

The statistics of communication facilities are as under:—

	Miles.	Number.
Teleprinters .. .. .	.. .. .	6
Morse instruments .. .. .	.. .. .	89
Telephones .. .. .	.. .. .	3,676
Miles of wire .. .. .	20,095	..
Miles of poles .. .. .	3,178	..
Railway exchanges—		
Automatic .. .. .	.. .. .	11
Manual .. .. .	.. .. .	14
Public exchange connections .. .. .	.. .. .	662

*Level-crossing Alarms.*—The wig-wag alarm at Titirangi Road, New Lynn, has been removed following the construction of an overhead bridge; also the wig-wag at Croydon Road, Glen Eden, due to the crossing being closed in connection with the Seroggy Hill grade-easement work.

Crossing-alarm bells have been installed at Walters Road, Tironui, and at Seddon Road, Hamilton. The delivery of flashlight-signal equipment is awaited from overseas to complete these two installations.

The total number of level crossings fitted with automatic warning-devices remains the same as last year—viz., 123.

#### TRACTION.

*Wellington-Paekakariki.*—The working of trains by electric traction on the Wellington-Paekakariki section was commenced in July, 1940. In the initial stages of operation some trouble was experienced due to the corrosive action of smoke-fumes from steam-locomotives on the overhead equipment in the several tunnels between Wellington and Paekakariki, but apart from this the electric locomotives in service on this route have functioned satisfactorily.

*Wellington-Johnsonville.*—The substations and the overhead equipment of this section have continued to function satisfactorily without interruption. The use of an improved type of suspension in the tunnels where clearances are very close has reduced the contact wire wear.

*Otira-Arthurs Pass.*—The new rectifier substation at Otira to replace the existing steam-plant is now practically complete, and it is anticipated that it will be in operation at an early date. The local substation to supply the Townships of Otira and Arthurs Pass with electric power has been completed, and an order has been placed for an 11,000-volt cable for installation through the tunnel. The relocation of the positive feeder cable and renewal of the catenary wire in the tunnel has been completed.

#### MAIN WORKSHOPS.

The substations attached to the main workshops have been maintained in satisfactory condition during the year. The change-over of the supply to the Hutt Valley Workshops from the Public Works Department substation at Khandallah to that Department's substation at Melling is in hand.

#### GENERAL.

Lifts and cranes under the control of the Department have been regularly inspected and maintained. Several electrically-driven water-pumping plants for water-services were installed during the year. Electric lighting has been installed at stations and yards at Whakapara, Waiotira, Ruatangata (Springs), Te Papapa, Linden, Westmere, Raroa, and Ranfurly.

One hundred and fifteen departmental dwellings have been equipped with electric lighting.

Statistics of electrical equipment are as follows:—

	Number.
Number of houses electrically lighted .. .. .	3,291
Number of stations electrically lighted .. .. .	441
Number of substations .. .. .	23
Total capacity of substations .. .. .	15,890 kVA.
Number of station yards floodlighted .. .. .	15

#### ACCIDENT TO WELLINGTON-AUCKLAND "LIMITED" EXPRESS TRAIN NEAR MERCER STATION, 28TH OCTOBER, 1940.

On the morning of the 28th October, 1940, whilst negotiating a curve at a point some 30 chains south of Mercer Station, the locomotive hauling the usual over-night Wellington-Auckland "Limited" express train overturned. The overturning of the engine resulted in seven of the eight passenger-vehicles on the train being considerably damaged, while two of the day-passenger cars and the leading sleeping-car were partly derailed.

The driver and fireman of the train were killed outright as a result of the accident. Twenty-one passengers were injured, some severely.

This regrettable accident was made the subject of an investigation by a Board of Inquiry set up under section 63 of the Government Railways Act, 1926. After a thorough and exhaustive investigation the Board found that the overturning of the engine was due to it entering a curve of 8.2 chains radius at a speed of approximately 55 miles per hour. This speed was 25 miles per hour in excess of the authorized speed for curves of that radius and 5 miles above the maximum over-all speed limit of 50 miles per hour for express trains between Frankton Junction and Mercer as laid down in the working time-table. Answering a specific question addressed to it, the Board stated it was satisfied that the locomotive, cars, and guard's van were in first-class order and condition, that the permanent-way was well laid and maintained, and perfectly safe to travel over at the authorized speeds.