MAINTENANCE.

Mr. J. Coom, Chief Engineer, reports as follows:-

Permanent Way.—The track has been maintained in good condition and there is a general

improvement in all the districts.

Fifty-eight miles of track were relaid with 70 lb. rails. I am proposing to relay at least one hundred miles for the year 1904-5. As in the previous year, second-hand 52 lb., 53 lb., and 56 lb. rails taken up on main lines have been relaid on branch lines, sixteen miles and a half having been done.

On most of the main lines of the colony the weight of rails is sufficient for the classes of rolling-stock now running, but this is not the case on several of the branch lines. On some parts of the main lines it will be necessary to relay with heavier rails before larger engines, which are required to provide for the increased traffic, could be used.

During the year we have relaid 352,295 sleepers, of which 39,527 were imported hardwood,

and the balance, 312,768, native timber.

The creosote plants at Woodville and Invercargill have been worked during the greater part of At Woodville 36,436 sleepers were treated, and at Invercargill 45,360, making a total of 81,796. A fair supply of sleepers for treatment has been procured, and stacked for seasoning.

The expenditure for sleepers during the past year, exclusive of laying, was £61,056, showing a

reduction of £15,832 on the previous year.

The efforts which have been made during the past few years to overtake sleeper-renewals have placed us in a fair position, and I anticipate that the expenditure under this head will be reduced in the future.

On track-renewals we spent the same as in the previous year.

Slips and Floods.—Several slips and floods with consequent delay of traffic occurred during the year, but none of them can be classed as serious except the wash-out at the Huatoki Creek, New Plymouth, the Mungaroa slip on the Wellington line, the erosion of the river-bed and banks at Stewart's Gully, and the damage by floods in the Otago and Invercargill districts during March. There were slips of less importance in the Manawatu Gorge, on the Hutt line near Belmont, and at the Eyre Creek on the Kingston Branch.

Traffic was interrupted by snow in parts of the Dunedin district in July.

Ballasting.—The Gates stone-crushing plant at Mosgiel still continues to give great satisfaction.

Bridges.—Bridges have been maintained in good condition.

The Ngaruawahia, on the Auckland Section; the Aramoho, Wangaehu, and Waiwakaiho, in the Wanganui district; and a number of smaller structures in the several districts have been strengthened to carry heavier engines.

The expenditure on repairs and renewals was £59,186, as against £63,728 in the previous year. Signals, Interlocking and Block-working.—The Signal Engineer's report, attached, gives the

details of the work which has been carried out.

The results of the installation of these safety appliances continue to give great satisfaction, and it is to be hoped funds will be found to carry on this important work.

Water-services.—These have been maintained in good order.

Considerable alterations and additions have been made to the services throughout the colony. Wharves .- Nothing calling for special mention has been undertaken during the year. The structures have been maintained in good repair.

Buildings.—New buildings have been completed at Dannevirke, Kaiapoi, and Fairfax.

The Bluff Station is well on towards completion, and the Dunedin Station, which is a large work, is in hand. The foundations and temporary works are finished, the bulk of the stone quarried, and masons are now employed in building.

At several other stations considerable alterations have been made to meet the growing wants

of the Traffic Branch.

Turakíua Station building and Stationmaster's house were burnt down on the 19th March.

The Departmental Offices in Wellington are completed, and were occupied by the staff in

November. The accommodation provided is in every way satisfactory.

Miscellaneous Works.—Additions and improvements have been made during the year amounting to £13,566, which has been charged to working-expenses. The principal works are as follows: Improved coaling accommodation, Frankton; stock-yards, Hangatiki; siding-extension, Pakipaki; additional siding accommodation, Middleton; water-service, Waihao Forks; additions to dwelling, Studholme; office for Car and Wagon Inspector, Dunedin; removal of central filling, George Street Pier, Port Chalmers; siding alterations, &c., for interlocking, and additions to stock-yards, Balclutha; houses for surfacemen, Aitcheson's and Borton's; additions to Stationmaster's house, Milton; oil-engine, Mosgiel; replacing 50 ft. turntables with 55 ft. at Christchurch, Oamaru, Palmerston, and Dunedin; platform and shelter-shed, Eyre Creek; siding alterations, Invercargill and Bluff; lengthening bridge at 3213 miles, M.L., Hurunui-Bluff Section; removal of creosoteworks from Woodend to Kew; additions to workshops, Greymouth; siding and stock-yards, Totara Flat; additions to Stationmaster's house, Hokitika; siding alterations, Seddonville; coal-shed and additional siding, Waimangaroa; additions to Merchandise Wharf, and siding alterations, Westport; building six portable huts for Wellington-Napier Section; and purchase of Priestman

Additions to Open Lines.—The principal works carried out during the year are as follows:—Additions to Station-buildings, Station-yards, and Sidings: Auckland, Stratford (part), Foxton, Palmerston North (part), Waipukurau, Hatuma, Summit (completion), Lower Hutt (part), Danne-