

exists in the Three Rivers district of that Province. Two hundred years ago the Governor Denonville wrote (1686) to the Minister of the day in France, "Send us iron-workers to work our mines," and iron was produced in the district in 1700. Some years later a company was formed for the purpose of making charcoal pig, but its affairs seem to have fallen into the hands of Government) which was very paternal then as now, for the first St. Maurice furnace was blown in in 1752, and bore, cut in stone, the fleur de lis, the insignia of the king, who was then Louis XV. There they made not only pig iron, but wrought iron, and shot and shell for war purposes.

Only in a limited and desultory way has the iron ore of the district in question been since worked. Stoves and other castings have been made of it by different proprietors, but its quality and value appear to have been scarcely recognized. We understand, however, that the Canada Iron Furnace Company, limited, which purchased the Radnor forges and property in 1889, and carried on the works for a year somewhat experimentally, has got such good results from a series of tests made of the ore of the district, and is so much encouraged by the demands for the product, that it will double the capacity of the works. It is now arranging for a furnace that will turn out from fifteen to twenty tons per day. The company claims to be able to produce from native ores a charcoal iron superior in many qualities to the finest iron made on this continent, not excepting the celebrated Salisbury charcoal iron of the United States. The claim of the company is that the addition of 10 per cent. of this Three Rivers ore to a mixture, replacing the best Lake Superior ore, gives an increased strength of 25 per cent. in tests. Further, that where, in tests for car wheels requiring a minimum strength of 2,800 pounds, the best grades of Salisbury iron gave, irregularly, a strength of 3,000 to 3,500 pounds, this Radnor iron being added to the extent of 88 per cent., a strength of 3,800 pounds has been produced. It is contended that this iron is especially valuable for foundrymen because it remedies shrinkage and produces finer-grained and stronger castings; also that, for malleable iron castings, fine engine work and car wheels, it cannot be surpassed.

The company in question appears to have some reason to look for a large measure of success as a reward for its enterprise. If what is stated about the quality of its product is not overstated, the demand must grow. And the company has some decided advantages: cheap labor, for instance, by the employment of the *habitans* of the district; an abundance of excellent wood for the purpose of charcoal-making; a valuable deposit on the Lake à la Tortue, besides a lot of ores of various kinds on the St. Maurice River, and 50,000 acres of bog ore rights in Three Rivers District. In default of iron works of her own, it is to be presumed that Ontario will take especial interest in these, since they are near enough, we should think, to render it possible for their product to compete in Ontario with American iron, which in the west of the province

at least, neither Scotch nor Nova Scotian can successfully do.

### THE CLIMATE OF CANADA.

Among the misapprehensions about Canada which still exist in European countries—and in certain cis-Atlantic regions too—in spite of much intelligent effort to remove them, is that concerning the character of our climate. As no notion is more common, among the untravelled people of the United States far from the lakes, than that this is a land of almost perpetual cold, and of an almost unheard of rawness and wildness, so we find travellers from the older countries (as well as from Indiana) reaching our shores clad in winter woollens for July, and mightily surprised and uncomfortable accordingly. The prevailing idea in Britain, on the subject of Canada, is well expressed by one of the tenant farmer delegates, Mr. George Brown, of Caithness, Scotland. His report says: "Canada was believed by the majority of people in this country to be a land covered, for nearly two-thirds of the year, by snow and frost, with few and brief glimpses of sunshine during the remaining third, which was followed again by a covering of eternal snow; a land of ice and Indians, bears and blizzards, unfit for the abode of the Anglo-Saxon race, except upon the seaboard and in the vicinity of the great lakes."

This sort of ignorance is amusing, sometimes annoying, but it exists; and every true Canadian should aid in the effort to dispel the errors and prejudices which often hinder people from coming to our shores. A very serviceable paper contributed to the *Montreal Witness* by Mr. Walter H. Smith, on Canadian Weather, affords information on the subject of summer and winter temperatures in Canada, which will prove interesting to many among ourselves; for the Dominion covers so vast an expanse that there are peculiarities of temperature in some distant parts of it that the average Canadian is not aware of. When allusions are made to our climate in foreign works, they are usually exaggerated. Our cold weather is fully dwelt upon, but less is said about our heat in summer. Perhaps even our neighbors will be surprised to learn that, according to a recent comparison of absolute temperature, the United States is both colder in winter and hotter in summer than Canada. The difference in range is more than thirty degrees in favor of Canada, by Mr. Smith's figures. Thus:

Canada; absolute range for 1890, inhabited parts of the Dominion:

Highest—Medicine Hat, Assa.	102.1 above zero.
Lowest—Oak Bank, Man.	51.0 below zero.

Total range ..... 153.1 degrees.

United States; absolute range for 1888—the figures for 1890 being unavailable:

Highest—Maricopa, Arizona.	119.0 above zero.
Lowest—Carlin, Nevada, and Fort Keogh, Mont.	65.0 below zero.

Total range ..... 184.0 degrees.

A fact that should be widely and persistently published is, says Mr. Smith, that the climate of inhabited Canada generally is more equable than that of the United States. To the old, the weak and the

feeble, sudden changes of temperature often mean sickness, and frequently death. The more equable the climate, the lower, generally speaking, other things being equal, should the death rate be. Canada possesses "conditions of climate to suit nearly everybody, from the Esquimaux and Icelanders down. The resident of Western Europe can find a counterpart of his country's climate in British Columbia and the Southern Peninsula of Ontario; those of Central Europe and Asia in the Canadian North-West, while residents of England, Ireland, Scotland and Scandinavia feel themselves at home in Northern Ontario, in Quebec and the Maritime Provinces."

Instances of our more equable climate are given in the paper in the thermometric readings of July and January respectively in Canada and the States. Taking the highest and lowest temperature for the month, in the States, we find the range or variation to be 84° (viz., from 119 down to 25°), while in Canada it was only 72° (viz., 102 at Medicine Hat to 30° at Nappan, N.S.) This showing is in Canada's favor by 12 degrees. "The heats of our Julys are consequently less than those of the United States, and the cool spells less severe. This is well illustrated by referring to the July records of mean temperatures. The warmest place in the Dominion during July, 1890, was:

	Degrees.
Point Pelee, Ont., mean tem	72.6
The coldest: Barkerville, B.C., mean tem.	53.1

July mean temperature range for Dominion 19.5

The warmest place in the United States for July, 1888, was:

	Degrees.
Texas Hill, Arizona, mean tem	100.0
The coldest: (Pike's Peak, 43.6° and Mt Washington, 44.8°, not included) Cimarron, Colorado	53.4
July mean temperature range for United States	47.5

This, surely, is an extraordinary difference. It is possible that a more extended comparison would modify it.

January is more equable, too, in Canada than the States, if this comparison of 1888 with 1890 be not altogether exceptional. Our highest temperatures are not so high; our lowest not so low. Thus: The actual highest temperature at any place in Canada during January, 1890:

	Degrees.
Paris, Ont.	+ 68
Lowest do., Oak Bank, Man.	- 51

January range for the Dominion ..... 119

Actual high temperature at any place in the United States, in January, 1888:

	Degrees.
Tucson, Ariz.	+ 90
Lowest do., Fort Keogh, Mont., and Carlin, Nev.	- 65

January range for the U. S. .... 155

A difference in the Dominion's favor of 36 degrees for the coldest month. Those who have been taught to believe that Canada is an unendurably cold place of residence should be told that the snow fall in many parts of Canada is far from excessive; that a temperature of 40 degrees below is not common; that it has not occurred at Montreal during the past sixty-six years, probably not in double that period; that the mean temperature of July at Montreal (69.9 degrees) is higher than July at Paris, France; that the mean tem-