

CANTERBURY.

Mathias Pass Road.—The track has been made from the grass flat above the Junction (L on Mr. Mueller's plan) to the cliffs at the mouth of Cañon Creek. It has been made from 4 to 5 feet wide throughout, except at a few bad rocky points, and very little work would make it fit for packhorse traffic. The total length constructed is four miles forty-three chains. As far as I am able to judge, there will be about two miles more to make to reach the Saddle. There are two very bad cliffs to pass. The rest of the ground presents no special difficulty; although the sidling is very steep, the ground is clear and free from all scrub, so that it will not take long to make a good foot track.

Cost of Work.—The cost of the works to date has been as follows:—

	£	s.	d.
Wages	731	2	10
Plant and tools	97	8	8
Carriage, horse-hire, and packing	128	19	4
Engineering	155	8	1
Total	£1,112	18	11

Of the plant there remains enough of almost everything to finish the work, and there will be a number of tents and a stock of useful tools on hand when the work is done. Unless any unforeseen difficulties occur, the track will be finished for the balance of the £1,500; but, in case it should not be sufficient, it would be advisable to have £200 more to draw on in case of need. I might have made some saving in the work had I at the first fully realised the difficulties of the work, and the fact that the Saddle could not be reached by the party from either side this season; in which case I should have worked with a smaller gang, and a considerable saving made in the item of carriage. The packing for a large gang, besides the conveyance of tools, coals, &c., engaged a number of horses, and was very expensive. As it was, I hoped all the time to be able to get round the Cañon Creek cliff before the snow fell; and had I been able to do so with the number of hands I had at work, I believe I could have easily finished to the Saddle.

Description of Track.—The track rises at a grade of 1 in 12 for 1 mile 38 chains throughout this length, the sidling is steep and the ground much covered with rocks; thence it runs over a rock-covered plateau, 20 chains, this length is comparatively level, but very rough; thence 15 chains of easy sidling-grade, 1 in 15, ground rocky. In the next section a fall of 1 in 10 for $3\frac{1}{2}$ chains, thence 20 chains grade falling at about 1 in 17, all easy sidling ground but much covered with rocks; from thence is run level, passing over a large face swept by avalanches, and over a snow channel. A better grade could be obtained by grading steadily down from C.; but the line would run through most difficult ground, as it would have to wind through moraines and very broken country. My line just heads the moraines and broken ground. To the cliffs of Cañon Creek is one steady rise, the grade varying from 1 in 15 to 1 in 17 throughout this length, the sidlings is very steep and rocky, the track runs through several snow channels and shingle slides, the last 36 chains is entirely through loose rock and shingle always on the move. During frosty weather rocks from the cliffs above frequently break away and roll down into the river.

A. DUDLEY DOBSON.

WESTLAND.

Mahitahi to Haast Road.—Length, 21 miles 30 chains; clearing, 33 feet; formation, 9 feet; metalling, 5 feet; 2 bridges, &c. Of this road 9 miles 30 chains were completed during the year ending 30th June, 1882, at a total cost of £2,779 0s. 5d.; and 11 miles 70 chains remain to be done during the present year, the contract price for which is £6,758 8s. 7d.

Mapourika to Gillespie's Road.—Length, 20 miles; clearing, 33 feet; formation, 9 feet; metal, 5 feet; 2 bridges, &c. Only 2 miles 65 chains of this road were contracted for during the past year, contract price, £570 10s. The next 15 miles are surveyed ready for tendering: the whole of the survey will be completed by next month.

Mathias Pass Road.—Length, 23 miles; clearing, 33 feet; forming, 7 feet; metal, 4 feet. In progress of survey only; no part of it contracted for yet; benching along the line of road ($1\frac{1}{2}$ to 2 feet wide, cost to June 30th, £622 11s. 10d.) is being carried on simultaneously with the survey.

The Dillman's Town to Christchurch Road and Lake Mapourika Road were constructed by County Council according to survey plans and specifications prepared by the department. The work is nearly completed.

On the Dillmanstown to Christchurch Road, 6 miles are cleared, formed, and metalled throughout; clearing, 33 feet; formation, 14 feet; metalled, 10 feet; cost, £1,891 17s. Mapourika Lake Road, $4\frac{1}{2}$ miles, cleared and formed throughout, metalled for only 2 miles 68 chains; clearing, 33 feet; formation, 6 feet; metalling, 4 feet. Two bridges, of the respective lengths of 26 feet and 36 feet by 7 feet in width, comprised in this contract. Cost, £859.

GERHARD MUELLER,
Chief Surveyor.

OTAGO.

Within the Lawrence and Tapanui districts or localities some good and useful work has been done during the year under the various votes granted by Parliament, as the formation of a road from Law-