D.—2. xxxviii

SIGNAL AND ELECTRICAL.

All installations have been maintained in good order and condition.

The following is a summary of the principal activities of the Signal and Electrical Branch during the year:—

SIGNALLING.

Stratford-Okahukura.—Good progress has been made with the installation of automatic signalling on this route, and it is anticipated that it will be possible to commence automatic operation over a section of the line from Stratford in the near future. The centralized traffic-control equipment for the Taumarunui-Okahukura section is now being installed. When in operation the signals and points at Taringamotu (2 miles 65 chains north of Taumarunui) will be operated and controlled from Taumarunui).

Napier-Gisborne.—Orders have been placed for the overseas material required for this installation, and delivery has commenced.

Papakura-Horotiu Duplication.—Extensive line alterations have been made during the year, and double-line automatic signalling has been brought into use on the section between Horotiu and Ngaruawahia (3 miles 54 chains), superseding the existing single-line automatic signalling. Material for which tenders have been accepted is continuing to arrive from overseas, and sections of the work are being resignalled as progress of the work of duplicating the track permits.

Wellington New Station and Yard.—The new station was opened for traffic on 19th June, 1937, from which date all platforms were brought into use. All offices in the new building are now occupied, and lighting and power reticulation for all services is in use. With the exception of certain work of a minor nature, the interlocking of the new yard is now complete.

Wellington - Tawa Flat - Porirua.—Coincident with the opening of the new station double-line automatic signalling was brought into use between Wellington and Tawa Flat (8 miles 43 chains) an aff-electric interlocking installation being provided at Tawa Flat. The Junction points at the latter station (when switched "Out") are controlled from Porirua, special provision having been made for the relay interlocking installation at Porirua to perform this operation. The Tawa Flat - Porirua section (2 miles 37 chains) is single line with automatic signalling.

Porirua Packakariki.—The work connected with the installation of automatic signalling between Porirua and Packakariki, with centralized traffic control of the section from Wellington, is in hand. This work is being proceeded with in connection with the duplication of the main line between Plimmerton and Packakariki.

Wellington Johnsonville Electrification.—This installation was completed in readiness for the inauguration of electric multiple unit services.

Whakapara Opua.—The installation of tablet working and fixed signals on this section is in hand. The signals used are of the colour light searchlight type.

Christehurch Station.—Preliminary work in connection with the signalling and interlocking systems has been investigated. The shifting of the Signal and Electrical Depot from Christehurch to Addington has been commenced.

Frame-levers.—Frame-levers with facing-point locks were installed at forty-nine stations.

General. Works of less importance undertaken during the year included the provision of motor points at a number of crossing-loops, installation of electric power for signals at several stations, and the equipment of a number of stations and sidings with tablet locks.

A switch-locked service siding was brought into use at Blanket Bay between St. Leonards and Sawyer's Bay in connection with the duplication of the line.

Fixed home and distance signals of the colour-light type have been installed at Manunui and Taringamotu consequent upon these stations having been opened as switch-out tablet stations.

Alterations and additions to the existing signalling and interlocking systems have been carried out at Papakura, Ngaruawahia, Horotiu, Frankton Junction, Paekakariki, Plimmerton, and Ngahauranga.

The track circuiting of the Lyttelton yard was completed during the year.

Darfield and Sheffield were converted to switch-out interlocked stations on automatic signalling territory.

The total number of signalling installations in use throughout the systems is as follows:-

			M. ch.	Number.
Miles of single line automatic signalling		 	$189 \ 44$	
Miles of double line automatic signalling		 	$90 \ 13$	
Automatic crossing-loops		 		33
Automatic switch-locked sidings		 		38
Power interlockings		 		38
Mechanical interlockings		 		90
Interlocked tramway crossings				7
Mechanical fixed signals and Woods locked	stations	 		305
Tablet locked sidings		 		269

Block-working.—New tablet stations equipped for switch-out working were installed at Taringamotu and Manunui. Woodside, Prebbleton, and Kamabi were equipped for switch-out working, the installation at the latter station being of special design for switching out two adjacent stations.

Porirua Tawa Flat, Tawa Flat - Johnsonville, and Tawa Flat - Wellington (via deviation) tablet sections were cancelled during the year.