D.-2. xii

Additions to Open Lines.—The expenditure under this heading for the year was £148,250, the principal works being: Rearrangements, Rotowaro, Taumarunui, Haywards, Matamau, Springfield, Gorge Road, Matai, Inangahua Junction, Greymouth-Otira, Westport; siding alterations and extenions, Auckand, Penrose, Te Kauwhata, Frankton, Rukuhia, Te Kumi, Okahukura, Taihape, Raetihi, Shannon, Thorndon, Trentham, Carterton, Masterton, Woodville, Takapau, Hatuna, Otane, Napier, Middlemarch, Edendale, Kotuku, Te Kuiti, Petone; goods-shed at Taupaki, Horotiu, Lepperton, Sutton, Titri; additions and alterations to goods-sheds at Rotorua, Hinuera, Okahukura, Raetihi, Christchurch, Five Rivers; stockyards additions at Marton, Woodville, Longlands; stockyards built at Kumeu, Motatau, Westmere, One-tree Point; platform lengthened at Westfield; loading-bank, Kumeu, Wallacetown; addition to station buildings at Auckland, Huntly, Waihou, Rotorua, Kiwitahi, Wharepoa Road, Okahukura, Napier, Christchurch, Ashburton, Palmerston; lighting of stations improved, New Lynn, Otahuhu, Taumarunui, Raetahi, Balclutha; cranes provided at Rotorua, Feilding, Otaki, Lyttelton; sanitary arrangements improved at Waikumete; concrete pits for car-shops, Dargaville; fencing between Taumarere and Opua (6½ miles), also between Mawheraiti and Reefton; approach to cream-loading stage, Walton; W.C. and latrines provided, Te Kawa, Ratana, Plimmerton; lavatory and ladies waiting-room, Thorndon; additions to dwellings at Puketutu, Motuhora; 6,000-gallon vat erected at Ongarue; siding for Stores Branch near Pokako; ash-pit lengthened, Cross Creek; water-services improved, Greymouth, Stillwater; new station-yard provided, Waingawa; alterations reference from and store-room built, Woodville; Lyttelton, veranda and platform at Ferry Wharf and pay office; Linwood, new station building and veranda; Christchurch, erection of traverser D shed and improvements Colombo Street crossing; Addington, artesian well and eisterns, Maintenance depot, and additions to tarpaulin-shop; Chertsey, veranda; Belfast, 6,000-gallon vat and pump-house with electric pump; Oamaru, new house and addition to engine-shed; Palmerston, provide shelter for housing electric-light plant; Middlemarch, shift turntable from Dunback; Invercargill geared motor-hoist erected in running-shed; Wairio, oil-engine and pump installed, thirty-four new huts built.

Miscellaneous. Additions and improvements amounting to £3,024, and charged to workingexpenses, were carried out. The works included: Additions and improvements to stations, buildings, sidings, &c., Newmarket Workshops, Frankton, Pokako, Matamau, Kensington, Riverton; three cottages, Parnell, connected with city sewer; Remuera, water-trough provided at cattleyards; Manurewa, overhead traveller provided; Otahuhu, 15 ft. ash-pit; approach roads improved at Kaipara Flats, Matamata, Ida Valley; Tirau, improvements to cream-loading stage; latrines or urinals provided, Kiwitahi, Te Mawhai, Awarua, Taihape; water-services improved at Cross Creek, Bluff; ticket-office on Ferry Wharf at Lyttelton; Waianakarua, loading-bank altered; Mosgiel,

north end of platform raised.

Expenditure.—The expenditure for the year was as follows:— 1,111,045 Maintenance (charged to working-expenses) New works (charged to capital) ... 210,319 Other Government Departments, public bodies, and private parties 35,689 Total expenditure .. £1,357,053

The Maintenance expenditure charged to working-expenses amounted to £367 per mile, compared with £350 per mile in 1920-21, £280 per mile in 1919-20, £252 per mile in 1918-19, £240 per mile in 1917–18, £243 per mile in 1916–17, £251 per mile in 1915–16, and £254 per mile in 1914–15.

Mileage.—The mileage open for traffic on the 31st March, 1922, was 3,029 miles 79 chains.

During the year 12 miles 27 chains additional lines were opened for traffic.

Land and Leases.—Number of leases registered during the year, 611; aggregate rental of same, 19 8s. 2d. Total number of leases current on 31st March, 1922, 6,050; aggregate rental of same, £43,456 10s. 11d. Private-siding agreements registered during year, 83; aggregate rental of Total number of agreements current on 31st March, 1922, 462; aggregate rental of Miscellaneous agreements entered into, 16. Total number of Proclamations issued, same, £2,961. same, £16,008. taking or giving up land, 42. Total amount of compensation paid during year for land taken £31,707 15s. 4d.

Staff.—Maintenance Branch—Working staff, 3,590; office staff, 141; total, 3,731.

SIGNAL AND ELECTRICAL.

Mr. H. J. Wynne, A.M.I.C.E., Signal Engineer, reports as follows:-

I have the honour to submit the following report on the signals, interlocking, block-working, electric lighting and power installations, also the telegraph and telephone facilities, on the New Zealand Government railways for the year ended 31st March, 1922.

Fixed Signals at Officered Stations.

Home and distant signals have been provided at Kaukapakapa and Kumeu. Distant signals in addition to home signals have been erected at the following stations: Wellsford, Helensville, Wharepapa, Waimauku, and Waitakere.

The total number of officered stations (including tablet stations), is 480, of which 302 are

equipped with fixed signals, 100 are interlocked, and 78 unequipped.

Sixteen signal-repeaters have been installed during the year, making a total of 366 now in use. The installation of low-voltage electric signals in place of distant signals at Ohakune, Johnsonville, and Khandallah has been carried out, and the electric signals are working satisfactorily.

Interlocking of Points and Signals.

Alterations have been made to signalling and interlocking at Frankton Junction, Taumarunui, Taihape, Aramoho, Paekakariki, Khandallah, Sockburn, Islington, Rolleston, and Invercargill.