

The shortage of haulage-power is particularly felt in the North Island, the difficulties of the position being accentuated by the fact that a large amount of time is lost in obtaining the use of engines manufactured in the South Island and transferred to the North. It is desirable therefore to make provision for building locomotives in a railway workshop located in the North Island. I recommend the erection and equipment of a workshop for the building of locomotives at Newmarket, but it will take at least two years to complete the shop ready for operations. In the meantime, unless the position is faced in the manner recommended, the shortage of engine-power will go on accumulating and the transport business of the country will get into a very unsatisfactory condition. In connection with the expenditure involved in providing the workshops at Newmarket, I would mention the fact that the use of each engine transferred from the South Island to the North is lost for an average of twenty-eight days, and the expenses incidental to packing, unpacking, and reassembling amount to approximately £380 per engine. Fifty-four locomotives have been transferred from the South to the North Island during the past seven years. This has involved a cost of £20,520, apart from the loss of earning, which on a conservative estimate may be put in round figures at £46,000. Sea-freight charges involved an expenditure of £5,500, bringing the total debit for transfer of engines up to £71,000. On these facts it will be seen that the proposition to provide engine-building shops at Newmarket is commercially sound. It forms the only satisfactory solution to the engine-power problem, and will provide employment for an additional number of skilled artisans.

The standardization of the types of engines most suitable for future use is engaging attention. There are far too many types in use at the present time. Double-heading, which has to be resorted to very largely under the existing circumstances, is most expensive and objectionable, especially where superheated engines are employed through tunnels. The day when the smaller type of engine can be used with economy on the New Zealand railways is past; what is now required are powerful locomotives of standardized types.

Passenger-cars.

The passenger accommodation is insufficient to meet the requirements of the traffic. There are a number of cars under construction in the railway workshops, and an effort will be made to increase the output. I am not convinced that it is necessary at the present juncture to go outside the Dominion for cars, and I am anxious to avoid this if possible.

It would be uneconomical to provide cars sufficient to meet the heaviest demand made by rushes of traffic during the holiday season; nevertheless I am strongly of opinion that the practice of withdrawing a large number of wagons from traffic for utilization as passenger-vehicles is objectionable from both the departmental and the public point of view, and should be gradually restricted. To supplement the carriage-stock for use at rush periods vehicles of a special type suitable for the dual purpose of conveying passengers in cases of emergency and carrying goods at other times have been designed, being, in fact, an improved covered goods-van, with windows, ventilators, and lamps added. Vehicles of this type will provide more comfort when used in passenger service than the tarpaulin-covered trucks at present in use. The use of these vehicles will be extended if found suitable for the business, as the day is far distant when the whole of the requirements of passenger traffic can be provided for with carriage-stock.

The latest types of passenger-cars are designed on sensible lines, are comfortable, and well adapted to existing requirements. They are not luxurious, and are sometimes adversely compared with the passenger accommodation in the Old Country. Such a comparison is unfair unless it at the same time takes into consideration the difference between the passenger revenue of the two countries. The designs will be improved in some respects, but there are many necessities which should be provided on the New Zealand railways before we indulge in luxuries.

Railway Motor-cars.

A petrol-electric rail-motor-car was delivered and put into traffic on the 1st July, 1914, since which date it has been conveying passengers regularly between Thorndon and Johnsonville. No fault can be found with the engine supplied, it being to the power specified when this order was given in November, 1912, but the power developed is not sufficient for hauling the suburban traffic satisfactorily up the severe grades encountered in the neighbourhood of Wellington, Auckland, or Dunedin.

Undoubtedly rail-motors are the most convenient form of vehicle for dealing with suburban business, except at rush hours, and with a view to extending their use inquiries are now being made to ascertain whether suitable petrol-electric engines can be built, within the limits of our narrow gauge, of sufficient power to haul two large cars with passengers at a reasonable speed and economically up the grades such as those outside Wellington or Auckland.

Car-lighting.

The question of substituting electric lighting for gas on the main through trains is having consideration. Electric light has obvious advantages, but its installation on a large scale in New Zealand passenger-trains would involve too serious an expenditure to be contemplated at the present time.

In order to arrive at the cost of fitting the principal express trains and deciding on the best system to be adopted here I have ordered complete electric-lighting plant from the firms manufacturing the best-known systems. These will be fitted in New Zealand stock for experimental purposes, so that definite data can be obtained as to first cost of installation, cost of lighting and upkeep, as compared with gas lighting.