Two new 5-ton steam-cranes are being made in Railway Workshops.

Axles.—During the year 2,095 car, van, and wagon axles were replaced with modern steel axles; this number does not include the new stock built. The replacement of old iron axles by modern steel axles of increased stength has been charged, as hitherto, against revenue, although it has enabled the capacity of the 6-ton goods-wagon to be increased to 8 tons, and 8-ton wagons to 10 tons.

Westinghouse Brake.—All new engines and rolling-stock built on Auckland, Wellington-Napier-New Plymouth, and Hurunui-Bluff Sections are equipped with the quick-acting Westinghouse brake before being placed in traffic, and effective arrangements are in force for the systematic examination and upkeep of Westinghouse brakes.

Car-lighting.—The oil and acetylene gas manufactured at the five separate Pintsch gasworks amounted to 4,812,177 cubic feet, costing 2s. 5·10d. per 100 cubic feet. By the introduction of incandescent inverted mantles a marked improvement has been effected in car-lighting, and arrangements have been made to equip all carriages with these mantles.

Workshops .- Various additions to workshop plant and appliances have been made during the

Motor-cars.—To connect Hanmer Springs with the railway terminus at Culverden a motor-car service was established during the year. Pending the building of bridges across the Hanmer, Percival, and Rogerson Rivers, the motor-cars at present run to Waiau Ferry only, a distance of eighteen miles, the remaining six miles of the journey being completed by coach.

Re-taring Wagons.—The tare weight of all wagons is checked each time a wagon is in the workshops for repairs; also, at intervals not exceeding twelve months, the tare of all goods-wagons in service is checked and adjusted.

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

Train-running and Mileage.—There has again been a very marked increase in train-mileage. Compared with 1906-7 the increase for 1907-8 is 295,820 train-miles, or equal to 4:38 per cent., and 487,797 engine-miles, being equal to 5.32 per cent.

The increased cost per train-mile is due to increased cost of wages, fuel, and materials. The cost of rebuilding old cars, vans, and wagons, together with the renewal of axles, was exceptionally heavy last year, and materially added to the cost of working.

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

					Cost in Pence per Train-mile.		
	Year.		Train-mileage.			Car and Wagon Brauch.	Total.
1907–8 1906–7			7,051,274 6,755,454	9,654,056 9,166,259	19·49 18·55	5·47 4·82	24·96 23·37

MAINTENANCE.

Mr. J. Burnett, Chief Engineer, reports as follows:-Permanent-way.—The track generally is in good condition. Relaying was done during the year as under:

Main line relaid with 70 lb. steel material				
,, 100 lb. ,,	•••	• • •	• • • •	$1\frac{1}{2}$
Total new material Branch lines, 30 lb. and 40 lb. relaid with				$99\frac{1}{2}$
material, &c., removed from main line				35
Total relaying	•••	• • •		$\overline{134\frac{1}{2}}$

Sleepers.—331,678 new sleepers put into track; 88,470 of these were imported hardwood; balance—243,208 native timber, 77,983 of which were creosoted.

The cost of track renewals, which includes all relaying, continues high, representing almost

one-third of the total expenditure on maintenance.

Slips and Floods.—No serious interruption to traffic was caused by slips or floods.

Ballasting.—363,246 cubic yards of ballast were used on the track during the year. The opening of a ballast quarry with crushing plant has been put in hand at Te Kuiti, and a stonecrushing plant has been installed in the Wellington district.

Bridges, &c.-Bridges and culverts have been maintained in safe condition, and a large

amount of renewals and strengthening has been carried out.

The principal works in hand were as follows: Strengthening Hamilton Bridge; approaches for new steel viaduct, Mangatewainui, on the Napier line; Rangitata North and Temuka Bridges, in the Christchurch district; the Mataura Bridge, Glenham Branch; and the Oreti Bridge, on the Mossburn Branch.