The following table gives particulars of repairs, &c., to tarpaulins for the year:—

Description.	Number passed through Shops.	Manufactured New.	Condemned and replaced.	Repaired.
Tarpaulins	8,278	391	642	7,245

Stationary engines and cranes: The following table gives particulars of repairs, &c., to stationary engines and cranes for the year:—

Type.	Number passed through Shops.	Erected new.	Thoroughly overhauled.	Heavy Repairs.	Light Repairs.	Painted.	Touched up.	Converted.	Boiler-repairs.					
									New Tubes.	Tubes pieced.	Boiler patched.	Heavy Repairs.	Light Repairs.	New Boilers.
Hand-cranes ...	26	2	1	4	19	3	1	...	...	...	...	...	...	...
Steam-cranes ...	49	1	1	15	30	6	1	2	...	...	...	1	7	...
Stationary engines ...	8	...	1	1	6	...	...	...	...	...	2	3	8	...
Hoisting-engines ...	3	...	...	1	2	1	1	...	...	...	...	...	4	..
Pile-drivers	7	...	2	3	2	1	...	...	...	...	...	...	...	...

The erection of two 10-ton hand and one 7-ton steam cranes was completed.

The expenditure per train-mile has been as follows:—

Year.	Train Mileage.	Engine Mileage.	Cost in Pence, Locomotive Branch, per Train Mile.	Cost in Pence, Car and Wagon Branch, per Train Mile.	Total.
1902–3	5,443,333	7,626,628	16·69	4·67	21·36
1901–2	5,066,360	6,996,765	16·64	4·71	21·35

The cost per train-mile is practically the same as it was the previous year.

The usual returns are attached.

I have, &c.,

A. L. Beattie,

Chief Mechanical Engineer.

The General Manager, New Zealand Railways, Wellington.

APPENDIX C.

ANNUAL REPORT ON THE MAINTENANCE OF THE NEW ZEALAND RAILWAYS.

Sir,— Chief Engineer's Office, Wellington, 1st April, 1903.

I have the honour to submit the following report on the maintenance of the New Zealand Railways for the year ending 31st March, 1903:—

Permanent-way.—The track has been maintained in good condition. During the year fifty-four miles of track have been relaid, 39½ miles with 70 lb. rails and 14½ miles with 56 lb. rails. The best of the second-hand rails taken up from the main lines have been used to relay lighter classes of track on the branch lines, thirteen miles having been so relaid.

In my previous report I called attention to the necessity for increasing the rate of relaying, but I regret to say that this year, owing to the delay in obtaining rails, there was less done than for some three or four preceding years.

The remarks I made in my last report in connection with relaying still apply. The track now being relaid is not unfit for traffic, but if the relaying be not pushed on faster the expenditure in the near future must be abnormally increased to keep our lines in a safe condition.

The return of sleepers, attached to the Statement, shows that during the year we have relaid 384,469, of which 92,597 were imported hardwoods, and the balance, 291,872, native timbers. The expenditure on sleepers, exclusive of laying, was £76,888.

I regret the decision to cease the use of hardwood sleepers, for the reasons given when I recommended their importation.

Considerable delay has occurred in the delivery of the new creosoting plant for Woodville and repairing the plant at Invercargill, but a large number of sleepers have been procured in readiness for treatment and the work will be commenced early in the forthcoming year.

During the year there has been expended on track-renewals £176,494, as against £170,473 in the previous year, although a less amount of track has been relaid. The difference is accounted for by balances of rails and sleepers carried over, having been received too late to lay during the year, and by relaying with second-hand rails on the branches.