

## LOCOMOTIVE.

Mr. A. L. Beattie, Chief Mechanical Engineer, reports as follows :—

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

*Locomotives.*—The number of locomotive engines on 1st April, 1903, was 372, the number on 31st March, 1904, was 377. Six new engines were built during the year, and one old tank engine, Class L, was sold. The new engines built comprised one Class B tender engine for heavy goods traffic, one Class U engine for mixed traffic, and four tank engines—two of Class Fb type, one Class Wa, and one Class L engine. This L engine replaced the old engine sold.

The new locomotives, together with boiler renewals, increased the total tractive power by 72,887 lb., or equal to 2·08 per cent.; the new engines building, and boilers under construction, when completed, will still further increase the tractive power by 328,328 lb., or an additional 9·19 per cent.

In the New Zealand Government Railway Workshops up to date 23 tank and 15 tender, making a total of 38 locomotive engines, have been built; also 24 old locomotives have been rebuilt with greatly increased tractive power.

Four hundred and seventy locomotives passed through the workshops during the year, details as follows :—

Particulars.	Number and Type.					
	Tender Engines.	Tank Engines.	Fell Engines.	Fairlies.		Total.
				Single.	Double.	
Number passed through shops ...	198	226	8	34	4	470
Built new ...	2	4	...	...	...	6
Converted or rebuilt ...	...	12	...	...	...	12
Thoroughly overhauled ...	14	18	...	2	1	35
Heavy repairs ...	69	73	8	16	3	169
Light repairs ...	113	119	...	16	...	248
Painted and varnished ...	41	54	...	4	...	99
Touched up and revarnished ...	52	51	...	8	1	112

Included in above return are 5 engines repaired for Public Works Department, and 1 engine for Castlecliff Railway Company.

The following new locomotive engines are under construction in Government railway workshops, viz.: one Class E compound double-ender tank engine for Rimutaka Incline traffic, and ten Class Wf tank engines: total, eleven.

In addition to above, ten Class Wf tank engines are being built under contract by Messrs. A. and G. Price at Thames. A contract was let to this firm during the year, and satisfactory progress has been made with the work to date.

*Boilers.*—Boiler-repairs, renewals, and new boilers are in a satisfactory position and well up to date. Seven new boilers were constructed. The following statement gives an outline of the work done during the year :—

Description.	Number passed through Shops.	Built new.	Heavy Repairs.	Light Repairs.	New Tubes.	Tubes pieced.	New Smoke-box Tube-plates.	New Fire-boxes complete.	New Fire-box Tube-plates.	New Barrels.	Boilers patched.
Boilers ...	185	7	81	97	46	24	3	2	2	1	62

Sixteen new locomotive boilers are in hand, consisting of one Class E, three Class F, one Class J, one Class T, and ten Class Wf boilers.

*Carriages.*—The car-stock on 1st April, 1903, consisted of 751 cars: 5 old 4-wheel cars, Class D, were written off and replaced; sixty-three new bogie-cars were built: and the car-stock on 31st March, 1904, consisted of 809 cars.

The new stock built has increased the passenger-seating accommodation by 10·45 per cent.

Thirty-seven cars were fitted with lavatories, making a total of 269 cars so equipped to date.

Fitting second-class compartments of bogie-cars with cushion seats is nearing completion. The total number fitted to end of year was 395 cars.