

The question of further steps to be taken to effectively deal with the situation is now under consideration.

These uniform rates have been adopted in the following areas:—

*Auckland* and Newmarket to stations Otahuhu—Te Awamutu—Cambridge inclusive.

*Christchurch* to Kaikoura; Hawarden; East Oxford; Leeston; Rakaia and Ashburton.

*Timaru* to Albury or Cricklewood; and to Winscombe, Fairlie, or Eversley.

The uniform rates introduced represent a considerable reduction in our existing rates for goods of Classes A, B, and C and, with a few exceptions, traders who were using road transport for their higher-rated traffic in the areas above mentioned are now using rail transport for all goods. Investigations are being carried out in other areas where competition in similar circumstances is acute, with a view to a further extension of this system of rating.

In no cases are the "uniform rates" applied to low-rated traffic until the person or head of the firm concerned has been personally interviewed by the Commercial Manager or other suitable officer, and the conditions explained.

*Collection and Delivery.*—Under present-day conditions it must be recognized that the question of collection and delivery is of paramount importance. The Department has a parcels-delivery system in operation in the various centres, and, to supplement this, we recently introduced a modified form of collection in Wellington. In regard to goods traffic, a delivery system is now in operation in Frankton, Hamilton, and Cambridge, and a modified system in other centres. We also have working-arrangements with carriers in quite a number of districts. We will endeavour to extend our scheme of collection and delivery for goods traffic during the coming year. I will not consider our activities in this connection complete until we are in a position to quote door to door rates for any transport work that is of a nature that we might handle.

*General.*—During the year representatives of the Commercial Branch have attended many meetings of Chambers of Commerce and other public bodies in the various districts. First-hand information regarding railway matters is given, and every opportunity is taken to bring before the public by personal representation the many facilities for transport which the Department is in a position to provide.

#### LEVEL CROSSINGS.

The work of protecting level crossings as funds have permitted has been carried on during the year. Warning-devices were installed at eleven crossings, making the total number of crossings protected 109.

A phase of the level-crossing problem that has engaged our attention during the year has been the question of the signals that are given by crossing-keepers at level crossings. With the growth of the use of coloured light signals as applying to road traffic, confusion has developed as regards the meaning of the signal which it has been customary for crossing-keepers to show to road traffic to indicate the approach of the train. It is now generally recognized that green is an "all clear" signal and red a "danger" signal to road traffic as it is to rail traffic.

Owing to the difficulty that has arisen in this connection, we explored the possibility of devising some means whereby crossing-keepers would give a readily discernible and unequivocal signal to road traffic. Eventually a portable "stop" notice constructed of letters composed of small reflectors was designed and was submitted to and approved by a conference that had been called in connection with other matters by the Minister of Transport. Unfortunately, sufficient reflectors were not in the Dominion to enable the signals to be at once constructed, but an order has been placed and it is expected that the necessary material will arrive shortly. The work of making the signals will be at once put in hand, and, as soon as completed, the necessary change in the method of signalling by crossing-keepers at level crossings will be brought into operation.

Another aspect of level-crossing protection to which we have given consideration during the year has been that of devising a means whereby continuous protection might be given at crossings at which crossing-keepers are located. Generally speaking, crossing-keepers are not on duty for the whole of the twenty-four hours in each day, and there is therefore a period at which the crossing is not protected. In America the difficulty has been overcome by the replacement of crossing-keepers with signals, generally of the flashing-light type, worked either automatically or by a signaller at convenient points. The flashing-light signals give quite an effective warning of the approach of a train, and especially where there is more than one track crossing the road they are more effective than a crossing-keeper can be. There is also the advantage of giving warning for the whole twenty-four hours of the day. A still further advantage is to be found in the fact that they are less expensive than crossing-keepers.

A review of the crossings at which crossing-keepers are located is now being made with a view to determining those at which it might be advisable to replace the crossing-keepers with signals as above mentioned.

During the year we have continued to receive a large number of suggestions having for their object the prevention of accidents at level crossings. Generally, the suggestions have taken the line of some type of automatic appliance which will give the road-user notice of the approach of a train. In recent times the provision of gates, automatic or otherwise, has been more frequently suggested. In this connection it is interesting to note the tendency in the United States, where the level-crossing problem is probably more acute than in most countries, and where it has been more intensively studied. It is generally agreed that crossing bells have lost considerably in effectiveness by the increasing use of closed cars. Crossing-gates are regarded as expensive, and not effective, while the crossing-keeper is not always successful in preventing accidents, especially where more than one track is concerned.

The Railway Superintendents' Committee of the American Railroad Association appointed to study the question recommended the adoption of double flashing-light signals.