

difficulties were encountered by reason of sewer, water, and gas pipes, and the influx of water. Fifty-two large manholes and 46 footpath distributing-manholes were constructed, whilst 26½ miles of 3 in. ducts was laid ready to receive the cables. A start was made in July to utilise the underground system by drawing a 103-pair cable through to serve Kelburne subscribers prior to the arrival of the 306-pair cable. Several 306-pair cables, aggregating 375 chains, have since been drawn into position north and south of the exchange, and already over a hundred subscribers have been connected through them. Three hundred others will be connected similarly within a very short period.

The wiring and replacing of telephones in the new Parliament Buildings caused a large amount of work.

The requirements of the Board of Control in regard to electric-light permits also demand considerable attention. Four hundred and fifty permits were issued during the year, all of which necessitated visits of responsible officers to judge circumstances.

The lines have been overhauled and strengthened from Puponga to Nelson and branches, Mokihinui to Westport, Carter's Junction to Cape Foulwind, Westport to Inangahua Junction, Longford section from the Eight-mile to the new bridge and to Hope Junction, and the Hope Junction - Tophouse - Belgrove Section.

Morse was installed at Collingwood, enabling direct communication with Nelson. Karamea was also converted into Morse direct with Westport.

Ahaura and Brunnerton were converted from Morse into telephone offices.

Extensive bush-fires occurred in the Buller Gorge during March, doing considerable damage to the line there.

The Pelorous Sound line has been supplied with 2,000-ohms telephones, much improving the circuit. The Ross-Okarito line was also similarly dealt with. These telephones are of a special type suitable for long-distance working. They have a condenser so applied that the ringing is not interfered with when the receiver is off the hook.

The overhauling and strengthening of the main line from Kaikoura to Christchurch has been carried out. Spans have been shortened and angles doubled between Kaikoura and Waiau. The line is constructed of iron rails throughout this section. From Waiau to Kaiapoi the poles are of wood, and every fifth one has been doubled. Between Kaiapoi and Christchurch 30 ft. poles are in use. This section has also been overhauled and re-armed to accommodate subscribers' metallic circuits. South of Christchurch and as far as Hornby the line of 30 ft. poles has been shifted to make room for railway duplication. Beyond Hornby the line has been reconstructed to a point south of Hinds. Iron rails doubled have been used for poles, replacing 48 miles of wooden poles, spans all under 3 chains, and six-holed arms in place of two-holed. This makes a substantial line, quite fit to carry the increased load of five wires as far as Rakaia, and three beyond that station.

Reconstruction-work is being pushed forward towards Timaru, and two wires for the trunk telephone and one 300 lb. copper wire (Morse) are being taken along as the work progresses.

A party running a wire from Otira to Bealey Flat is strengthening the section generally as it proceeds, and the line will be in first-class order before winter.

A 52-wire metallic-circuit cable has been run between Christchurch and Lyttelton, and the 26 connections in use are working satisfactorily. One hundred and forty-nine chains of armoured cable laid underground in the Lyttelton tunnel is included in this work.

An exceptionally heavy snowstorm in July completely wrecked over a hundred miles of the Central Otago lines.

During the reconstruction, advantage was taken of the opportunity to move 32 miles of the old line between Pigroot and Wedderburn to the main road. New material was used throughout the greater part of the reconstruction.

The last of the Dunedin telephone earth circuits was converted to the metallic system on the 29th May, 1908.

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