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The reorganization of the workshops, as a result of which engines are now returned to traffic with earlier despatch, and the improvements that have been made in transport arrangements whereby a greater mileage is now run by engines, have had the desired effect of giving more elasticity to the Department's locomotive stock.

It is anticipated that when the locomotives now under construction are placed in traffic the Department's requirements in respect of locomotive-power will be adequately met for some time to come, except for the replacement of a number of engines of obsolescent types which have been in traffic for periods extending from thirty-five to fifty years. A number of these engines are at present engaged in shunting services and are not capable of dealing economically with the work of the present day. These engines will be replaced by a standard type of high-powered shunting engine, the designs for which are now being prepared.

Designs are also being obtained for high-powered articulated engines of the Garratt type for

service on the heavy grades in the North Island.

CARRIAGES.

Forty-six cars and eighteen brake-vans were built in the Department's workshops during the year. Eight cars were sold, and five cars and two brake-vans were written off.

During the year a new sleeping-car was designed and exhibited at the Dunedin and South Seas

The car is 56 ft. by 8 ft., and is divided into nine compartments each containing two berths. The car is lighted with electricity, heated by steam, and has a lavatory-basin connected with hot- and coldwater services in each compartment. Special attention has been paid to the ventilation of the carriage.

This car is said to compare favourably with those in use in other parts of the world.

Arrangements are being made to build five of these cars in the Department's workshops and to call tenders for a further five.

Steady progress is being made with the fitting of carriages with electric lighting. One hundred and eighteen cars have been fitted to date, and it is expected that all main-line cars will be so equipped within the next two years.

Arrangements have also been made to fit main-line cars with emergency Westinghouse brakecocks for use by guards and passengers in cases of extreme emergency.

WAGON STOCK.

The following wagons were built in the Department's workshops and placed in traffic during the year :-

30 Class H four-wheeled cattle-wagons.

92 Class J four-wheeled sheep-wagons.

101 Class La four-wheeled (12 tons) high-side goods-wagons.

55 Class M four-wheeled (8 tons) low-side goods-wagons. 21 Class W four-wheeled refrigerator-vans.

6 Class U double-bogie goods-wagons.

46 Class UB double-bogie goods-wagons.

9 Class V double-bogie refrigerator-wagons.

7 Class ZP double-bogie covered goods-vans.

Total 299 four-wheeled and sixty-eight bogie wagons.

Seventy-five four-wheeled wagons were sold and forty old four-wheeled wagons were written off during the year.

The workshops are at present engaged on the following building programme:—

26 Class H cattle-wagons.

38 Class La high-side goods-wagons.

99 Class M low-side goods-wagons.

29 Class W refrigerator-vans.

 $\begin{array}{c} 25 \text{ Class X} \\ 35 \text{ Class XB} \end{array}$ ventilated goods-vans.

50 Class YB hopper wagons.

6 Class R $\left.\begin{array}{c} \\ \\ \end{array}\right\}$ bogie goods-wagons.

15 Class UB

2 Class Uc bogie tank wagons for bulk-petrol traffic.

5 Class Ug bogie horse-boxes.

 $\left\{ \begin{array}{l} \text{2 Class Z} \\ \text{3 Class ZP} \end{array} \right\}$ covered goods-vans.

Twenty additional tank wagons for bulk-petrol traffic will be put in hand during the year to the order of the various firms engaged in this traffic.

The speeding-up of train services and the provision of additional fast goods services has given the Department a quicker turnover of its rolling-stock, and has enabled it to cope more satisfactorily with "peak" demands.

RAIL-MOTORS.

The Board has conducted experiments during the year with self-propelled rail-cars, and although a thoroughly satisfactory vehicle has not yet been produced a certain measure of success has been attained. The "Sentinel" steam-car mentioned in the Board's report for last year has been tried out on the Wellington-Melling line. It has not, however, quite met the requirements of the traffic there, and it is therefore proposed to place it on a branch line where it should prove more suitable,