

workshops ; of this number 600 were added to stock, and twelve were to replace tarpaulins missing at stocktaking ; 696 worn-out tarpaulins were condemned and written off and replaced with a similar number of new tarpaulins.

The following table gives details of the work on tarpaulins for the year :—

Description.	Number passed through Shops.	Manufactured new.	Condemned and replaced with New Tarpaulins.	Repaired.
Tarpaulins	19,905	612	696	18,597

One thousand three hundred and fifty tarpaulins were being manufactured in the railway workshops at the close of year.

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

Description.	Number passed through Shops.	Heavy Repairs.	Light Repairs.	Painted.	Paint touched up.	Boiler-repairs.					
						Heavy Repairs.	Light Repairs.	New Tubes (Sets).	Tubes pieced (Sets).	New Firebox Tube-plate.	Boilers patched.
Hand-cranes	28	2	26	..	10	..	..	..	..	..	..
Steam-cranes	20	9	11	1	7	1	3	..	..	..	1
Stationary engines	22	2	1	..	..	6	16	2	3	1	7
Pile-drivers, hoisting-engines, &c...	9	2	7	1	3	1	5	..	1	1	2

General.—In addition to the cars, brake-vans, and wagons passing through workshops for repairs as mentioned above, during the year 18,339 cars, 5,201 brake-vans, and 63,554 wagons were repaired by staff at out-depots in order to keep vehicles out of service the shortest possible time.

Axles.—During the year 463 car, van, and wagon axles were replaced with modern steel axles. This number does not include axles for new rolling-stock.

Westinghouse Brake.—No progress was made during the year of equipping the balance of engines and rolling-stock on Westland Section with the Westinghouse brake, owing to want of material. Efficient arrangements are in force for the examination and upkeep of the Westinghouse brake. All new engines and rolling-stock built for sections upon which the air-brake is in operation are equipped with it before being put into service.

Car-lighting.—The oil-gas manufactured at the five separate Pintsch-gas works during the year amounted to 7,496,000 cubic feet, and cost to manufacture 4s. 2·42d. per 100 cubic feet, the increase in cost of production being principally due to enhanced cost of oil, &c.

On sections not provided with Pintsch gas all cars are lighted with acetylene gas.

Rail Motor-cars.—The Thomas transmission rail motor-car was out of commission during the year owing to repair parts not being obtainable, as mentioned in my previous report. The Westinghouse petrol-electric rail motor-car is still out of service owing to the reduced time-table still being in operation.

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

Renewals and Replacements.—During the year five second-hand tank engines and two wagons were sold ; also 696 worn-out tarpaulins were condemned and written off. To replace the engines and wagons sold new stock is under construction ; 696 tarpaulins were made to replace those condemned and written off.

Train Running and Mileage.—There has been an increase of 8,937 miles in train-mileage as compared with 1917–18.

The engine-mileage has decreased by 169,067 miles as compared with 1917–18. The decrease is principally due to the reduction in work-train services.

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.
1918–19	7,477,583	9,992,874	34·89	9·83	44·72
1917–18	7,468,646	10,161,941	31·42	9·10	40·52