

APPENDIX.

MAINTENANCE.

Mr. F. C. Widdop, M.Inst. C.E., Chief Engineer, reports as follows :—

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

Permanent-way.—The quantity of relaying done is smaller than that carried out during the previous year. The decrease is due to the late arrival of materials on order. The relaying during the year has been as follows :—

	Miles.
Main line and branches, 40 lb., 53 lb., 55 lb., 56 lb., 65 lb., and 70 lb. rails relaid with 70 lb. material	54 $\frac{1}{4}$
Main line and branches, 40 lb., 52 lb., and 53 lb. relaid with 55 lb. material ..	8 $\frac{3}{4}$
Main line and branches relaid with second-hand 53 lb. and 56 lb. material removed from main line	5 $\frac{1}{4}$
Total relaid for the year	68 $\frac{1}{4}$

Sleepers.—The number of new sleepers placed in the track during the year was 189,720.

Ballasting.—155,300 cubic yards of ballast were placed on track.

Slips and Floods.—Slips and floods of extensive nature were experienced in the North Island during the year. Serious damage to the track, and dislocation of traffic, was caused on several lines.

Excessive rainfall in April caused many slips on the North Auckland line, through traffic being interrupted from the 3rd April to the 13th May. Special gangs were occupied for several months clearing away the slips, and the work of repairing the damaged track took some months longer. Slips also occurred in the Auckland District during May, on the Waihi and Thames Branches, traffic being interrupted for several days. In the Ohakune district slips and washouts occurred on the main line during April, June, August, and September. The engine of the express train from Wellington was derailed through running into a slip near Kopaki on the 8th April.

In the Taranaki District the portion of the Toko Branch between Pohokura and Whangamomona was completely blocked for traffic from the 5th April to the middle of July by slips caused by exceptional rainfall. Slips and washouts near Mokoia blocked the main line for five days in April, a temporary bridge having to be erected over one portion of the track washed out. A flood covered several miles of the Foxton Branch during November, interrupting traffic for two days. Traffic on the Rimutaka Incline was blocked by slips from the 1st to the 7th November. On the Napier main line also several large slips interrupted traffic for several days in November.

Several slips and washouts occurred on the Picton Section during this month, dislocating traffic. The engine of a special train was derailed near Riverlands on the 1st November owing to a pier of a bridge being undermined by a flood.

The damage done to the Napier-Eskdale line by flood-waters during the previous year was made good by the placing of 26,000 cubic yards of filling on the track.

In the Canterbury District about ten thousand willows were planted to prevent river encroachment between Cass and Arthur's Pass. On the Westland Section over 3,000 tons of stone were used for river protective works.

Bridges.—These have been maintained in good order. Repairs and renewals have been carried out at a large number of bridges. A number of bridges of timber construction were replaced by structures of steel. A considerable amount of bridge-strengthening to allow heavier engines to run is being carried out on a number of lines.

Water-services.—These have been maintained in good order. A number of improvements have been made, and additional storage vats provided.

Wharves.—The wharves belonging to the Department have been efficiently maintained. On Lake Wakatipu the jetty at Bob's Cove has been rebuilt, and the wharf at Glenorchy was overhauled and repaired.

Buildings.—Extensive renewals and repairs have been effected. The station building at Te Horo, and dwellings at Owango and Maheno, which were destroyed by fire, have been replaced.

Station-yards.—Siding extensions and rearrangements have been carried out and additional accommodation provided at a number of stations.

Railway Improvements.—The total expenditure under the Railway Improvement Authorization Account during the year was £131,196, as against £10,827 last year.

The preliminary work on the Auckland-Westfield deviation was completed, and the actual construction was well under way by the end of the year. Considerable earthwork was done in connection with the rearrangement of Auckland station-yard. The rearrangement of Paeroa station-yard, including a new bridge over the Ohinemuri River, was put in hand, and good progress is being made. The Dunedin-Ravensbourne deviation and duplication were practically completed, and traffic will shortly be diverted on to the new line. Preliminary work was proceeded with in connection with the new station-yards at Frankton, Palmerston North, Wellington, and Christchurch, and also the duplication of line between Penrose and Papakura. The strengthening of bridges between Oamaru and Dunedin is now in hand.