San Francisco and Port Moody, at the head of Burrard Inlet, next come, very nearly at sea level.

The Canadian line is thus out of all comparison in a more favourable position for cheap transportation than the Union and Central Pacific now in actual operation in the United States. There is, as before shown, no gradient in either direction between the Lake Superior terminus and the Tête Jaune Cache on the west side of the Rocky Mountains exceeding 1 per 100 or 52.8 feet per mile, and, with one single exception, at the crossing of South Saskatchewan, the heaviest gradient ascending eastward from a point near Battleford to Fort William, is only 0.5 per hundred, or 26.4 per mile; and this location may be revised. These are about half the gradients of the Grand Trunk and other railways in actual operation in the older provinces.

As far as regards snow obstructions it appears, from tables compiled by Professor Kingston, from 3 years observations in the Rocky Mountains, that in some of the passes and river valleys snow may average from 4 to 5 feet in depth, but in the general fall the average is far below that of Ottawa, Quebec and Montreal; while east of the Rocky Mountains, between Jasper Valley and Edmonton, it does not much exceed half that of Ottawa. With respect to the cold, though the Autumn is more severe in the Rocky Mountain district than in Ontario, Quebec and the Maritime Provinces, yet the winter itself compares favourably with Eastern Canada. On other portions of the line the general snow fall is less than that of Ottawa.

It is not at present proposed to make the line continuous to Montreal, but to make a connection with the United States lines for winter traffic. But the line from Selkirk to Ottawa direct, as proposed, will make the distance, in winter, less by 670 miles. This connection will undoubtedly very soon be made after the country between Lake Superior and the Pacific Coast becomes populated. The woodland region around and to the east of Lake Superior is known to be rich in mineral deposits, which may, ultimately, when they are developed, afford considerable traffic to the road.

The Prairie Region from its great adaptability for wheat culture, will probably, at an early day, be the seat of a very large population, and the line has been especially located with the view to obtain the lightest possible gradients and the easiest curvature, with the intention of obtaining the absolutely best conditions of traffic for the future.

The extent of cultivable land between Lake Superior and the Rocky Mountains is stated in the report of the Chief Engineer, to be 160,000,000. The total average under cultivation in the Province of Ontario is under 7,000,000. There are drawbacks to the settlement of the North West which claim recognition, but there cannot be any doubt as to the salubrity of the climate and the great fertility of the soil; and it is undoubtedly capable of sustaining a large population.

The question of greatest difficulty to be yet finally settled is to decide the route from the continental "divide" at the Yellow Head Pass to the Pacific Ocean; or whether to take it in a more northerly direction through the Peace River country. No less than eleven different routes have been projected from the Yellow Head Pass to the coast, ten of which have been measured, the routes varying from 461 to 560 miles. Route No. 1 to Burrard Inlet is the shortest. But Route No. 2 to the same Inlet appears to have the most decided advantages. The estimated cost of building the road by these several routes ranges, in round numbers, from $30,000,000 to $40,000,000. That (No. 2) to Burrard Inlet being $35,000,000. These estimates are founded on work of the character of that of the Intercolonial Railway. The expenditure might be reduced by the introduction of timber trestle work in the place of solid earth or rock embankments, and the use of temporary structures.

As regards the characteristics of the Railway, in view of its capacity for business and the cost of maintaining it and operating it, the Chief Engineer states there can scarcely be a doubt that route No. 2, terminating at Burrard Inlet, is the best. As regards the present local traffic, the present population of British Columbia, could do very little towards maintaining the road; and therefore, the questions are as to the probabilities of the best future advantages. The data collected, by inquiry made by the Geological Survey, establish the existence of great mineral wealth in British Columbia, and the opinion is expressed by the Geological Officers of the Gov't. that the fact will rather surpass than fall short of the estimates given. The agricultural resources of the Province are also very considerable It is found that there is gold throughout the whole Province, from the extreme northern point of the Cossiar to the southern boundary.

As regards the Harbour of the terminus with a view to through traffic, information was taken from a number of Her Majesty's officers, having acquaintance with the coast. The deductions from the statements of these officers appear to be that the River Skeena is the nearest to the Asiatic Coast, but the naurtical advantages of a terminus in that quarter cannot be decidedly stated, as he waters have not been properly surveyed. But so far as known, Burrard Inlet, an arm of the Strait of Georgia, and particularly English Bay, at its mouth, is the best harbour and has the easiest approach from the ocean. It is, however, to be remarked that the most important islands of the St. Juan group are now in the possession of a foreign power, and they are in a position to assume a threatening attitude towards passing commerce. This question is ultimately governed by the further one of power to maintain. Except therefore, for some question which may arise respecting an altogether more Northern route, the route from the Yellow Head pass to Burrard's Inlet has the most advantages both as relates to the Line itself and the Harbour on the Pacific.

The Chief Engineer states that in future years when British Columbia shall be thickly populated and its great mineral wealth fully developed, that it may become necessary to make a Railway to the outer shore of Vancouver Island, at whatever cost, but at present that work is too formidable.