

from there to Hampden the measures are standing at angles of 50° to 70°, striking N. to N. 40° W., and dipping easterly." In another letter he states that "A quite low saddle—really no rise at all to speak of—occurs between the head of the Howard and the Rotorna Lake, and I am informed that the saddle between the Howard and Rotoiti is quite low; but it is quite impossible to travel it now, owing to the quantity of fallen timber."

The Hon. Dr. Pollen,

Chairman, Middle Island Railway Extension Commission.

I have, &c.,

JAMES HECTOR,

Director.

APPENDIX No. 5.

MEMORANDUM by Mr. BLACKETT.

Public Works Office, Nelson, 9th December, 1882.

In re *Mr. Rochfort's Plans, &c., of Central and East Coast Routes of Extension northwards from Christchurch.*

As requested by you I have examined Mr. Rochfort's plans and section of the two routes, and find some few discrepancies and errors in both routes.

Central Route.—On plan he gives height of saddle as 3,070 feet above the sea, and on section 3,230 feet. The first height agrees very nearly with my own at head of Alma; the other may be at head of Travellers' Valley. I cannot make the difference between Travellers' Valley Route and that down Alma more than $3\frac{1}{2}$ miles, whereas Mr. Rochfort makes it 5 miles. The Hossach Saddle is incorrectly spelt Hossack by Mr. Rochfort. My heights agree so nearly with Mr. Rochfort's in this route that I do not think it necessary to give them.

East Coast Route.—The grades between $57\frac{1}{2}$ miles and 62 miles on section Waipara to Blenheim are, if I remember Mr. Dobson's plan, incorrect, as I think he makes 1 in 50 throughout. This point could be settled by reference to the Engineer in Charge, Middle Island. The grades between Ure River and Blenheim are all limited to 1 in 50, although shown steeper by Mr. Rochfort. On Greenhills route, by Mr. Foy, Mr. Rochfort shows a 1 in 7 grade from Whale's Back to Conway and Charwell Saddle. This should be 1 in 7 Whale's Back to Conway River (see pencil line).

I enclose a skeleton tracing showing approximate position of East Coast, Central, and Maruia routes, which may be of service to you.

I have, &c.,

J. GEO. BLACKETT,

Resident Engineer.

The Hon. Dr. Pollen, Chairman Railway Extension Commission.

APPENDIX No. 6.

The SECRETARY, Reefton Railway League, to the RAILWAY COMMISSIONERS.

GENTLEMEN,—

Reefton, 30th November, 1882.

By direction of the Reefton Railway League I have the honour to submit the enclosed circular for your favourable consideration, and, in respect thereto to urge the practicability of travelling over the proposed Ada Pass railway route, and further respectfully submit that but a short time, unattended with danger, would be required to compass the journey.

I have, further, the honour to draw your attention to the situation of the Ada Pass on the map as being the most central, as indicated by the term, of the several proposed railway routes going northwards, and from which a branch line of twenty-nine miles in length would connect the West Coast, by which all interests could be served.

I have, &c.,

HENRY GEO. HANKIN,

Secretary.

The Hon. the Members of the Royal Railway Commission.

Circular.

GENTLEMEN,—

At your request I have the honour to report that during the time that I acted in the capacity of Engineer to the Inangahua County Council I had occasion to make several trips through the Cannibal Gorge Pass for the purpose of prospecting for a road-line to connect Reefton with the cattle-runs on the Canterbury side of the Spencer Range.

During these journeys I discovered that the maps of that portion of the country were in error, as they each and all show the head-waters of the Maruia River running north along the western base of the Spencer Range. I also discovered that the same error existed upon the Canterbury side of the range with respect to the head of the Ada River (a tributary of the Waiau), as the maps show that the Spencer Range acts as the divide between the heads of the Maruia and Ada Rivers.

The divide between the Maruia and Ada Rivers is a very low saddle; and the Maruia River, instead of going north on the western base of the Spencer Range, has cut its way through the heart of the Spencer Range to the Ada Saddle, which is the true divide between the head-waters of the Maruia and Ada Rivers. This statement can be corroborated by Mr. George Walker, station proprietor, Maruia Plains; and Mr. W. L. Fowler, station master, Lake Guyon. Moreover, and as a proof that the above statement is correct, on the 4th March, 1880, at a quarter to 7 a.m., I left Fowler's Station, on Lake Guyon, in company with Mr. George Walker, and on horseback made the passage of the gorge and arrived at Reefton at 2 a.m. on the 5th, doing the journey in nineteen hours, including a rest of an hour on the Maruia Plains. To travel across the Spencer Mountains would be a feat impossible on horseback; also, it must be taken into consideration that we had five and a half hours' travelling after night-fall. Moreover, it rained during the whole journey, insomuch that the Maruia River rose rapidly during the time we were passing through the gorge.

I have, &c.,

WILLIAM GARDNER,

Late Engineer, Inangahua County Council.

The members, Reefton Railway League.