district which furnishes the source of rivers falling in both directions into J. H. Lefroy, R. A. Hudson's Bay, and into Lake Superior and the Atlantic. That region is one of immense physical difficulty in consequence of morasses, and every trader 23 February 1857 knows the Savannah morass, the Prairie portage, and the great interruptions which he has to pass, with extreme difficulty, in consequence of there being swamps at what is the height of land of that region.

236. Are you aware that there is a scheme now in commencement, rather than anything else, of carrying a railway along the northern shore of Lake Superior, and eventually across the Rocky Mountains to the Pacific Ocean?—

I have seen proposals to that effect.

237. Do those plans contemplate any impassable barrier on the northern shore of Lake Superior?—Those plans have always seemed to me to be drawn on the engineering principle of laying down an air line, and then assuming that capital will carry you along it; but the physical difficulties of doing it would be enormously great, and I cannot persuade myself that such an undertaking

would be conducted with any commercial advantage.

238. Mr. Grogan.] You spoke of the population on the Red River Settlement not being very large, owing to the difficulty of access. If there were a railway in that direction capable of being constructed, would not that difficulty be obviated?—It would, undoubtedly; but it always appears to me, on studying the map, that the natural affinities of the Red River Settlement are with the valley of the Missouri, and that we shall be going against nature if we try to force it into the valley of the St. Lawrence.

239. You consider that the natural direction is to go into the United States? —I think so; I do not think that the route by the St. Lawrence can ever

compete commercially with the route to the south.

240. You have illustrated your local experience for a period of 12 or 14 years; you have said that your general observations in the country were insufficient to enable you to form correct data?—They were insufficient to obtain the fact of the highest or the lowest temperature, or to furnish a mean which was not liable to be disturbed by the observations of another year.

241. Do any records exist at the different stations of the Hudson's Bay Company whereby the increase or decrease of temperature can be ascertained? -I am sorry to say that the records of that region are exceedingly slender, almost valueless in a scientific point of view. Sir John Richardson has collected in his last work of travels the best information he could get, but the data are most scanty.

242. In point of fact, does the impression exist in the country that the

climate of that district is ameliorating?—I never heard of it.

243. With regard to limestone, is the district where the limestone prevails of any extent?—The western shore of Lake Winnipeg is entirely limestone, but there is no soil on it; it has literally no soil in many places; it is as bare as your hand.

244. The rock is on the surface?—Yes.
245. The soil does not cover the surface completely?—I did not explore with sufficient accuracy to give an opinion upon those points. I must beg that my observations may be considered as relating principally to the routes that I travelled over. I did not explore the interiors; I went over the great routes of communication only.

246. Are you able to speak of vegetation, whether it exists in detached portions of that district?—I can speak more positively of that, because I made inquiries about it, the subject having engaged my attention. The points where cultivation was more carried on were these: there was the Red River Settlement, where there was very considerable cultivation, and Fort Cumberland, and the Basquiau River, in the Saskatchewan district, and Lake La Crosse; at Fort Cumberland there were about 10 acres of ground under cultivation; at Lake La Crosse, a little to the north of Cumberland House, there were also about 10 acres of ground under cultivation, yielding barley; at Lake Athabasca, where I passed a winter, which is further north again, potatoes of a small size could be grown, but there had been no success in growing barley, or any cereal at all. At Fort Simpson, on Mackenzie's River, where it turns to the northward, just at the angle, on a large island of deep alluvial soil, farming was unusually successful; there were regular crops of barley, regular cattle, and a very good garden. That is in about latitude 62° I think; barley grew there very well indeed.

247. Sir