

Stationary Engines and Cranes.—The repairs and renewals were as follows :—

Description.	Number passed through Shona.	Re-erected.	Heavy Repairs.	Light Repairs.	Painted.	Touched up.	Boiler-repairs.					
							New Boiler.	Heavy Repairs.	Light Repairs.	New Tubes (Sets).	Tubes pieced (Sets).	Boilers patched.
Hand-cranes	17	...	5	12	5	8	...	...	...	...	...	...
Steam-cranes	50	1	9	40	3	4	1	...	4	...	...	...
Stationary engines	23	...	...	...	...	...	1	9	14	4	3	9
Pile-drivers and hoisting-engines	9	...	4	5	...	...	...	...	...	...	...	...
Pneumatic cranes	1	...	...	1	...	...	...	...	...	...	...	...
Oil-engines	1	...	1	...	...	...	...	...	...	...	...	...

Axles.—During the year 983 car, van, and wagon axles were replaced with modern steel axles : this number does not include new stock. The replacement of old iron axles with modern steel axles is being pushed on as expeditiously as possible. The steel axles increase the carrying-capacity of four-wheeled wagons by 2 tons.

The work of raising sides and ends of high-sided wagons is being pushed on as much as practicable. This addition to these wagons enables full loads of coal to be carried, and increases the usefulness of wagon stock.

Westinghouse Brake.—All new engines and rolling-stock built for the North and South Island Main Lines and Branches are equipped with the quick-acting Westinghouse brake before being placed in traffic. Efficient arrangements are in force for the examination and upkeep of the Westinghouse brake.

Car-lighting.—The oil-gas manufactured at the five separate Pintsch gasworks amounted to 8,270,930 cub. ft., costing 2s. 1-29d. per 100 cub. ft. The work of fitting cars with incandescent mantles is now practically completed.

Motor-cars.—Cars in service have been kept in good and efficient working-order.

Steamers.—The Railway Department's steamers on Lake Wakatipu have been maintained in good order.

Re-taring Wagons.—Whenever wagons are in workshops for repairs tare weight is checked and adjusted when necessary ; also, at intervals not exceeding twelve months the tare weight of all goods-wagons in service is checked and adjusted.

Cattle and Sheep Wagons.—The fitting of grated floors to the older wagons has made satisfactory progress ; the work will be completed during current year. All new wagons are fitted with grated floors before being placed in traffic. These grated floors are found to be a great improvement in wagons for carrying live-stock.

Renewals and Replacements.—During the year under review thirteen bogie wagons, specially for timber and coal traffic, were converted from twenty-six four-wheelers. Also two coal hopper wagons and 2,322 worn-out tarpaulins were written off and replaced by a similar number of new wagons and new tarpaulins respectively. In accordance with the practice of the Department the cost of the conversions, new wagons, and new tarpaulins was debited to working-expenses.

Train Running and Mileage.—There has again been a marked increase in train-mileage. Compared with 1909-10 the increase for 1910-11 is 251,909 train-miles, or equal to 3-19 per cent., and 264,043 engine-miles, being equal to 2-47 per cent.

The following table shows particulars of the expenditure per train-mile :—

Year.	Train-mileage.	Engine-mileage.	Cost, in Pence, per Train-mile.		
			Locomotive Branch.	Car and Wagon Branch.	Total.
1910-11	8,141,075	10,943,830	20-50	5-31	25-81
1909-10	7,889,166	10,679,787	20-37	4-98	25-35

MAINTENANCE.

Mr. J. Burnett, Chief Engineer, reports as follows :—

Permanent-way.—The track has been maintained in good condition. Relaying has been carried out as follows :—

	Miles.
Main line, 53 lb. and 56 lb., relaid with 70 lb. steel material	100
Branch lines, 30 lb. and 40 lb., relaid with second-hand 53 lb., &c., steel material	
removed from main line	40

Total relaying for the year 140

This is the greatest length yet relaid in one financial year. In view of the constantly increasing mileage and the age of many of the lines it is advisable to continue relaying at about this rate.