interlocking with colour-light signals: Auckland, Glen Innes, and Panmure. Automatically controlled switch-locked sidings have been fitted at Orakei, Tamaki, and Sylvia Park.

Papakura Duplication.—Between Papatoetoe and Papakura, 8 miles 22 chains, double-line automatic signalling has superseded single-line automatic signalling, and power interlocking with colour-light signals has been fitted at Wiri and Manurewa. An automatically controlled switch-locked siding was installed at Takanini.

Main Trunk.—Signalling and interlocking with electrical-point movements and fouling-protection have superseded fixed signals at Hunterville and Rata.

Auckland New Station.

The work at Auckland Station, which included electro-pneumatic signalling, communications, lighting, and power, has been completed. The signalling of the station is the largest individual work which has yet been carried out by this Branch, the whole of the yard being controlled by one main cabin, with one subsidiary cabin in the goods-yard. The change-over from the old to the new station was successfully carried out.

General.

Alterations and additions to existing signalling and interlocking have been carried out at Dunedin, Frankton Junction, Papatoetoe, Lepperton Junction, Petone, Palmerston North, Waiareka Junction, Christchurch, Port Chalmers, Middleton, and Greymouth. Penrose Junction has been converted to a special switch-out station with colour-light signals for main-line working.

Home and distant signals with Woods locks have been installed at Makerua, and removed from Hunterville, Rata, Belgrove, Hikutaia, Puriri, Kopu, Te Karaka, Motupiko, Waikino, and Ladbrooks owing to their being superseded by other methods of signalling or being no longer required.

Additional fixed signals have been provided at Rangiora Junction, Southbrook, Kaiapoi, and Thornbury Junction.

The total number of signalling installations is as follows:—

Miles of single-line automatic signalling	188 m. 16 ch.
Miles of double-line automatic signalling	61 m. 36 ch.
Automatic crossing-loops	33
Automatic switch-locked sidings	34
Power interlockings	26
Mechanical interlockings	96
Interlocked tramway crossings	7
Mechanical fixed signal and Woods locked stations	315
Tablet-locked sidings	269

The following works are in hand: Automatic signalling between Ravensbourne and Sawyer's Bay. Signalling and interlocking with electric-point movements and fouling-protection at Pokaka, Horopito, Raurimu, Porootarao, and Hihitahi. These works will be completed early in the near future.

Block-working.—The present position in regard to block-working is as follows:—

Total mileage equipped with tablet instruments	1,648
Number of tablet instruments in use	856
Number of tablet stations	356
Number of tablet exchangers	320
Mileage of double line worked by lock and block	15
Number of stations	12
Number of instruments	26

Telegraph and Telephone Facilities.—The reconstruction of communication pole lines and wires has been vigorously pushed ahead during the year, and the communication system considerably improved. New methods have been introduced to give a maximum number of services with the lines available, and this work will be continued during the forthcoming year.

In the North Island over 80 miles of pole-line have been rebuilt, and 7 miles of new pole-line erected, and in the South Island 95 miles were erected. All wires on these new pole-lines other than the tablet-system wire and local Morse wires have been run in copper wire. The strengthening of a further 50 miles of pole-line was carried out, and, in addition to the new wire replacing old iron wire, 306 miles of copper wire were erected.

The metallic circuiting of existing telephone-lines has been carried out on the following sections: Invercargill to Winton and Rakaia to Rakaia Bridge.

The lines have been rearranged with Morse services superimposed over the telephone-lines on the Wellington–Napier, Wanganui–Frankton Junction, Christchurch–Culverden, Christchurch–Dunedin, and Dunedin–Invercargill Sections. This work has improved the telephone facilities and enabled economies of Morse services and the relinquishing of rented lines.

Train-control-selector telephone systems have been completed and brought into use between Marton and Wanganui and between Christchurch and Culverden. A further section, Dunedin–Oamaru, will be completed in April, and during the forthcoming year other sections in both Islands will be completed.

At the Auckland new station and yard a full automatic telephone exchange was brought into operation with 125 local lines connected, and all district lines terminated on a manual board. The telegraph system was modernized to a universal-battery system, and the services simplified. A local distribution-cable network was also completed in the Auckland area.

In Wellington, to anticipate yard alterations, a telephone-cable was laid from Lambton to Thorndon and a 100-number manually operated switchboard has been installed to provide full intercommunication.