

line across a level country. There will be ballast always at hand in the river-beds, and a considerable quantity of timber available for the first construction without much haulage. I think the Commission will hardly find any difficulty in deciding the question from a colonial point of view, if only they can satisfy themselves that the inland country is not a howling wilderness. If the country is valueless, that may be a point in favour of the other line; but in any case it is almost too obvious to remark that the central line serves the whole, or nearly the whole, of the northern part of the island, either directly or indirectly, more or less. It opens communication with the West Coast by the Waiau-uwha and Ahaura from the Hanmer Plains, the best line to the West Coast; and it opens communication both with Marlborough and Nelson, with the valleys of the Motueka and the Buller; even before a line should be carried through the Buller Valley, it would be of very great importance in opening that part of the country and rendering it accessible as a place of settlement. I give my opinion for what it is worth, but it is politically and socially of real importance to have this trunk railway through from end to end of the Islands, and that the uses of the different parts of the country are not wholly limited to the very localities themselves. I think no little value ought to be attached to varieties of climate which would induce a good deal of traffic and settlement of easy classes during a part of the year in the mild regions around Nelson, Waimea, and Motueka. We have heard of invalids going up to Tarndale, and in Switzerland there are many alpine valleys nearly twice the height of Tarndale, where persons go to spend the five or six winter months. That leads me to add that part of my wanderings during the last seven years led me much about Switzerland and the Tyrol, countries inferior to our uplands, but comparatively densely peopled. Land is occupied in those countries at much higher elevations and of much poorer quality than the land to be found along the central line. In most respects I fancy Swiss or Tyrolese immigrants would find themselves transported with their advantage if placed at Tarndale. The population of Alpine Switzerland is about twenty-one to the square mile. The area of Alpine Switzerland is about equal to that of the northern districts, taking in the Waiau-uwha and Ahaura country. If we could plant people in proportion to the population of Alpine Switzerland, not including tourists, in the country under the consideration of the Commission, we should have a population of about a quarter of a million there, whereas there are now some 35,000 or 40,000, a population that lives in a luxurious climate near the beach. It appears to me that such a comparison as this ought not to be lost sight of. There is, I should think, three-fifths of this Southern Island of a character substantially the same as, and certainly not better than, this northern district. I leave it to others to speak of the mineral deposits that undoubtedly exist along one of the main ranges running north and south through the whole district under discussion. The gold deposits are everywhere apparent, and the total yield of the Nelson Province, though a rugged and little-occupied country, looks very respectable on the official returns. With respect to climate, I wish to say that all our general knowledge of physical geography, and our experience of the climate of New Zealand—under the lee of the Great Southern Alps, for instance—would lead us to the conclusion that the witnesses whom the Commissioners have heard in Nelson are right in the general statement that there is no great quantity of snow on that side of the mountains. The country there is under the lee of, and at some distance from, the three chains of mountains which intercept the great westerly moist currents of wind. It is well known that in Canterbury, and I suppose in Otago also, under the lee of the mountains, the climate is very much drier than it is on the West Coast. My own observation is that, passing from what may be called a sirocco on the Canterbury Plains over Arthur's Pass, you often arrive in what may be called a continuous shower-bath on the other side. The enormous glacier system of the Southern Alps depends upon its having denuded the westerly winds of their moisture. That is what makes the rainfall on the Canterbury Plains more moderate than the average of New Zealand, whereas on the western coast the rainfall is nearly double the average of New Zealand. I produce, for the information of the Commission, a diagram showing comparative heights of the Great Pacific Railway, United States of America, and the central line now projected. The Pacific line runs for 1,200 miles above 3,300 feet, the level of Tarndale, and rises at two points above 7,000 feet, and at one point to 8,240 feet. For ordinary falls of snow, in countries where railway management is prepared for such things, it is child's play. Many of the engines upon the present lines would carry a plough before them, and run through a snow-drift of five feet deep at a speed of twenty miles an hour if required. I hand in another diagram, showing comparative elevations upon the central route to Nelson, and the Brennerbahn (a trunk railway from Vienna through the Tyrol to the Plain of Lombardy, passing a saddle of 4,485 feet, without snow-sheds). I may state that, at an elevation not greater than Tarndale, I have ridden all day through snow on the upper plateau of Algeria, within sight of the Sahara, but you would not object to a railway in Algeria on account of the snowfall.

842. *The Chairman.*] Do you know whether the whole or a large proportion of the land in Nelson Province has been alienated from the Crown?—The greater part of it—the open land—is either sold or under lease. I think the maps in the Commissioners' hands do not give full particulars. No doubt a large part of the land affected is under lease, but the freehold and leasehold lands are marked in the same colour on the maps, so that there is no possibility, without assistance, of ascertaining precisely what there is actually the property of the Crown. Almost the whole of the land fit for present occupation is either freehold or leasehold.

843. It has been stated that the fact of the land being held under lease absolutely precludes its sale during the currency of the lease. Is that the case?—I presume so. The old leaseholds were under an Act which I had a hand in preparing and passing through the General Assembly. The occupants were in full possession during the term of the lease, and there was no possibility of removing them.

844. Not even by compensation?—What cannot be done by compensation! There was no stipulation for acquiring the land by compensation, except for road purposes.

845. Supposing a railway to be made, all the country, as far as settlement is concerned, would be actually locked up from all interference on the part of the Government?—Yes, except as regards the actual line, unless the Government could make terms with the leaseholders during the currency of the leases. In some of the leases there is a purchasing right, but at a price not yet assessed. It remains to be assessed when the tenant claims to exercise his purchasing right.