## No. 2.

## Mr. T. M. Foy to the Engineer-in-Chief.

Kaikoura Township, 22nd January, 1877. SIR.-I have the honor to forward you a report upon the further exploration of the Cheviot Hills

District, as the route for the main trunk line from Amberley to Blenheim.

On my way to the Cheviot Hills I made a further examination of that portion of the line lying between Amberley Station and the Conway River, and I find that I have no reason to alter my opinion, as already expressed in a former report, as to the course of the line between these two places.

On my arrival at the Hurunui River I found that an engineer was engaged in laying out a road on the north side of this river, which appears to be in connection with the bridge which I understand is to be erected at the place shown upon the sketch-map, and which would have formed the site of the railway bridge had the line followed the route of the Greta River. The fact of the work being proceeded with led me to the conclusion that the idea of a railway line ever passing through that district had been abandoned, at all events, by the persons interested in this work. I may here remark that the principal and, in fact, the only objection the owner of Cheviot Hills appeared to raise against the route of the other line was that, in his opinion, it would be impossible to maintain a line of railway over the Greenhills District, from the fact that owing to its elevation — viz., between 1,400 and 1,500 feet above the sea-level—the snow in the winter time would form an insuperable barrier thereto. I have never seen this locality during the winter months, but it appears to me that from the elevation alone it would scarcely warrant such an assertion, and, strange to say, he is the only person that I have met with that hazards such an opinion, and, stranger still, as I informed him, should the line ever pass through his district it must of necessity also pass over that of the Greenhills, and of that he must now be fully convinced. As regards the snow in winter upon the Greenhills, I heard from a disinterested and intelligent person, who has known the locality for the last twenty years, that an objection to the route over the Greenhills on the score of snow is not warranted by facts, for it is only at the time of severe winters that the snow remains upon the ground for any length of time in this district, and that it is only where drifts occur that it ever exceeds a foot in depth upon the plains. Its close proximity and exposure to the sea air appears to me to justify the belief that its stay upon the ground must be of very short duration.

On my recent exploration I made a minute examination of the country from the Conway by the sea-coast, as also the route of the telegraph line to the Kaikoura Township; and, although I have never met with nor heard of any person advocating or even thinking of a line by either of these routes, still I was anxious to be able to form some idea of the cost of these lines, and I can now say that to follow the coast line it would involve at the Amuri Bluff about one and a half miles of tunnelling, whilst between the Kihikibi and Kahautara Rivers it would be impossible to construct a line that could be kept in a state of repair, as the base of Riley's Hill in places dips into the sea, and for nearly the whole length of this distance a railway line would be exposed to the full force of the waves during ordinary tides, and during a storm along this part of the coast the exposure would be fatal to any works that

might ever be constructed.

The route by the telegraph line, as I have already stated in my former report, is altogether impracticable, as it passes over hills, some of them rising to the height of five or six hundred feet, then across a valley and over an equally high hill, and, after a succession of these flights, it falls nearly vertically into the valley of the Kahautara River. It is therefore demonstrably certain that a line of railway can never pass over any portion of the country that lies between the Conway River and the sea-coast, as it is, financially speaking, as well as from an engineering point of view, altogether out of the

The practicable and impracticable portions of this line along the Conway River and the sea-coast are shown upon the sketch-map, the former by a red and the latter by a black line. This being the case, we must return back to the Waiau River, and, instead of passing by way of the Hawkswood Run to the Conway, we must take the course of the Leader River, which, as I have already reported, is practicable for a certain distance, which I have now shown upon the sketch-map accompanying this report. The high hills, from the point marked B, obstruct further progress in this direction, and if it were otherwise, from the course this line here takes, it would join the other line at a point west of the saddle which divides the Mason River from the Campbell Creek, so that, as a recompense for increase of distance, something more than that which the Cheviot Hills District possesses would be required to justify so great a detour from its proper direction, more especially when we consider that the Chevict Hills line passes through an isolated and exclusively pastoral district, and that there is a certain possibility that the owner may object to allow a population to be formed within the precincts of his own grounds and dwelling-house, as the land in question is mostly, if not all, freehold property. However remote this latter idea may appear, the fact of the possibility still remains, but such

a contingency, if possible, would have to be guarded against.

But the more weighty objections to this line, apart from all other considerations, must be based and I consider rest sufficiently upon its engineering and financial difficulties, as any progress onwards to the Kaikoura Township from the points marked A, B, upon the sketch-map could

only be accomplished at considerable and unnecessary cost.

Another serious objection to this line is that the branch to the West Coast would be considerably affected if the main line passed through the Cheviot Hills District, as it would become the means of adding nine or ten miles at least to its present length, having to join the main line at or near the point shown on the sketch-map and noted "Junction of line to West Coast," in the Waikari Valley. The traffic along this part of the line would be sure to meet with opposition by the boats that ply during the wool season between the small ports along the coast and Lyttelton. At present the wool from the Motuuna, Stoneyhurst, Cheviot Hills, Parnassus, Hawkswood, and all the minor stations, is conveyed to Lyttelton by boat, and I question whether, if a line of railway was constructed through these districts, any alteration in this respect would be made. The owner of Glenmark Station would no doubt