## The Gatineau Valley Railway.

### THE GATINEAU VALLEY AND JAMES' BAY.

The Ottawa and Gatineau Valley Railway Company, in addition to the early construction of their main line, work upon which will commence this month, have in contemplation the prosecution of an extensive exploratory survey from the Dessert River, the present terminus of the road, to James' Bay, the distance from Ottawa to the Bay by the Hurricanaw River route being only 450 miles, and acknowledged to be not only the most direct, but easiest of construction, whilst traversing a line of country full of valuable minerals of a highly merchantable character, and offering an inviting field for the capitalist and farmer, second to none on the continent.

Not many years since the great North Western prairies, now the marvel of the world for their wonderful fertility and extraordinary production of grain, were a *terra incognita* to the general public, and were given up in the popular imagination to howling desolation and perpetual frost. The opinion entertained of them is very generally held to day regarding the large and more southern region, comprising 60,000 square miles situated between James' Bay and the height of land north of Lakes Superior and Huron. Yet the constantly accumulating facts are likely to prove that this northern heritage of Ontario is exceedingly valuable in lumbering and mining resources and capable of sustaining a very considerable agricultural population. The recent geological surveys demonstrate that a most valuable mineral region lies within and beyond it, that the dense forests which cover it contain a very large amount of valuable timber, which can easily be floated down the magnificent rivers—several of them each over 300 miles in length—which traverse the region; that the surface, unlike that of the Ottawa, Muskoka, and Algoma districts, is almost unbroken by lakes, and only occasionally by rocks; and that the south and south-west of James' Bay, at some distance inland, a fertile belt well adapted for agriculture exists, which, when the mineral and forest wealth of the country is being turned to account, will be an inviting field for the farmer.

#### COAL AND IRON MINES.

It is exceedingly gratifying to learn from Prof. Bell's recently published report that around James' Bay and up the eastern side of Hudson Bay lie great deposits of iron and coal so close together that with the cheap water freights which the region may afford, the district along James' Bay may yet become another Pennsylvania. Prof. Bell, after referring to the soil, climate and forests of the district, says:—"Minerals may, however, become in the future the greatest of the resources of the shores of Hudson Bay. Little direct search has yet been made for the valuable minerals of these regions. In 1875 I found a large deposit of rich ironstone on the Mattagami River. In 1877 inexhaustible supplies of good manganiferous iron ore were discovered on the islands near the east main coast (that is the coast along the eastern shore of James' and Hudson Bays,) and promising quantities of galena around Richwood Gulf and also near Whale River. Traces of gold, silver, molybdenum, and copper were likewise noted on the east main coast. Lignine was met with on the Missinaipi (a branch of the Moose), gypsum on the Moose, and petroleum-bearing limestone on the Abittibi River (another large tributary of the Moose)." Another explorer, referring to the great iron, coal and other minerals of the neighborhood of James' Bay says: "I have no hesitation in pronouncing this district the richest mineral region in the Dominion, perhaps on the continent." Anthracite and iron are found along the rivers south of James' Bay, a gigantic outcropping, containing over twenty-five per cent. of pure iron ore, displaying itself along the Moose, and a magnetic island on the Abittibi rendering the surveyor's compass useless. To Ontario, this immense mineral wealth is likely to yet prove an important factor in her prosperity, particularly as Moose Fort is only 500 miles from Toronto, and on the completion of the connecting link the Calendar, near Lake Nipissing, a Moose Factory Branch over 200 miles long from near Nipissing or a branch only 200 miles long from near Nepigon, will, with the Pacific Railway, furnish a short route to the shores of James' Bay.

#### THE GREAT NORTHERN FOREST.

The great forest which bounds Hudson Bay on the east and extends up the interior of East Main and Labrador to Ungava Bay and Hudson Straits, six hundred miles north of Moose Factory, attains its greatest characteristic development just south of James' Bay, which lies nearly midway between the northern and southern limits of the peculiar trees which compose the great northern woods. Some trees, such as the Banksian pine and spruce, which along their southern limits in Central Ontario are almost valueless commercially, here become giants of the forest, and are valuable for timber. The list of trees which flourish at James' Bay or in its drainage basin includes, according to Prof. Bell, the spruce (two feet or more in diameter) the tamarac, balsam, poplar (luxuriant) Bankeian pine, silver fir, arbor vitæ, elm, white pine, and red pine, and of lesser importance the poplar, mountain ash and montain maple. As James' Bay is as near to Liverpool as is Quebec, the future of the district as a lumbering country looks hopeful.

#### WARMER THAN NORTH WEST WHEAT LAND.

Such being the great wealth of mine and forest which is likely to be developed some day, the question arises, are climatic conditions sufficiently favorable for the agriculture which will be necessary to sustain the large population which may flock to James' Bay territory? Prof. Bell who has spent thirteen summers around Hudson Bay, thinks they are. Testimony comes from other reliable sources to similar effect: casual experiments in wheat growing have succeeded at some localities. Moose Factory, at the extreme north of the Moose drainage basin, is in latitude 51°.15, the same as the Qu'Appelle Valley, and further south than Battleford. Its winters are not colder than those of Manitoba generally, and are warmer than the Athabaska and Peace River countries. The average temperature for the year (30°.8) is higher than that of many parts of the best wheat-growing lands of the North-West, and less than four degrees colder than that of Winnipeg—a difference chiefly perceptible in early spring. The southern part of the James' Bay district is further South than Manitoba, and on the same latitude as districts in Quebec, where wheat and even Indian Corn are grown every year. The "fertile belt" of the district is a greatly undulating plain, with a sandy loam soil, and lies in the same latitude as Winnipeg. If wheat in Manitoba is an assured success every year, it is reasonable to suppose that James' Bay district with its large area of fertile soil, cannot be without agricultural value.

The scantiness of the population has prevented agriculture being tried. Fortunately at one point—"Moose Fort"—but on a "low, wet clayey soil, exposed to icy winds," a careful record has been kept for several years, and it furnishes a test of climate much superior to that which casual experiments in agriculture would afford. The figures and comparisons given hereafter are chiefly compiled from the three latest meteorological reports, and embrace the year 1878-79 80, a sufficiently long period to exclude the possibility of such mistake regarding the general characteristics of the climate.

#### WINTER AT JAMES' BAY.

The winter usually begins in the early part of November, but sometimes not until the third week. November and December are snowy months, but after New Year's, excepting in one year when January was snowy, the snow fall had not exceeded a few inches. The total snowfall is much the same as in Toronto, although a greater depth is on the ground at one time. Rain is rare in mid-winter, although not unknown. The mean temperature of December, January and February is 1.°3, or little more than one degree warmer. The mean of Dungaven, in the celebrated Peace River country, is 7.°5 below zero, or nearly eight degrees colder than Moose Factory. In extreme temperatures Moose Factoy is not so cold as Winnipeg, the lowest being 45° below zero, while Winnipeg shows 47° below. Dunvegan registered 63° below zero in 1880. As excessive temperatures as Moose Fort knows, are recorded in the colder settled parts of Ontario.

#### THE NORTH WINDS OF SPRING.

In March occasional temperatures of 45° to 50° above zero indicate the approach of spring. In the early part of April the ground becomes bare, but the weather is exceedingly disagreeble and variable until near the middle of May, cold winds and warm winds rapidly alternating. This is due to the fact that James' Bay being exceedingly shallow, except in the deep central portion, freezes almost over its whole width—150 miles—and northward to its junction with the deep open waters of Hudson Bay, presenting in this respect an analogy to the northern end of the Caspian Sea. The ice in spring remains and melts in the Bay, and the cold air arising from it is drawn southward by the greater heat of the Moose River basin. North winds are thus the prevalent winds during April, May and June. In this respect the immediate neighborhood of the bay resembles Cape Breton, and several other parts of the Maritime Provinces where spring is retarded to an almost similar degree by the cold winds from the icy current flowing down the coasts. In May Moose Factory is 4 degrees colder than Prince Arthur's Landing, but inland, where the cold north winds have lost their force, this month, like the rest of the spring, is warmer. Gardening at the Fort begins about the middle of May, and the last severe night frosts occur before the month is over, and temperatures of nearly 80° in the shade are sometimes reached.

#### WARMER SUMMER THAN EDINBURGH.

Summer may be said to commence with June, although the freezing point is touched about the beginning of this month in most years, as it is in the North-West, and in several parts of Ontario not far from Toronto. The summers at the Fort are not so warm as fifty and a hundred miles inland, and are cooler in June, July and August than at Winnipeg, and in many parts of the North-West, but warmer than at other North-Western districts, or at Edinburgh, Scotland.

The following table shows the mean temperature at various places, and will prove interesting for comparisons. The foreign stations are from Blodgett: all the Canadian stations, excepting Edmonton and Fort Saskatchewan show the mean, not in one year but in three—1879-79 80—and may be taken to represent the usual summer climate.