

The cost will exceed the appropriation by £37,400, of which £9,000 is for extra rolling stock, and the rest is due to the original insufficient estimates for formation having been adopted, while data for correcting them were not to hand.

#### MOERAKI TO DUNEDIN.

The most important work on this line is the Deborah Bay Tunnel, which is the key to the whole work. It is  $63\frac{1}{2}$  chains long, of which about one-half is finished.

Between the tunnel and the junction with the Port Chalmers Line is a short contract of about three miles in length of very heavy work. The contractor having failed, it will be re-let.

North of the tunnel, the Purakanui contract, of about eight miles, has been let.

The surveys of the rest of this line are nearly ready, and the work will be begun shortly.

#### DUNEDIN TO PORT CHALMERS.

This line has been worked by the Provincial Government, and, as before stated, is paying over 20 per cent. on the average cost of New Zealand railways. The actual cost of construction of the line cannot be ascertained, as it was built by a private firm and purchased by the Government.

#### DUNEDIN AND CLUTHA.

The first section to Green Island has been opened nearly a year, and the remainder will be opened in September.

The Chain Hills Tunnel has caused great trouble and expense. It was fully expected, from borings made, and from the nature of the cutting adjoining the tunnel, that solid rock would be found throughout. Instead of this, the rock has proved to be mica schist, so fractured and fissured that timber had to be employed throughout the whole length, and, with all precautions, the excavation has proved a very dangerous work. Brick lining has been found necessary throughout the whole length of the tunnel. At the entrances extensive slips have occurred, which have also added to the cost of the work. The total of these extras amounts to £25,000.

Fencing to the extent of £6,000 beyond the original estimate has been done. Extra culverts and bridges have cost £3,000.

Extra price of rails in England amounts to £11,000.

These items explain the excess of cost over estimate.

#### TOKOMAIRIRO AND LAWRENCE.

The principal work remaining unfinished on this line is the Glenore Tunnel. The contractor having failed to carry out the work, his contract was determined by the Government and re-let.

The date for completion is now 1st May, 1876.

#### CLUTHA TO MATAURA.

The bridge over the Clutha River has not been carried on with proper energy, and the Government have determined the contract. It will be re-let as soon as possible. The north abutment is nearly finished, and the material has been nearly all conveyed to the site of the bridge.

From the bridge to Clinton is not yet let, but the surveys are finished, and work will be shortly begun.

From Clinton to the Mataura the work is in hand, and will be finished early next year.

#### MATAURA TO INVERCARGILL.

The first section of this line was opened for traffic in February, 1874, and the second on 7th June, 1875, making 32 miles open out of 40 miles. The rest of the line will be finished shortly.

Great delay was caused by landslips in the Edendale cutting, at the twentieth mile from Invercargill. The slopes fell in several times, and had to be excavated again. A temporary loop line was made over the hill alongside the cutting, so as to allow the platelaying and ballasting to go on while the cutting was in progress.

The extra cost of these slips and of the loop line amounts to £7,500. Extra fencing to the amount of £6,500 has been done, and extra station accommodation to the amount of £9,500 provided.

When the estimates for this line were made the great rise in the cost of iron had only begun, and it was not expected to reach the height to which it afterwards attained. The cost of rails and rolling stock was under-estimated to the extent of £14,000.

#### WINTON TO KINGSTON.

Forty-six miles are under contract, on 22 miles of which the rails are being laid, and this length will be open for traffic in August.

The remaining length of 20 miles to Kingston will be placed under contract very shortly.

I have, &c.,

JOHN CARRUTHERS,  
Engineer-in-Chief.

The Hon. the Minister for Public Works.

### ENCLOSURES TO THE ENGINEER-IN-CHIEF'S ANNUAL REPORT.

#### Enclosure No. 1.

#### REPORT ON THE HARBOUR AT RIVERTON.

The ENGINEER-IN-CHIEF to the Hon. the MINISTER for PUBLIC WORKS.

HAVING by your directions visited and examined the Port of Riverton, I have the honor to report thereon as follows:—