

agriculture only in limited areas, the central portion of the hydrographic basin of Hudson bay, north of the great lakes is covered with soil consisting of clay and sand, in which vegetable mould forms a large percentage, thus rendering the land most desirable for the cultivation of crops when ordinary drainage is effected.

It is valuable to know that the country is covered by soil consisting of clay and sand. What else would it be covered with? That is valuable information on which to judge whether it is advisable or not to go on with this undertaking.

The evidence afforded by the flora or native plants of the district along the proposed railway line affords an excellent criterion to agriculturists and others in making an estimate of the capabilities of the district in question.

Very valuable information this for the government. Then we have a description of the mineral possibilities :

The metalliferous belt of Huronian rocks which carries nickel, copper, silver, gold, iron and other minerals of economic importance occurs prominently throughout a large section of the line of the proposed railway. After crossing the Canadian Pacific Railway in the Sudbury region this great mineral belt proceeds in a northeasterly direction to Upper and Lower Lake Abitibi north of the height of land. This mineral belt is quite wide in the districts of Algoma and Nipissing, extending close to the boundary of the Thunder bay district. In the latter district two large areas of similar mineral bearing rocks occur which lie also close to the height of land.

But the Prime Minister told us that that section of country was largely a fertile clay belt. Well, that is not the kind of belt in which you are likely to find mineral deposits. They are generally found in a rocky section of very little value for agricultural purposes, so that this report contradicts the assertion of the First Minister, who was describing this section as a sort of paradise for agricultural settlers. Its soil, he said, was equal to the very best in Ontario. Then we have the farming operations described :

The various farms of the different lumber companies carrying on business along the headwaters of the various streams which flow into the St. Lawrence and Ottawa rivers, as well as the gardens and farms scattered throughout the hydrographic basin of Hudson bay, at the Hudson bay posts (such as at Abitibi, Brunswick House, Frederick House, Mamattawan, Mattagami, &c.) form excellent criteria from which one can easily ascertain the possibilities of the whole region from an agricultural standpoint, leaving no doubt whatever that the basin can support a vast population.

There is nothing about minerals there :

From a careful study of the altitudes comprised in the Quebec to Winnipeg region and south as well as north, it can be readily seen and affirmed that the boldest expression of the Laurentide hills occurs along the southern border of their line outcrop.

Not much information in that. I do not know that that was not well known before, and in any case it is little value to parties

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proposing to build a railway. The capabilities of construction are thus described :

The construction of the National Transcontinental Railway, crossing the cereal-growing district south of Hudson bay, between the great lakes and the foot of James bay, will open up for settlement a generally level tract of country, not only well timbered and well watered, but also producing a dense growth of plants which predicates capabilities of an agricultural nature, dairy, farm and stock-raising products, which can support a mixed population, including agriculturists, manufacturers, lumber merchants and all those varied classes of a community dependent on such natural resources as are found within that basin.

It is estimated that the marine sediments of the Hudson bay basin, consisting of clay loam, sandy clays and various other soils and surface deposits, fit for agriculture, is at least twice the area covered by the agricultural lands in Ontario between Ottawa and Lake St. Clair.

Then we are given some information about the timber limits :

#### Timber Limits.

The Laurentide hills which will ever be a source of immense revenue to the country, not only from their valuable timber limits and capabilities for producing more when re-forestation on a large scale is established in this country, but also from their untold mineral resources, forming a comparatively narrow belt of rugged hills, separate two distinct agricultural basins the larger of which lies to the north.

The new railroad will widen the eastern belt of habitable land, and as soon as the country realizes the immense wealth which is lying dormant in the great undeveloped basin south of James bay, where practically all the cereals can be raised successfully which are now raised in the provinces of Quebec and Ontario, so soon will its people seize it and inhabit the same.

We are next told about mineral occurrences :

In the report of the royal commission on the mineral resources of Ontario and measures for their development, presented by order of the legislative assembly, Toronto, 1890, reference to the occurrence of iron and copper on Abitibi lake, is given, pp. 23 and 24 respectively, also of the mineral resources of various districts comprised within the railway belt in question.

That is valuable information for the building of a railway.

For altitudes of lakes, rivers and various locations along the proposed line of the Grand Trunk Pacific, see Mr. J. White's recent work entitled : 'Altitudes in Canada,' issued by the Geological Survey of Canada as publication number 745, 1901, pp. 209, 210, 211, 212, 213, 214, 215, 227, 169, 170, 171, 172, 173, 175.

For projected or trial lines and branches of Canadian Pacific Railway, see also pp. 47-69, including the following :—

- (1.)—Lake Manitoba to Lake Nipissing, p. 69.
- (2.)—Lake Manitoba to Mattawa, p. 68.
- (3.)—Lake Windigoostigwan to Manitou lake, p. 54.
- (4.)—Lake Nipigon to the height of land, p. 51.
- (5.)—Nipigon river to Long lake, p. 50.

In this report I also find a mention of trees found along the line of the National Transcontinental Railway. It appears that