Bay – White's Bay and No. 1 Oterangi Bay – White's Bay single-core telegraph cables as soon as the vessel could be made available for the work. The "Recorder," after spending some days loading cable at Auckland and Wellington, left the latter port on the 27th May to commence work on the No. 5 cable, repairs to which were completed on the 5th June. Operations were then commenced on No. 1 cable, over which communication was re-established on the 7th June. After discharging the serviceable picked-up cable into the shore tanks at Wellington the "Recorder" sailed for Auckland on the 9th June, the charter having extended over a period of twenty-four days.

Each of these repairs necessitated the laying of a length of two miles and a half of heavy shore-end cable in shallow water. This portion of the work was undertaken with the aid of two small vessels—namely, the Government steamer "Janie Seddon" and the auxiliary scow "Kohi."

A fault which developed in the trench section of the Wellington-Seddon 4-core telephone cable in May caused some minor interference with the operation of the circuits. Electrical tests from the Lyall Bay cable-hut indicated that the fault was approximately two yards from the Seddon office, at which point the defect was found, and repairs were effected before the cable services had become seriously affected.

## FOVEAUX STRAIT CABLE.

The submarine cable between Stewart Island and the mainland remained in good working-order throughout the year. A short-wave radio-telegraph link between Half-moon Bay (Stewart Island) and Awarua Radio is being maintained as an emergency channel of communication.

# RADIO-TELEGRAPH AND RADIO-TELEPHONE SERVICES.

### WELLINGTON-RADIO.

There has been a marked increase in the volume of traffic handled at Wellington-Radio, where

the plant and operating facilities were extended and improved last year.

Certain replacements having become necessary in the modulating equipment associated with the short-wave radio-telephone transmitter installed for use on the overseas radio-telephone service, consideration was given to redesigning the apparatus or, alternatively, replacing it by equipment of modern performance with a view to obtaining improved operation and more economical maintenance. As a result a complete new modulating assembly has been installed, with satisfactory results from the point of view of economy both in power consumption and in the cost of replacement parts required from time to time.