Doubling and Improvement of Lines.—Hutt Road and Railway improvement: These works are practically completed. The road is being maintained by the Department and cost charged to the construction authority. The cost of construction and maintenance should now be apportioned among the local bodies affected and the maintenance taken over.

Dunedin-Mosgiel: Double-line working is now in operation between Dunedin and Abbotsford, and can be instituted for a mile further at any time. The progress of the Chain Hills Tunnel has been retarded by the difficult ground met with.

Grade-improvements.—Grade-easements on the North Island Main Trunk line, including new stations, Tuakau and Pukekohe, in connection therewith, have been in hand, a sum of about £22,000 having been spent on these works during the year. The deviation improving grades in connection with the new Manawapou (Wanganui district) Viaduct has been in hand and is approaching completion, which will. however, be hindered by delay (owing to English strikes) in connection with the viaduct contract.

Expenditure.—The cost of maintenance for the year was £735,546, equal to about £263 per mile of railway maintained. In addition to this, £226,045 has been spent on new works and works for other Government departments, public bodies, and private parties, making a total of £961,591. The increase in the cost of maintenance is mainly due to the carrying-out of improvements, such as the removal of the work-depots (Wellington and Christchurch), deviation of line (Mercer), new engine-depot at Pae-kakariki, rearrangement of yard (Waikiwi), and social halls for the use of workmen; and to the advance in the pay of the workmen.

Mileage.—On the 31st March, 1912, the mileage open for traffic was 2,807 miles 56 chains—46 miles 31 chains having been opened during the year. Lands and Leases.—The following is a summary of the business under this head : Leases—Number

Lands and Leases.—The following is a summary of the business under this head : Leases—Number of leases registered during year, 636; aggregate annual rental of same, $\pounds 8,979$: total number of leases current at 31st March, 1912, 4,022; aggregate annual rental of same, $\pounds 30,641$. Sidings—Number of siding agreements registered during year, 15; aggregate annual rental of same, $\pounds 425$: total number of siding agreements current at the 31st March, 1912, 340; aggregate annual rental of same, $\pounds 6,462$. Land—Total number of Proclamations issued taking or giving up land, 58; total amount of compensation paid during year for land taken, $\pounds 22,887$.

Staff.--Maintenance working-staff, 4,260 men : office staff, 123 men : total, 4,383 men.

SIGNAL AND ELECTRICAL.

Fixed Signals at Officered Stations.

During the past year twelve stations have been fitted with fixed semaphore signals—viz.; Green Hills, Ealing, Dromore, Bankside, Pleasant Point, Farndon, Otane, Hatuma, Matamau, Papatawa, Ashhurst, and Onerahi.

| Total numbe Total numbe | | | | | with | fixed | ginnals | •• | | 215 | 423 |
|----------------------------|------|--|-----|--|----------|-----------|---------|----|-----|-----|-----|
| Interlocked | 1 01 | | ••• | | •••••••• | | | | ••• | 75 | |
| | | | | | | | | | | | 290 |
| Still to equip | | | •• | | • • | | • | •• | | 133 | |

Interlocking of Points and Signals.

The electro-pneumatic installation at Dunedin has worked satisfactorily.

The following places have been signalled and interlocked : Mercer, Woolston, Weedons, Taihape, Linwood, Thorndon, and Washdyke : also tramway-crossings at Antigua Street, Christchurch, and Conon Street, Invercargill ; Kioreroa Bridge (Whangarei) ; and the service siding at Pukekohe.

The interlocking has been added to and rearranged at Abbotsford, Green Island, Burnside, Timaru. Addington, Penrose, and Auckland.

The following sidings have been interlocked with the tablet system : Egmont Box Company's siding, Winiata; Lepperton ballast-pit, Lepperton; service siding at 34 m. 44 ch., Tuakau. The interlocking at Gore and Paeroa is in hand. Total stations now interlocked, 75; tram-crossings] interlocked, 5; intermediate sidings inter-

Total stations now interlocked, 75; tram-crossings interlocked, 5; intermediate sidings interlocked with tablet, 16.

Expenditure for the year was-New works, £12,703 6s. 5d.; maintenance, £5,738 19s. 4d.

Block Working (Electric Tablet).

During the year fifty-four tablet instruments and eighty-five miles of line have been fitted and brought into operation, embracing the following sections: Rolleston to Washdyke, Onehunga to Onehunga Wharf. Waipiata and Paremata have also been installed as tablet stations. The equipment of the sections Waipukurau to Napier and Greymouth to Dunollie is in progress.

of the sections Waipukurau to Napier and Greymouth to Dunollie is in progress. Total mileage now worked under tablet, 1,389 miles. Electric tablet instruments now in use, 708 at 299 stations.

Automatic tablet-exchangers have been installed at twenty-two additional stations: total now in use, 277.

Lock and Block.

The electric lock-and-block system for double-line working has been brought into operation between Christchurch and Heathcote, Templeton and Rolleston, and Burnside and Abbotsford.

Total mileage now equipped with lock-and-block apparatus, 381 miles double line.

Electric lock-and-block instruments now in use, 74 at 34 stations.