

LOCOMOTIVE.

Mr. H. H. Jackson, Chief Mechanical Engineer, reports as follows:—

The engines, rolling-stock, plant, machinery, and appliances have been maintained in thoroughly efficient working-order, details of the work done being as follows:—

Locomotives.—On the 1st April, 1915, there were 557 engines in service, and on the 31st March, 1916, there were 585 engines. Eight second-hand tank engines were sold and written off. Thirty-six new engines were added to stock. Of the new engines added to stock fourteen were built in the Government railway workshops and comprised four “*Pacific type*” simple superheated tender engines, Class AB, and ten 4-6-4 (“*Baltic type*”) heavy tank engines, Class Ww; twelve 4-8-0 simple superheated heavy tender engines, Class Bb, were completed under contract with Messrs. A. and G. Price (Limited), of Thames, and ten 4-6-2 (“*Pacific type*”) simple superheated tender engines were imported from the Baldwin Locomotive Works in America.

In the Government railway workshops to date 155 engines have been built, and twenty-four old locomotives have been rebuilt to modern designs.

Seven hundred and forty-one locomotives passed through the workshops during the year, the details of work done being as follows:—

Particulars.			Number and Type.					Total.	
			Four-cylinder "Balanced-compound" Tender Engines.	Tender Engines.	Tank Engines.	Fell Engines.	Fairlies.		
							Single.		Double.
Number passed through shops ...			85	234	401	5	15	1	741
Built new			...	4	10	...	...	...	14
Erected			...	10	...	...	...	...	10
Re-erected			...	...	15	...	...	...	15
Thoroughly overhauled			12	37	40	...	1	...	90
Heavy repairs			29	53	91	5	9	1	188
Light repairs			44	130	245	...	5	...	424
Painted			32	59	56	4	3	...	154
Paint touched up			26	91	44	...	4	...	165

Included in above are six engines for private lines and one engine for the Public Works Department.

At the close of the year there were under construction in the railway workshops thirty-six engines, consisting of sixteen “*Pacific type*” simple superheated tender engines, Class AB, and twenty heavy tank engines, 4-6-4 type, Class Ww. Under contract with Messrs. A. and G. Price (Limited), of Thames, there were sixteen 4-8-0 type simple superheated tender engines to complete. An order for an additional ten of these engines was placed during the year with this firm, thus increasing the contract from twenty to thirty engines. Thus at the end of the year there were altogether in hand fifty-two locomotive engines.

The new locomotives added, together with boiler renewals, increased the total tractive power by 674,629 lb., or equal to 9·30 per cent. The new engines being built and the boilers under construction will, when completed, still further materially increase the tractive power.

Boilers.—The work on new boilers, renewals, and repairs has been kept well up to date. Twenty-three new locomotive boilers were constructed.

The following statement shows details of the boiler-work done:—

Description.	Number passed through Shops.	Built new.	Heavy Repairs.	Light Repairs.	New Tubes (Sets).	Tubes pieced and Second-hand (Sets).	New Fireboxes.	New Firebox Tube-plates.	Boilers patched.
Boilers ...	370	23	126	221	81	36	9	11	121

Thirty-five new boilers were under construction at close of year, and comprised thirteen Class AB, two Class F, and twenty Class Ww.

Carriages.—The stock on the 1st April, 1915, consisted of 1,397 cars, and on the 31st March, 1916, the number was 1,452 cars. Two cars were sold to the Public Works Department and written off. Fifty-six new bogie cars were built, and one petrol rail-motor-car was added to stock.