

## INFORMATION CONCERNING THE CLIMATE OF RED RIVER.

**“WHAT is the climate?”** To answer this question in a manner commensurate with its importance, especially if we should take the whole territory into consideration, would necessitate the writing of a series of articles extending through a number of issues of this paper. We presume, however, that our Canadian friends will be satisfied for the present with a concise account of our climate, and need not particularly dwell upon that of any other portion of this country other than that which might be termed the vicinity of the settlement.

Nothing is more delusive than the idea so commonly entertained that lines of latitude govern the climate. The common supposition is that latitude 45° or 50° carries the same amount of heat or cold, sunshine or rain, or depth of snow all around the globe. That whatever grain or fruit will not grow and ripen in one place upon a particular line east, will not flourish or bear fruit in another place to the westward on the same line. It is an error—especially as regards the climatology of the north temperate zone. Taking the map of North America let us illustrate this position by following the circle of 50° north lat. across the continent, commencing in the east.

After crossing the northern peninsula of Newfoundland it touches the continent in the rocky and extremely inhospitable coast of Labrador, a climate almost totally unfitted for the habitation of civilized men. It then crosses a portion of the Province of Quebec, where we find the climate somewhat ameliorated, still the country is not adapted to agricultural pursuits. The line continuing westward crosses that portion of the Hudson Bay Company's territory lying between the Dominion of Canada and James' Bay, the summer weather constantly increasing in length and, it is shown by the immense forests it traverses and facilities it affords for garden vegetables, a great softening of the climate when compared with that of Labrador, or even with the north-eastern portion of Quebec. Lat 50° reaches us at 97° parallel of longitude and passes through the heart of the settlement. Here we have a climate almost similar to that of central Ontario, in fact it is the same to all intents as that through which lat 45° passes in Canada. Any thing which will flourish in that latitude in Canada will flourish and ripen in Red River settlement. Still pursuing our journey westward we find that near the Rocky Mountains the climate resembles that of middle Pennsylvania and Ohio and crossing the mountains the Pacific coast upon lat 50° enjoys a weather very similar to that of Maryland and northern Virginia. To New Westminster latitude 49° 14' we have seen the English daisy and the pearly blossom in February.

Is not this a remarkable contrast to the sterile coast of Labrador directly to the east?

It is a remarkable, and in many respects an unaccountable fact that the isothermal lines tend rapidly northward as they cross the continent and in this do we not see a remarkable provision of Providence for the future millions who are to inhabit the interior of this vast territory?

The climatic line of central Ontario after passing this settlement in lat 50° tends rapidly towards the north thus softening the extremes of heat and cold and affording delightful summer weather as far north as 60° and 68° in the neighbourhood of the Rocky Mountains. At Fort Dunvegan on the Peace River lat 66° we have as good a fine root crop as can be grown in many parts of the Dominion. 1,000 bushels of potatoes have been raised from 30 bushels of seed. Turnips, cabbages, carrots, onions, etc. do well. Wheat and barley thrive there also. At Fort Vermilion in lat 68°, everything that has been tried thrives and attains perfection. All through the Saskatchewan to the south of Peace River, there seems to be little difficulty in carrying on any kind of agriculture. The natural grasses, the wild peas and vetch grow most luxuriantly and to show its unusual climate, our latest news assures us that there is little or no snow in that region this winter and the prairies are as fine as the same as in summer.

This of course is a very unusual instance, but as this is a very mild winter all over the continent, we merely state the fact to show that while we have from 10 to 12 inches of snow on the level the Saskatchewan has nothing to speak of.

We think we have shown sufficiently plain that degrees of latitude have very little to do with climate as far as east and west is concerned although it cannot be denied that starting from any point on a certain degree, and by going due north the rigour of the climate will vary according to the distance you are from the starting point, that will hold good here as well as in Canada, only we have from five to six degrees the advantage of you.

Taking an average of a number of our winters it will be safe to say they set in about the 1st of December. The weather is clear and cold no doubt, but very pleasant for all that.

There are more variations in cold and heat than the thermometer indicates. We are tolerably well acquainted with Canadian weather and for some reason 10° below zero here does not appear as cold as 10° above zero in Canada.

This is a fact that many will testify to—cases of frozen limbs and noses and of freezing to death, are not as common here as in the Dominion.

The depth of snow varies from one to two feet on the level. It is about one foot this winter and last winter it was about 15 inches.

The grand charm of our winter consists in its unchangeableness. Winter while it is winter and no shifting about and humberging one with thaws and rains and sleets. Spring sets in early in April and the genial rays of old sol seem to absorb the greater part of the snow by evaporation. Our rivers are expected to break up, as a general thing, about the middle of April, about the same time the snow disappears

from the plains, the spring birds appear in a day or two, and the prairie flowers are in blossom immediately. The quickness of the change from winter to spring is absolutely astonishing to a stranger. One week everything looks as dreary and desolate as in December, and the next finds the rivers open, the snow gone, prairie flowers in bloom, ducks, geese, pigeons and other birds on hand, and the farmer with his plough in the ground. And the quickness of vegetation. It is like looking upon a magic picture, so sudden is the change from winter to summer.

Dame Nature has no bashful hesitancy here. Yesterday she was dressed in a sober gray and to-morrow she will have donned a garb of living green.

We have upon our table a schedule of the progress of the seasons, taken from the journal of a gentleman who has taken considerable care and interest in the subject for the last six years, and we shall give the average dates for that time, that our Canadian friends may see and judge for themselves.

Water fowl generally make their appearance during the first week in April, although in 1863 they came on the 20th of March.

Pigeons, blackbirds &c. are seen about the middle of April in 1863 on the 7th.

Snow is off the plains about the same date, in 1863 on the 7th.

Red River breaks up about the 18th of April, in 1863 on the 7th, and has been broken up by the 1st of April, though rarely so soon.

The Assiniboine breaks up, two or three days later every season.

Prairie flowers are in blossom during the last week in April.

Ploughing commences about the middle of April.

Trees in leaf, about the 20th of May.

Wild plum and cherry trees in blossom about the 20th of May.

Wheat in ear about 6th July.

Barley harvest commences about the 9th of August, and the wheat harvest a week later.

Potatoes are taken up the 1st of October. A transient fall of snow of two or three inches in depth, and lasting a couple of days, takes place about the 20th of October, after which our Indian summer sets in and we have the most delightful fall weather in the world, which lasts until the latter part of November, winter generally setting in about the 1st of December.

As to summer frosts, we have them occasionally, and so do you in Canada. They sometimes do harm to the crops to places, and so they do in Canada and in the Northern States. Do you remember the great frost of June 14th and 20th in 1857? We do at any rate, and have never seen anything quite so bad in this settlement.

Our space will not permit us to dwell upon this subject much longer and we will just state that in Red River we raise wheat (weighing 65 lbs to the bushel), barley, rye, oats, corn, buckwheat, peas, potatoes, turnips, beets, carrots, parsnips, onions, tomatoes, water and musk melons to perfection. At Rosville, a Methodist mission, some three hundred and fifty miles to the direct north of this settlement, they raise very fine water melons.

To sum the matter up, our springs are shorter, our summers as long, our autumn far finer, and our winter a little longer and not so changeable as in Ontario.

As far as healthfulness is concerned our climate is all that can be desired. We have no disease peculiar to the country, and ague is not indigenous to the soil. Upon consultation with our two best physicians we find that they only know of two cases each, and they were brought in from abroad. —*Nov. West.*

## BET ROOT SUGAR.

IN view of the possibilities of a failure in the supply of cane sugar from Cuba, the Cleveland Leader expresses the opinion that it would be well for the American people to look carefully into the project of making sugar from the mangel wurzel or sugar beets of Germany and France. The suggestion is a good one. Sorghum is practically a failure but the beet is every reason to suppose that the beet is susceptible of producing very favorable results whenever the experiment can be intelligently undertaken. Nearly the whole of the sugar used by France and Germany is derived from this source, and since the grape has been successfully transplanted from those countries to our own, it is within reason to assume that the beet will, in proper hands, be found equally adaptable to the exigencies of our soil and climate. There is now in progress, near Knoxville, an experiment of this kind, and as the climate of Tennessee has been pronounced by Europeans the most favorable for such an enterprise, we shall watch for results with considerable interest. The only serious attempt hitherto made to utilize the sugar beet in this country was undertaken in Illinois, and failed through want of experience, imperfect machinery and a general disregard of all that the experience of Europeans has demonstrated with regard to the process. Immense sums have been spent in Europe in experiments with machinery, methods of ripening, extraction of the sugar, and economy of refuse, and with these costly deductions already in hand we ought not to be long in reaching successful results. It is estimated that the soil of Tennessee is capable of producing ten tons of beets to the acre, which will yield from 1,600 to 2,000 pounds of sugar. If this result is actually attained there need be no doubt as to the profits of the enterprise. It must be acknowledged, however, that the machinery is elaborate and costly, that plenty of water is absolutely essential, and that at first it will be necessary to import skilled labor from Europe. Nevertheless, in view of the enormous consumption of sugar in this country and the uncertainty of our future supply from the West Indies, it is to be hoped that exhaustive experiments will be made the coming season, not only in Tennessee, but among the bottom lands of Ohio, Missouri and Virginia.

## FISH OR FIGHT.

THE Tribune fulminates over the New Dominion of Canada and the insubordinate Province of Prince Edward Island in such a fashion as may well sour all the milk and spoil all the beer between Labrador and the Saskatchewan. It is, all too, about fish. The philosopher of Graham bread is smitten with a cod tail in the house of his friends. The turnips of the Brahman of Chappaqua are cast in his face by them of his own household.

The Tribune has discovered, it is always making such discoveries, that a high civilization is in a marked degree, due to variety and abundance of food. "Alas," it has learned (we fear a little late in the day) that fish goes to the making of brains. Wishing, therefore, to become highly civilized and to make for itself brains, the Tribune demands fish. It roars for fish, indeed, as fiercely as John Hook, in the famous speech of Patrick Henry, bawling hoarsely through the American camp, "Beef! beef!"

What has all this to do, you will ask, O reader, with the New Dominion and with Prince Edward Island? Much.

The Canadian waters and those of Prince Edward Island are prolific of fish, of "fish needed," so the Tribune assures us, for "the progress of that large portion of North America which is governed by the United States."

The people of Prince Edward Island having been visited last summer by a Congressional Committee, with B. F. Butler at its head, are so horribly scared at the notion of a return of their fearful guests that they are quite willing to let us have all the fish we can catch in their waters. But the New Dominion is more plucky and less liberal. Canadian fish, it appears, are not to be caught with any but a "reciprocity" bait. This the Tribune, dazed by its habitual lunacies on the subject of the "balance of trade," declines to let the New Dominion. It prefers to fight for its fish. It informs the Canadians that, while the rights of nations are "seen to be proper," and do not contravene the rights of humanity, they may "be respected," but that when they "cease to be such, then it is time for the weaker to go to the wall and their 'rights' to become 'technical.'" It is a right of the Canadian nation to say who shall fish in their waters. But it is a right of mankind, the Tribune thinks, that people who live in New York who lack brain and need a "brain food," should go and take it whether or not. This doctrine is equally beautiful and simple, and it is susceptible of a general application with the happiest results to private and to public affairs. The rights of property, for example, will be found, in accordance with this doctrine, to be perfectly respectable until they contravene the rights of humanity. It is a right of property in a third avenue baker to keep his loaves on his own shelves till they are bought and paid for. But it is a right of humanity in Jack Cade, being an hungry and penniless, to march into the said baker's bakery, and knocking him down with a staff of one of his own flour barrels, to make off with a handsome quarter. The baker's "rights" become "technical." In the present state of our national affairs, however, and under the existing pressure of the national debt, we hope the Tribune will not insist upon its creed too strenuously. We shall be delighted to see the Tribune supplied with brain food, but we really do not think a war necessary to secure it. Montaigne relates that he was particularly fond of fish, believing, what many persons say, that it is more digestible than other food. But he also adds that he never ate fish in conjunction with flesh, thinking the two would not agree very well together. We fancy Montaigne was right. Let the Tribune get fish and eat fish, but forbear to mix flesh with it, even though it be "see, see, fum, the fish of an Englishman." —*N. Y. World.*

## WHOLESALE TRADING.

THE Toronto press, no doubt, exaggerate the success attending the efforts of capitalists to establish a whole sale trade in that city. The Montreal journals, on the other hand, in belittling their attempts and laughing at the results, are no doubt committing an error in the opposite direction. The balance of fact will, perhaps, be even arrived at in admitting the advantages and capabilities possessed by Toronto to do a large amount of trade in the western peninsula, and in taking it for granted that a certain amount of success has attended the efforts which have been directed by energy and skill, aided by abundant means, to attain the end by diverting a share of the business hitherto done by Montreal to the city of Toronto. The example of Toronto is an encouraging one in that it shows that the old condition of things may in some measure be restored, that of the leading cities and centres of population doing at least in part the wholesale trade of the surrounding country. It is something for the merchants and moneyed men of Kingston to consider whether more could not be done in the way of wholesale trade than already is done in this city. We have the wholesale trade in groceries established here, we have various manufacturers located in the city, as of boots, shoes, clothing, machinery, hardware, musical instruments, etc., but it is noticeable as a great defect that a large dry goods house solely devoted to the wholesale trade is lacking. It is believed that if the country customer could be assured of being able to buy in Kingston all that he wants for the supply in his store, and at rates equally cheap, the advantage would be with Kingston over Montreal, and that we could do a much larger trade than is done with the surrounding country. There is an opening here, it is thought to embark in the wholesale dry goods trade—a business which it would be to the interest of the wholesale grocers and other dealers to encourage, as all these businesses would mutually support each other, and tend to make Kingston a business centre. For the rest, the system of employing canvassers or drummers must be the same in all parts of the country. —*Kingston News.*