

*Sleepers.*—304,755 sleepers were put into the track during the year.

A plant is being installed at Kew, near Invercargill, for the treatment of timber by the Powell preservative process. It is anticipated that our softer timbers, and some of our harder but less durable timbers, can be satisfactorily treated by this process, enabling use to be made of a large quantity of such timbers, which, without treatment, are unsuitable for sleepers.

*Slips and Floods.*—Damage to lines and interruption of traffic from slips and floods have not been serious. The deviation at Poolburn, on the Otago Central Branch, has been completed.

*Ballasting.*—During the past year 376,300 cubic yards of ballast have been used on the track. The crushing-plant at Te Kuiti has been constantly at work; others intermittently. Satisfactory results have been obtained with a machine ballast-loader recently purchased, and the use of such machines will probably be extended.

*Bridges, &c.*—Bridge structures have been maintained in safe condition. Mangatowainui (Napier district) steel viaduct has been completed, the Tongahoe (Wanganui district) new steel viaduct is in hand, and the Manawapou (Wanganui district) will be put in hand this year. This is the last of the high timber viaducts.

Several timber bridges have been rebuilt in ironbark, and a considerable number in rolled-steel joists. The Jetty Street overbridge at Dunedin has been redecked with reinforced-concrete slabs and wood blocking. Owing to the cost and difficulty in procuring first-class ironbark, the use of plate girders and rolled-steel joists is being considerably extended.

*Wharves.*—The new ferro-concrete wharf at Picton is in hand. At Nelson the dredging of new berths is completed, and extension of the wharf is approaching completion.

*Buildings.*—Station buildings have been rebuilt at several places, including those destroyed by fire at Otaki and Levin.

Obsolete and worn-out station buildings are being from time to time replaced by more suitable structures. Several platform verandahs have been provided.

*Grade Improvements.*—Surveys have been made for a number of grade easements on the North Island Main Trunk line. A start has been made at Tuakau, where the work includes complete rearrangement of the station-yard.

The cost of this work will be recouped by the increased capacity of the line, and it would be advisable to spend £25,000 per annum on it.

A deviation improving the grades has been started in connection with rebuilding the Manawapou Viaduct (Wanganui district).

*Miscellaneous Works.*—Additions and improvements were carried out during the year amounting to £15,174, which was charged to working-expenses. The principal works were: Additions and improvements at Mount Albert, Manurewa, Ruatangata, Mangaonoho, Penrose (part), Wellington, Kurow, Balclutha, and Edievale (part); additions to water-services at Ohingaiti, Upper Hutt, Milton, and Gore (part); erection of verandahs at Penrose, Papakura, Khandallah (part), Thornbury Junction, and Otautau; new houses at Waipahi (part) and Teremakau (part); additions to houses at Ngahere, Wai-iti, Ashhurst, Huntly, Waimate, Morven, Westmere, Tuakau, Newmarket, Masterton (part), Rotorua, and Waipara (part); erection of weighbridges at Bluff, Invercargill, and Waimangaroa Junction; provision of pay-office in goods-office, Auckland; connecting station buildings with city drainage, Nelson; shed for Railway Fire-brigade, Napier; fencing workshops, Napier; removal of goods-shed, Ruatapu to Greymouth; wash-out boiler-shed, Thorndon; office for Locomotive Foreman, Thorndon; additions repair-shed, Palmerston North; rearrangement station building, Pukekohe; metalling and fencing approach-road to station, Te Karaka (part); Morse wire, Thorndon—Palmerston North; installation of Synchronome electric clock, Dunedin Station; additions A shed, Christchurch; connecting yard closets and urinals with sewerage system, Christchurch; additions to library, Cross Creek; erection warehouse crane, Winton (part); shed for train-examiners, Hawera; six portable huts, Invercargill Section; provision of party wall in Wanganui wharf-shed (part); erection of 50 ft. turntable, Wanganui; new station building, Kawakawa; social hall, Wellington (part); extension of engine-shed, Waipukurau (part); wagon-repair shop, Taihape; approach-road, Motunaho; crane, New Plymouth; goods-office, Hastings; installation of acetylene gas, Upper Hutt (part); shifting cottages from Broken River to Staircase (part).

*Additions to Open Lines.*—The cost of these works, charged to capital, amounted to £112,852. The principal items were as follows:—

Signalling, interlocking, block working, &c. Additions to station buildings, station-yards, and sidings, Auckland, Mount Eden, Mount Albert, Henderson, Penrose, Westfield, Otahuhu, Papakura, Buckland, Tuakau, Mercer, Frankton Junction (completion), Hamilton, Morrinsville, Otorohanga, Te Kuiti, Taihape, Palmerston North, Linton, Shannon, Levin (completion), Stratford, Thorndon, Christchurch, Papanui, Timaru, Milton, and Stillwater.

*Miscellaneous.*—Additions to water-services at Opua (part), Taumarere, Drury, Otorohanga, Taumarunui, Ohingaiti, Taihape, Rata, Palmerston North, Johnsonville, Waipara, Waitati, Invercargill, and Kumara; new houses at Taupiri, Ngahauranga, Hawarden, and Picton; purchase of land at Mount Eden, Ahuriri, Hastings, Upper Hutt, Hayward's, Ngahauranga, Wellington, Woolston, Ad-dington, and Lime Hills; overbridge, Taihape; wharf-extension, Nelson (part); new wharf, Picton (part); extension of subway, Marton (part); fencing line, Manawatu Gorge (part), North Island Main Trunk (part), and near Tinwald; deviation of line, Ravensbourne (part); crane, Hamilton; refreshment-room, Gore; additions to goods-sheds, Ohakune and Eltham; goods-shed, Waimiha; acetylene-gas lighting, Taumarunui; additions to workshops, Petone; weighbridges, New Plymouth, Bluff, and Invercargill; additional bridges, Thames Branch; new stations, Mangere Road and Kuru-puni; pneumatic riveting plant, Wellington; extension of Davis Street culvert and reclamation, Wellington; additions to engine-shed, Gisborne; installation of aerogen gas, Taihape; additions to engine-depot, Dunedin (part); extension of platform, Invercargill.