

MAINTENANCE.

Mr. F. W. MacLean, Chief Engineer, reports as follows :—

The track, buildings, structures, and appliances have been maintained in good order and repair.

Owing to the difficulty in obtaining supplies of material and to the shortage of labour, much work which would otherwise have been carried out has had to be postponed till conditions are more nearly normal.

As indicated in the report for the preceding year, relaying has had to be curtailed further. A contract has been entered into for the supply of rails, but there does not appear to be much prospect of delivery being made in time, or of suitable labour being available, to allow of much being done in the ensuing year towards overtaking arrears of relaying.

Permanent-way.—The relaying during the year has been as follows :—

Main and branch lines, 53 lb. and 56 lb. steel and 70 lb. iron rails relaid with new 70 lb. materials	Miles. 13½
Branch lines, 40 lb. relaid with new 55 lb. material
Branch lines relaid with second-hand material removed from main line
Total relaying for the year	13½

Sleepers.—93,480 new sleepers were used in renewals during the year.

Ballasting.—164,807 cubic yards of ballast were placed in the track during the year. The scarcity of labour and reduction of work-trains has curtailed the amount of work done.

Slips and Floods, &c.—Following the damage caused by floods and slips in the early part of the year in the Auckland district, further damage occurred in the Kaipara, Whangarei, and Kaihu localities.

Floods and slips in the Central, Wanganui, and Wellington districts were not very serious.

The long-continued wet weather in the Gisborne district caused extensive slips and washouts, which will involve considerable reconstruction work.

In the Christchurch district slips occurred on the Midland and North Canterbury lines. About 6,000 tons of rock were deposited for river-protection on the Midland Railway.

In Dunedin district about 3,000 tons of rock were deposited to protect the foreshore at Oamaru. The railway near Puketeraki Tunnel having shown signs of weakness, it has been deviated somewhat farther from the cliffs. Extensive floods occurred in the Clutha and Catlin's district.

Considerable floods occurred throughout Southland during May. A former washout on the Mararoa Branch which had been bridged was filled in.

Fully 3,000 tons of rock have been used in river-protection works in Westland district.

Floods in the Nelson district in March caused extensive damage and considerable delay to traffic.

No effort has been spared to effect repairs promptly where damage has caused delays to traffic, and these delays have not been serious in most cases.

Bush-fires in the neighbourhood of Ohakune damaged a number of bridges.

Bridges.—These have been maintained in good condition. Owing to the difficulty in obtaining materials it has not been possible to do much in strengthening bridges for heavier engines.

Water-services.—These have been maintained in good order. Improvements have been effected at a number of stations.

Wharves.—Wharves belonging to the Department have been maintained in good repair.

Buildings.—Extensive repairs and renewals have been carried out, and a number of new buildings and dwellings have been erected to replace old buildings and those destroyed by fire.

Station-yards.—Additional accommodation has been provided, and a number of stations have been rearranged.

Railway Improvements.—Auckland District: Auckland Station—Arrangements have been completed for the purchase of properties, and temporary arrangements have been carried out. The old engine-depot has been removed. Auckland-Mercer grade-easements—Further portions of this work have been completed, and a new station combining Drury and Runciman stations is in hand. The total expenditure under Railway Improvement Account during the year was £111,721.

Additions to Open Lines.—The expenditure under this heading during the year was £53,049, the principal works being—Signalling and interlocking, block-working, telegraph and telephone facilities, &c., rearrangements, Johnsonville (part), Ashburton (part), Kakariki (part), Prebbleton, Ohakune (part), Bennett's Junction; new locomotive-depot, Picton (part); rearrangement of engine-shed yard, Christchurch (part); alterations to sidings on No. 6 wharf, Lyttelton, consequent on reconstruction by Harbour Board; locomotive workshop additions, East Town, Gisborne, Addington; improved watering facilities, &c., Palmerston North, Otaki, Raurimu; goods-shed extension, Te Kuiti; boat-landing, new wharf, Picton; improved access to stockyards, Taupiri; improved drainage, Cross Creek and Petone; provision of public station at 5½ m., Huntly-Awaroa (part); crossing siding at 24½ m., Drury-Paerata; extension of sidings, &c., Ashhurst, Waimiha, Erua, Oamaru; alterations and additions to station buildings, Invercargill and Thorndon; additional refreshment-room accommodation, Frankton Junction, Marton, Palmerston North, Christchurch, and Oamaru; accommodation for repairs to rolling-stock, Wellington; additions to Locomotive Foreman's office, Frankton Junction; installing telephones and bells in refreshment-rooms at Mercer, Frankton Junction, Marton, Hawera, Palmerston North, Ashburton, Oamaru; asphaltting floors of coal-bins, Frankton Junction; car and wagon repair shop, Woodville; oil-store, Newmarket; installing 55 ft. turn-table, Palmerston North; provision of footbridge, &c., Kioreroa Bridge, Whangarei; electric lighting, Newmarket shops (part), East Town shops, Ashburton, Heathcote, and Kaiapoi; purchase of land, Taupiri, Marton, Haywards; purchase of house and land, Wyndham.

Miscellaneous Works.—Additions and improvements amounting to £8,006, and charged to working-expenses, were carried out. The works include—Additions to station buildings, sidings, yards, &c., Petone, Ladbroke's, Maewa, Centre Bush, Kensington, Dunedin; improved lighting (electric) station buildings, cottages, &c., Mosgiel, Burnside, Te Aroha, Picton; new houses at 5½ m., Huntly-Awaroa and Waverley; hot-water services installed in twenty-four houses; engine-shed