

to confer great benefit, especially on the district immediately concerned, as it enables ground to be worked that would otherwise remain unprofitable, and so gives employment to a large number of miners who have made this part of the colony their home.

#### SURVEYS.

*Otago Central Railway.*—The working survey of the Otago Central Railway has been continued and completed, except the part between Hyde and Roughridge, which will not take long to complete.

*Passes of Southern Alps.*—A reconnoissance survey of the passes at the heads of the Rakaia and Hokitika Rivers has been made, which has afforded important and satisfactory results. There has also been a further examination of several northern passes, at the instance of the promoters of a company, in course of formation at Christchurch, for connecting Westland with Canterbury and the southern trunk line of railway. The heights of the passes thus determined are as follow:—

|                |     |     |             |           |     |     |     |             |
|----------------|-----|-----|-------------|-----------|-----|-----|-----|-------------|
| Whitcombe Pass | ... | ... | 4,180 feet. | Hope Pass | ... | ... | ... | 3,230 feet. |
| Mathias        | „   | ... | 4,230 „     | Lewis     | „   | ... | ... | 2,870 „     |
| Arthur's       | „   | ... | 3,014 „     | Ada       | „   | ... | ... | 3,300 „     |
| Hurunui        | „   | ... | 3,150 „     |           |     |     |     |             |

The distances from Brunnerton to Christchurch by several of the lines suggested would be about—

|                |     |     |            |               |     |     |     |            |
|----------------|-----|-----|------------|---------------|-----|-----|-----|------------|
| Whitcombe Pass | ... | ... | 184 miles. | Arthur's Pass | ... | ... | ... | 142 miles. |
| Mathias        | „   | ... | 184 „      | Hurunui       | „   | ... | ... | 151 „      |

The route by the Lewis Pass is longer, having in view Christchurch as the terminus; that by the Ada exceeds it by about thirteen miles, according to the character of the line adopted. None of the passes of the Southern Alps offers a fitting gradient on the western side, without a long detour or zigzags. A consideration that must not be lost sight of, when the proposals come to be practically dealt with, is the importance of the districts on either side to be opened and benefited by railway communication. The promoters of the projected railway advocate the route by the Ada Pass.

#### TELEGRAPHS.

The telegraph system of the colony is already so far advanced that but little in the way of addition has been found necessary during the past year.

Between Stony River and Opunake, the gap which has existed for several years has at last been filled up. The greater part of the work was performed by members of the Armed Constabulary Force. The total length of this addition to the line is twenty-eight miles.

From Motueka to Collingwood, a line has been constructed forty-eight miles in length, with an intermediate office at Takaka. This line is worked by the Edison-Bell telephone.

From Port Chalmers to Seacliffe, a line carrying two wires has been erected for the Railway Department. This line is the first in New Zealand on which old iron rails are used as poles, and, in point of cheapness and stability, is a great success. The line was erected at a cost of £16 16s. 8d. per mile.

From Riverton to Otautau, telegraph wires have been erected along the railway line, and offices opened at Thornbury Junction and Otautau.

The removal of the difficulties which so long interfered with the opening of the Komata Road, in the Valley of the Thames, will enable the Thames-Waikato telegraph to be shifted to a line on which the maintenance will be much more economical than in the very difficult country through which it is now carried.

#### PUBLIC BUILDINGS.

In the North Island, the principal buildings which have been completed during the financial year are the new Supreme Court and offices, and the Police Station, in Wellington. A considerable number of Police Stations have been erected in various parts of the country, as well as four new Post and Telegraph offices.