

It is not my wish here to introduce any question relative to an isothermal line; but the presumption is, that, were the country explored this season, under cultivation, a condition only precluded by its vast extent, and absence of communication, its climate would unless in certain localities, from local causes, differ little from the lower cultivated portions of the Province of Quebec, an evidence of which exists in the crops raised under the present unfavourable circumstances at the Hudson's Bay Company's Posts, north of the great Watershed. At Moose Factory the extremes of temperature are -40° in winter and $+89^{\circ}$ in summer, the average during the coldest month being so far as I could learn, about $+11^{\circ}$, or a little colder than at Abbitibbie, where I procured my figures from the register kept for the Smithsonian Institution. The climate of the country is very healthy, and even in the heat of summer, the air highly invigorating, but early frosts frequently prevent grain from ripening properly, especially at Moose Factory, where the soil is rich alluvial, and the crops over luxuriant for an early harvest. At New Brunswick House, however, situated about $49^{\circ} 8' N.$ latitude, I procured a very fair specimen of ripe barley.

On Moose Island, in Lat. $51^{\circ} 14' 43'' N.$, the magnetic variation is $13^{\circ} W.$ and I observed from the Hudson's Bay Company's chart of 1821, that following the meridian of $80^{\circ} W.$ Long. at Lat. $52^{\circ} 10' N.$ it is $7^{\circ} W.$ at $52^{\circ} 40' N.$ it is $8^{\circ} W.$, while at Lat. $54^{\circ} 18' N.$ and Long. $80^{\circ} 30' W.$ it is $10^{\circ} W.$ I had no means at my command this season, of ascertaining whether observations taken this year would correspond with those of fifty years ago. In the soundings, so far as I was able to examine during a short trip of three days in James Bay, there seems in general little difference between those taken then and in 1821; that little however indicates a slitting up, but the bottom is free from rocks, except a few drift boulders, and the anchorage excellent.

Along our route of exploration we met with some very beautiful and interesting scenery, especially on the Abbitibbie river, of which I made some pencil sketches. On reaching Moose Factory, however, I found from Mr. J. L. Cotter, Accountant, Southern Department that, during his summer travels in Hudson Bay, he had, as an amateur, photographed many of the principal scenes we had passed; at the same time presenting me with what copies he had, including a complete view of Moose Island and Factory.

In my contact with the Indians, I have been far more successful than I anticipated in securing their good opinion, three of them having, as bowsman, steersman, and cook, followed us faithfully throughout the entire expedition. The Cree-speaking Indians had become very suspicious of the future in consequence of the transition state of the Company. In answer to many inquiries, which I had neither power nor authority to answer, I constantly assured them that the object and wish of the Canadian Government was to deal fairly by them; also taking care never to leave a post or encampment, before ascertaining to what extent our presence and conduct had met their approval.