

The following new work is in hand: Erecting 100 four-wheel wagons; building seventeen bogie and 605 four-wheel wagons; also, twenty-five four-wheel wagons are being built under contract, by Seagar Bros., Auckland.

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

| Description. | Number passed through Shops. | New. | Condemned and replaced. | Repaired. |
|-------------------|------------------------------|------|-------------------------|-----------|
| Tarpaulins | 7,899 | 810 | 432 | 6,657 |

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 over-hauled. | Heavy Repairs. | Light Repairs. | Painted. | Touched up. | Boiler-repairs. | | | | | |
|---------------------------|------------------------------|--------------|-------------------------|----------------|----------------|----------|-------------|-----------------|---------------|-----------------|----------------|----------------|--------------|
| | | | | | | | | New Tubes. | Tubes pieced. | Boiler patched. | Heavy Repairs. | Light Repairs. | New Boilers. |
| Hand-cranes | 22 | 1 | 1 | 3 | 17 | 2 | 3 | ... | ... | ... | ... | ... | ... |
| Steam-cranes | 37 | 4 | 1 | 3 | 29 | 6 | 5 | ... | ... | ... | ... | 2 | ... |
| Stationary engines | 13 | 1 | ... | 4 | 8 | ... | ... | ... | ... | 5 | 3 | 9 | ... |
| Hoisting-engines | 4 | ... | ... | ... | 4 | 2 | ... | 1 | ... | ... | ... | 3 | ... |
| Hydraulic engines | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... |
| Totals | 77 | 6 | 2 | 10 | 59 | 10 | 8 | 1 | ... | 5 | 3 | 14 | ... |

The erection of two 10-ton hand and one 7-ton steam cranes is in hand.

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. |
|---------------|----------------|-----------------|---|--|--------|
| 1901-2 | 5,066,360 | 6,996,765 | 16.64 | 4.71 | 21.35 |
| 1900-1 | 4,620,971 | 6,250,766 | 15.24 | 4.75 | 19.99 |

The increased cost per train mile is principally due to the high price of fuel. The average rate per ton under 1900-1 contracts was 16s. 2d., whilst under 1901-2 contracts the average price was 18s. 9d.

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 NEW ZEALAND RAILWAYS.

SIR,—

Chief Engineer's Office, Wellington, 1st April, 1902.

I have the honour to submit the following report on the maintenance of the New Zealand railways for the year ending 31st March, 1902:—

Permanent-way.—The track has been maintained in good condition.

Since my last report the new standard 70 lb. rails have come to hand, and during the year a total length of 40½ miles of track have been relaid with rails of this class, in addition to 28½ miles with 55 lb. and 56 lb. steel rails, making in all sixty-nine miles, or four miles and three-quarters more than was done during the previous year.

I would once more call attention to the pressing necessity for increasing the rate of relaying. By a return prepared some two or three years since it was shown that to keep pace with our requirements we should relay at least a hundred miles a year. For the past two years we have laid less than seventy miles a year, so that we are gradually getting into arrear with this work. It must not be inferred that the track is absolutely worn out and unsafe for traffic; but unless relaying proceeds at a faster rate the time when heavier rolling-stock can be used on some parts of the main lines and on branch lines will be much longer deferred. The necessity for an increase in the relaying is evidenced by the greater number of rails broken under traffic as compared with past years.