

the Commercial Agent, because the public are his particular care, therefore it is clear that the position of Commercial Agent will not be a sinecure in a country where grumbling is not yet a lost art. The Commercial Agent should be independent of the Chief Traffic Manager's Branch, as he will on numerous occasions have to take a somewhat divergent view from the Chief Traffic Manager in regard to traffic proposals, and for this reason he will be attached to the staff of the Head Office.

Maintenance Branch Organization.

This branch is satisfactorily controlled by the Chief Engineer, who has adequate staff to deal with the business transacted by the branch under normal conditions. There is, however, no margin to spare to meet the demands that will be made when the new works which are referred to in a later portion of this report are put in hand. To meet this contingency when the occasion arises, I purpose strengthening the professional side of the Chief Engineer's Office by a temporary addition in the shape of an Assistant Inspecting Engineer. By this arrangement the Chief Engineer will be relieved of a number of routine duties which can be carried out by the Inspecting Engineer, and be able to devote more time to personal supervision of the important works in progress in his branch and to making outdoor inspections.

Signal Engineer's Branch Organization.

The signalling and interlocking work is at the present time under the jurisdiction of the Chief Engineer, the immediate control of the practical operations being in the hands of the Signal Engineer, who is attached to the Chief Engineer's Office. This combination was quite satisfactory when the installation of the signalling and the interlocking systems was first undertaken. The work cannot, however, be said to come within the purview of what is ordinarily understood to be the duties of Maintenance officers, and in view of the dimensions to which signalling, interlocking, electric tablet, telephones, and telegraph have now attained, and the necessity for rapid extension of the signalling system, it is proposed to relieve the Chief Engineer of his present responsibilities in regard to the Signal Branch, and to place the latter under the entire control of the Signal Engineer, who will, however, still confer with the Chief Engineer on all matters which affect jointly the Maintenance and Signal Branches, as, for instance, interlocking of signals and points.

The new works which I am recommending herein will put a considerable strain on the present staffing of the Signal Engineer's Office. Up to the present time the Signal Engineer has himself performed the major portion of the duties, and been responsible for the whole of the arrangements connected with the present interlocking and signalling systems. There is no other officer attached to the Department capable of relieving him to any appreciable extent from the technical work he has been performing, and his outdoor supervision of this important section of the Department cannot therefore be as thorough as is desirable. The time has arrived when it is essential to appoint a fully qualified Assistant Signal and Interlocking Engineer, who will be capable of relieving the Signal Engineer of routine duties, leaving him to devote his energies and time to outdoor supervision and the more vital principles involved in the signalling and interlocking systems.

There has apparently been no opportunity for, and no possibility of, any officer connected with the Department obtaining the requisite training and experience in New Zealand. This is unfortunate, as it will compel the Department to go outside the Dominion to obtain a suitable man. The qualifications required in the Assistant Signal and Interlocking Engineer are—thorough workshop and drawing-office training, and experience in the supervision and erection of outside work on large British, American, or Australian railways on which extensive and up-to-date electric signalling and interlocking installations have been made. He must also be thoroughly conversant with mechanical, electrical, and electro-pneumatic systems, electric block working for single and double lines as applicable to areas in which train services are crowded, and have a knowledge of telephone and electric telegraph installations. I recommend that applications be invited for the position at an early date from qualified men in Australia, the British Isles, and America, and that the salary to commence be £400 per annum.

The staff of the Signal Engineer is being increased by the appointment of additional Signal Inspectors, signal-adjusters, and linemen to improve the maintenance and inspection of signalling-apparatus.

Chief Mechanical Engineer's Branch Organization.

The supervision of the Locomotive Branch is good in so far as the limits of the present staff organization will permit. The Chief Mechanical Engineer, who has control of the branch, is charged with responsibility for the condition of the whole of the rolling-stock equipment of the New Zealand railways, as well as with the supervision of the various railway workshops. He is, however, confined too much to his office, owing to his having no qualified assistant. To remedy this I propose to strengthen the Chief Mechanical Engineer's Office by adding to it a technical officer, who as Office Engineer will be capable of dealing with many of the questions of a technical character, thus relieving the Chief Mechanical Engineer of routine work, and enabling him to watch more closely matters that affect the administration of the branch. Until recently there were two qualified engineers attached to the Chief Mechanical Engineer's Office, so that what is proposed is to a certain extent a reversion to the previous standard of organization, the difference being that the Office Engineer to be appointed will be expected to take full control in the absence of his chief.

The great strides that have been made during the last few years in connection with locomotive practice and designs render it desirable to also strengthen the staff engaged in the Locomotive