

Based on the capital value of locomotives as at 31st March, 1924, the sum of £79,423 should be spent annually on renewals or set aside in a Renewals Fund.

Multiplicity of Locomotive Types.

There are some forty-eight different types of locomotive in service on the New Zealand railways, some of which are very antiquated. With such a variety, standardization of parts is not practicable and must add to maintenance costs. The renewal of locomotives recommended should do away with a number of these types.

Boilers and Fireboxes.

The age of the boilers is far higher than any experience on English or American railways, the average age of those condemned being $27\frac{3}{4}$ years in New Zealand as compared with 16 in England. At the same time it was stated by the Chief Mechanical Engineer in evidence that the water is bad, and that, other than putting a composition into the boiler, no steps to combat this are taken. The only reason that can be given for this great age is that the engines are not getting the same amount of work in their lifetime as those in England or America; but, whatever the cause, the effect should be a lower maintenance cost per year and a speedier output for the locomotive.

Steel fireboxes are used, and these apparently also have an unusually long life as compared with copper boxes, and, under these conditions, the costs should compare favourably with railways using copper boxes.

Locomotive Coal.

In the Chief Mechanical Engineer's evidence he stated that Welsh coal was far better than any he could get either in Australia or in New Zealand, and that his experience showed that there would be a saving of 30 per cent. in coal-consumption. As it would appear that Welsh coal could be procured at practically the same price as Newcastle coal, and if the reduction anticipated by the Chief Mechanical Engineer is realized, there would be a saving of some £200,000 per annum on the purchase of Welsh coal.

As shown by the Chief Mechanical Engineer in his evidence he is responsible for selecting and recommending the coal that should be used. No doubt he will give due consideration after careful trials to what extent it is possible economically to use the New Zealand coal.

Running Department.

The running of both passenger and goods engines is under the control of the Locomotive Department. At the larger engine-sheds it is the practice to post a daily duty-sheet providing for the running of time-table and special trains, and showing the booking-on time of each of the men, the engine allocated, and the train to be worked. At the smaller stations a weekly list is in operation. In our opinion a weekly list could be advantageously adopted at all running-sheds. The existing arrangement of laboriously copying out each day the names of all the men and the trains they are to work occupies a great deal of valuable time, and, in addition, there are numerous telephone calls from the men as to what their duties are to be on the following day. From cases brought to our notice the special trains—after eliminating conditional trains—formed a small proportion of the train service, and arrangements could easily be made to adopt a weekly roster, probably resulting in a certain saving in staff.

Should occasion arise after an engine has left the engine-shed for it to be diverted from the train which it is booked to run, such alteration is arranged by consultation between the traffic train-running officer and the locomotive officer concerned. In our view this appears to be a satisfactory arrangement.

Responsibility of Locomotive Department in providing Engines.

The Locomotive Department is responsible for the provision of engines suitable for running the trains, in having engines ready to go into traffic at the recognized times at which they are required to enter the traffic yard, and in arranging the distribution of engine-power at various centres and terminal stations so that engine-power is available to cope with all traffic offering.