which would render such a conclusion insecure; until the year 1832 the reindeer were in the habit of migrating in enormous numbers along the west shore J. H. Lefroy, R. A. of Hudson's Bay, passing York Factory to the south; in that year their numbers were greater than usual, and a most extraordinary and wanton slaughter of 23 February 1857. them took place by the Indians; the Company were unable to restrain them; from that day to this, according to the best of my information, the reindeer have never been seen in that region, although there is no reason to suppose that there is any change in the climate or its capacity for furnishing them with

Lieut.-Colonel

- 223. As you say you have paid attention to the state of the climate in Europe, I suppose you are perfectly aware that reindeer used to live upon the banks of the Danube and on the Rhine?—I was not aware of the fact; I had forgotten it if I had ever seen it.
- 224. That fact is adduced by Gibbon as a proof that the climate has very much ameliorated by time?—Yes.

225. The freezing of rivers, for example, is another evidence; I suppose there

is nothing that could contradict that?—I should think not.

226. Taking the same circumstances, namely, that Gaul and Germany were in times past, very shortly after the Christian era, in the same state that Canada is now; having paid attention to the climate of different countries, would you not conclude that the same circumstances occurring in Canada as have occurred in Europe, namely, the clearing of woods, and the draining of morasses, would lead to a great amelioration of the climate?—There are some circumstances which make an essential difference in the two problems. In the first place, the actual soil of Western Europe is deeper, and better suited to the growth of grains of every description than the soil of the Hudson's Bay territory, from my knowledge of it.

227. Is that the case with Prussia?—The district of Prussia, I believe, is generally sandy, but I have not travelled there; I speak of the country in a general way. Then there is this cause ameliorating the climate of Western Europe, which we feel in our own islands particularly, namely, the influence of the Gulf Stream. Our condition is abnormal; but if you refer on the map to the lines of equal temperature, passing through both continents, through America, and through Europe, you will find that the lines descend, that is to say, you will find the line of equal temperature, of 50° we will say, which is the limit of the profitable cultivation of barley, in much lower latitudes in the Hudson's

Bay territory than you will in Western Europe.

228. I suppose the southern point of Lake Winnipeg is about the latitude of

some of the finest countries in Europe ?—I believe it is.

229. Do you know anything of the actual physical condition of the northern shore of Lake Superior?—Merely from having coasted it before the explorations which have subsequently taken place; I mean those connected with mining speculations; therefore I had only ocular inspection from passing along it.

230. You have not travelled on the land there?—No, except for a very few

miles.

231. Have you any evidence that there are large morasses there which render it impassable?—Immediately adjoining the shores there cannot be large morasses, because the land rises rapidly; there are two terraces indicating changes of level at former periods, and the land rises rapidly, and in fact the north-west shore is mountainous.

232. There is a lake called Lake Nipigon —Yes.

233. Does not that fall into Lake Superior?—It drains, I believe, into Lake Superior; I never was there.

234. Therefore, may we conclude that it is higher than Lake Superior and

the land through which it runs?—Of course.

235. If on the shore of Lake Superior there are not morasses, we may conclude that there are not morasses between those two points?—Hardly that. Morasses are to be met with at the highest points. In fact, it will be found, as a general rule, I believe, that the districts which furnish the sources of rivers are always districts of morass. I could point to three or four instances of that on the map. Probably, Honourable Members can find on their maps the River Savan; the Dog Lake will be found on the map not far above Lake Superior. If you follow the line of boundary between Lake Superior and the Rainy Lake, about midway between the two you come to a very elevated 0.25.