The Caversham Tunnel has been driven a distance of about 39 chains, leaving 32 chains to do.

Expenditure.—Maintenance cost £656,154, equal to about £257 per mile.

Mileage.—On 31st March the total mileage open for traffic was 2,681 miles 39 chains, an increase for the year of 209 miles 44 chains, of which the Wellington–Manawatu line, taken over from the company, and the remainder of the North Island Main Trunk form the principal part.

*Private Sidings.*—Grants issued during the year number eighteen, making the total at 31st March 337, with a total annual rental of £5,737.

Leases.—On 31st March 3,113 leases, with a total annual rental of  $\pounds$ 19,363, were current; 681 leases having been issued during the year.

Staff.-Maintenance<sup>®</sup> working staff, 4,433 men; office staff, 135; total 4,568.

SIGNAL AND ELECTRICAL.

Signals, and Interlocking of Points and Signals.

During the past year forty-eight stations have been fitted with fixed semaphore signals, viz. :---

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Waikino,	Shannon,	Ohingaiti,	Owhango,
Papatoetoe,	Plimmerton,	Utiku,	Piriaka,
Manurewa,	Fordell,	Waiouru,	Ongarue,
Paerata,	Puketutu,	Ohakune,	Paekakariki,
Buckland,	Kartigi,	Tokomaru,	Manakau,
Whangarata,	Te Awamutu,	Paraparaumu,	Ohau,
Whangamarino,	Waitangi,	Tariki,	Levin,
Ohinewai,	Karioi,	Otorohanga,	Koputaroa,
Ohaupo,	Horopito,	Otautau,	Porirua,
Taupiri,	Erua,	Turangarere,	Waikanae,
Wairangi,	Waimarino,	Rangataua,	Bunnythorpe,
Poro-o-tarao,	Mangaonoho,	Raurimu,	Te Kuiti.
			'

The signalling and interlocking at stations has worked with the most satisfactory results.

The following stations have been fully equipped with signalling and interlocking, and brought into operation during the year: Lepperton Junction, Ngahauranga, Milton, Clinton, Newmarket Junction (temporary scheme), Penrose Junction (temporary scheme), Addington Junction (temporary scheme), Hornby Junction (temporary scheme), Pukerua; also Newmarket, Remuera, Green Lane and Racecourse Platform, Ellerslie, and Penrose, complete schemes for double-line working; Turner's, Booth's, Gardner's, Palmer's sidings, also service siding near Burnside, have all been interlocked with the tablet system.

The work has been commenced at Marton, Ngaio, Tawa Flat, Ngaurukohu, Sockburn, Templeton, Islington, Parnell Tunnel and the rearrangement of Addington, Hornby, and Rolleston to suit doubleline working.

The expenditure for the year on new works was £25,213 3s. 7d., and for maintenance £3,450 8s. 10d.

## Block Working.

The electric train-tablet system of block working has worked with every satisfaction.

During the year 130 tablet instruments and 270 miles of line have been fitted and brought into operation, embracing the following sections: Marton to Mataroa, Mataroa to Waiouru, Frankton to Taumarunui, Taumarunui to Waiouru, and Wellington to Longburn (Manawatu line).

The following have been converted into switch-out stations: Papatoetoe, Papakura, Paerata, Buckland, Pokino, Whangamarino, Ohinewai, Taupiri, Horotiu, and service siding near Abbotsford. Ballast-siding, Ngawapurua Bridge, and Addington South signal-box have been installed as tablet stations.

The equipment of the sections from Woodville to Waipukurau, Pukeuri to Washdyke, Ngahere to Blackball, is in progress.

Automatic tablet-exchanging apparatus has been installed at eighty additional stations, and is giving every satisfaction. The Main Trunk line, Wellington to Auckland, is completed, and the equipment of the rest of the main lines not already installed is well in hand.

The installation of the electric lock and block system for double-line working has been completed and brought into operation between Newmarket and Penrose, and the work has been commenced on the double lines between Wellington – Lower Hutt, Christchurch–Rolleston, and Christchurch– Heathcote.

## Telegraph and Telephone Facilities, and Electric Lighting.

During the year 822 miles of wire and 348 miles of poles have been erected and brought into use; also various alterations and additions have been made to improve existing lines.

Thirty-five Morse instruments and 118 telephones have been fixed and brought into operation, twenty-five additional and seven extension connections have been made with the public telephone exchanges, and eight portable telephones brought into use.

A number of old-pattern telephones have been replaced by new and modern ones.

Greater facilities are still needed in some of the districts to suit the more pressing requirements.

The electric light at stations where installed is giving every satisfaction.

During the year electric light has been installed in the workshops at Invercargill, the signals and yards at New Plymouth, signals and stockyards at Ngahauranga, and at Waitara and Te Aroha Stations. The expenditure on the electric block working, telegraph and telephone facilities, and electric lighting for the year was,— £ s. d.

ng for	the year was,-					£	s.	d.	
) Ne	ew work			• •	 	 29, <b>9</b> 70	5	9	
M	aintenance				 ••	 10,783	3	1	
Pt	ublic telephone-e	xchang	e connecti	ions	 	 1,764	10	0	