

APPENDIX B.

ANNUAL REPORT UPON THE WORKING OF THE LOCOMOTIVE BRANCH, 1902-3.

SIR,—

Chief Mechanical Engineer's Office, Wellington, 16th May, 1903.

I have the honour to furnish the following report on the working of the Locomotive Branch for the year ending 31st March, 1903 :—

The engines, rolling-stock, machinery, and plant have been maintained in good and efficient working-order.

The locomotive stock has been increased during the year by ten new engines, built in New Zealand Railway workshops, and comprised two heavy tender engines (Class B type) and eight tank engines; four of Class Fb type, two of Class La (replacing two old engines sold), and two Class Wa passenger engines.

These additional locomotives increased the total tractive power by 123,696 lb., or 3·66 per cent. The new stock and new boilers in hand will still further increase the tractive power by 202,085 lb., or 5·99 per cent.

The replacing of old types of locomotives by those of more suitable design and greater tractive power is being done as expeditiously as practicable.

To cope with the growth of traffic over the Rimutaka Incline two Class B engines were converted to Class Wb, and put into service between Cross Creek and Summit. These engines have done efficient work on the incline.

There has been a large increase in the mileage run as compared with the preceding year, the increase in train-miles being 376,973, equal to 7·44 per cent., and engine-miles 629,863, equal to 9 per cent.

The North Island contract for the equipment of rolling-stock on Auckland and Wellington-Napier-New Plymouth Sections with the Westinghouse automatic air-brake is practically completed. The Westinghouse brake is now in regular use on all trains on both of these sections.

A contract for equipping with the Westinghouse brake engines and rolling-stock on the Hurunui-Bluff Section has been entered into, and the Westinghouse Brake Company will commence the work at an early date.

On 31st March, 1903, there were in the North Island 151 locomotives, 296 carriages, 117 brake-vans, 3,729 wagons, and five travelling cranes fitted with the Westinghouse air-brake. In the South Island 70 locomotives, 141 carriages, 20 brake-vans, and 75 wagons were similarly equipped.

Boiler repairs and renewals are in a satisfactory position, the work being well up to date. The new work in hand at close of year consisted of one D, three F, one J, three K, two T, and one U, or a total of eleven locomotive boilers.

During the year 1,223 car, van, wagon, and crane axles have been renewed.

An electric-lighting plant has been installed at Addington workshops, and a considerable proportion of the buildings are now equipped with arc and incandescent lamps.

During the year twenty-nine cars were fitted with Pintsch gas, making a total of 636 vehicles fitted to date.

The Pintsch gas manufactured at the five separate gasworks totalled 2,598,510 cubic feet, costing 2s. 3½d. per 100 cubic feet, the increased cost of production being due to repairs and renewals to plant and appliances, and the increased price of gas-oil.

Small auxiliary plants are under erection at Christchurch and Dunedin for the purpose of producing acetylene-gas, it being intended to use a suitable admixture of oil and acetylene gas, and thus greatly increase the brilliancy of the light.

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

Particulars.	Number.	Type of Engine.
Number passed through shops	395	160 tender engines, 187 tank engines, 30 single Fairlies, 2 double Fairlies, 6 Fell engines, 8 engines for Public Works Department, and 2 engines for Castlecliff Railway Company.
Built new	10	2 tender engines, 8 tank engines.
Converted or rebuilt	2	2 tender engines to tank engines.
Thoroughly overhauled	34	8 tender engines, 22 tank engines, 2 single Fairlies, 1 Fell engine, and 1 engine for Public Works Department.
Heavy repairs	138	57 tender engines, 56 tank engines, 13 single Fairlies, 1 double Fairlie, 5 Fell engines, 4 engines for Public Works Department, and 2 for Castlecliff Railway Company.
Light repairs	211	93 tender engines, 99 tank engines, 15 single Fairlies, 1 double Fairlie, and 3 engines for Public Works Department.
Painted and varnished... ..	103	49 tender engines, 49 tank engines, 3 single Fairlies, 1 engine for Public Works Department, and 1 for Castlecliff Railway Company.
Touched up and revarnished	65	27 tender engines, 32 tank engines, 4 single Fairlies, 1 engine for Public Works Department, and 1 for Castlecliff Railway Company.