

2,357 modern steel axles were placed under cars, vans, and wagons during the year in substitution for old iron axles, and by this means the carrying-capacity was increased by 2 tons per wagon. The sides and ends of a large number of high-sided wagons were raised, thus increasing the capacity of this type of wagon.

The seating-accommodation of second-class carriages on mail and express trains is being improved by substituting chair-seats for the longitudinal seats previously in use. Cars of all classes are being fitted with platform gates and gangways. Additional lavatory accommodation has also been provided, and improved lighting is being provided on the smaller sections by substituting acetylene-gas for the old type of oil-lamps. The amount spent on new and improved machinery for the workshops was £27,495.

118½ miles of track were relaid, 86½ miles of main line with 70 lb. steel rails and 32 miles of branch line with steel rails taken out of the main lines. The labour troubles in the United Kingdom delayed delivery of the material on order, thus retarding relaying operations. Second-hand rails are also being utilized to provide check-rails on some of the sharp curves, and it is anticipated that the wear on the outer rails of the running-track will be considerably lessened by this means.

287,383 sleepers and 372,000 cubic yards of ballast were used in maintaining the track during the year.

A large number of works were carried out during the year for the purpose of improving the facilities and increasing the accommodation. They comprised enlarging station buildings, erection of verandahs, weighbridges, houses for staff, water services, stockyards, fencing, social halls for staff, goods-sheds, lighting, and sanitary arrangements. Other works intended to promote the public convenience and facilitate the operations of the Department were in hand and well forward at the end of the financial year.

The signal and interlocking systems have been brought into operation during the year at Mercer, Woolston, Weedon's, Linwood, Washdyke, Taihape, and Thorndon; also at Kioreroa Bridge, Antigua Street (Christchurch), and Conon Street (Invercargill). A rearrangement of interlocking has been made at Abbotsford, Green Island, Burnside, Timaru, Addington, Penrose, and Auckland.

Fifty-four Tyer's electric tablet instruments were brought into operation on sections Rolleston to Washdyke, Onehunga to the Wharf, Waipiata, and Paremata. Automatic tablet-exchangers were fitted up at twenty-two stations.

Electric lock-and-block working was established between Christchurch and Heathcote, Templeton and Rolleston, and Burnside and Abbotsford. Twelve additional stations were equipped with fixed semaphore signals. The telegraph and telephone system was also increased by 345 miles of wire.

1,389 miles of line are now controlled by the Tyer's electric tablet, 38½ miles of double line by lock and block, and 21 miles by train staff and ticket.

The railway system of train-signalling by telegraph and telephones comprises 2,096 miles of poles and 5,640 miles of wire. The expenditure on these necessary adjuncts to safety since 1901 has been £278,546.

The whole of the railway appliances and equipment, comprising rolling-stock, machinery, track, bridges, buildings, and other structures, have been maintained in an efficient and satisfactory condition.

#### REVENUE.

The gross revenue for the year amounted to £3,676,509, and exceeded the estimate by £151,509 and the gross revenue for the preceding year by £182,327. Passenger revenue shows an increase of £81,531; season tickets, £14,173; coaching traffic, £9,544; goods and live-stock, £71,706; miscellaneous and rents, £5,373. The receipts per train-mile amounted to 8s. 9¼d., as against 8s. 6¾d. for the previous year. The earnings of the Lake Wakatipu steamers amounted to £6,669 as against £6,643 last year. The net earnings amounted to £433 per mile for the average number of miles open, and gave a return of 3.98 per cent. on the capital cost.