Stationary Engines and Cranes. - The repairs and renewals to stationary engines and cranes were as follows :-

· · · · · · · · · · · · · · · · · · ·						i		:			Boiler repairs.				
	Description .			Number passed through Shope	Erected.	Re-erected.	Heavy Repairs	Light Repairs.	Painted.	Touched up.	Heavy Repairs.	Light Repairs.	New Tubes (Sete).	Tubes pieced (Sets).	Boiler patched.
Hand-cranes Steam-cranes Hydraulic cra Stationary en Pile-drivers a	gines	 g-engines		28 46 1 19 9	1 1	3	8 16 1 1 2	20 26 4 6	1 10 2	10 10 	 1 4 1	2 15 2	· · · i 1	1	 7

Axles.—During the year 847 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 fourwheeled wagons by 2 tons.

The sides and ends of high-sided wagons are being raised to enable full loads of coal to be

carried, and this will further increase the usefulness of the wagon stock.

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

Car-lighting. — The oil-gas manufactured at the five separate Pintsch Gasworks amounted to 7,326,780 cub. ft., costing 2s. 2.73d. per 100 cub. ft. A large number of cars has been equipped with incandescent mantles, and the work on the remaining cars is being pushed on as quickly as possible.

Motor-cars.—Cars in service have been kept in good and efficient order. One new car was added

to stock during the year.

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

Retaring 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 goodswagons in service is checked and adjusted.

Cattle and Sheep Wagons.-New cattle and sheep wagons are all fitted with grated floors, and the older wagons are also being provided as quickly as practicable with the grated floors, consider-

able progress having been made therewith.

Grated floors for wagons carrying live-stock have been found to be a very great improvement.

Renewals and Replacements.—During the year under review two bogie cars were destroyed by fire at Fairlie Station; one old four-wheel brake-van, two coal hopper-wagons, and 1,890 worn-out tarpaulins were written off stock. These were respectively replaced with two 50 ft. standard cars, one 30 ft. bogie brake-van, two 8-ton standard coal hopper-wagons, and 1,890 new tarpaulins. In accordance with the practice of the Department, rolling-stock destroyed, sold, or worn out is written off, and replaced with standard vehicles, and the cost debited to working-expenses.

Train Running and Mileage.—There has again been a marked increase in train-mileage. Compared with 1908-9 the increase for 1909-10 is 430,930 train-miles, or equal to 5.78 per cent., and 236,958

engine-miles, being equal to 2.27 per cent.

There has been a reduction in the total cost per train-mile.

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

		!		1	Cost in	Pence per Train-mile	
Year.			Train-mileage.	Engine-mileage.	Locomotive Branch.	Car and Wagon Branch.	Total.
1909-10 1908-9	•••		7,889,166 7,458,236	$10,679,787 \\ 10,442,829$	20·37 20·22	4·98 5·34	25·35 25·56

MAINTENANCE.

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

Permanent-way.—The track has been maintained in good condition. During the past financial year relaying with heavier rails has been carried out as follows:---

Main line, 53 lb. and 56 lb., relaid v Branch lines, 30 lb. and 40 lb., relaid			 aterial	82
removed from main line	• •	••		31
Total relaying for the	year	 	 	113

Miles.