

May 6 to May 30. Only one note is taken regarding the peach, which blossomed last year on May 12.

APPEARANCE OF INSECTS AND BIRDS.

The first appearance of insects and migratory birds is very unreliable indication of the relative earliness of a season. Some years they come straggling so much that the first arrivals are not noted. One year the blue birds did not seem to come at all. The time of arrival seems to be regulated by other considerations than mere temperature for the earliest arrival of robins or thrushes during these ten years being February 10 in the excessive winter of 1880-81. That date ended the sleighing period in Toronto, but not the winter. Thrice in the ten years the robin arrived in February. The blue bird is a late arrival. This year he came with the robin in February. In 1880 he came on March 3rd, and one year not till April 19. The oriole and humming-bird are more regular, invariably coming in the second or third week in May. The exceptional record for 1878 is however missing. Butterflies are noted as early as March 7 and as late as April 26. Fireflies vary from early in May till late in June.

LATEST FROSTS AND SNOWS.

Of other spring incidents two of the most carefully noted are the latest hoar frosts and the latest snows. Under the latter term a fall of even a few flakes is included. On June 4, 1859, snow fell. In twelve other years out of the last forty the latest was in May, and in three the latest was in the end of March. The latest hoar frost occurred June 20, 1862, and in twelve other years June frosts were recorded, generally in the first week. In one period of 13 successive years the latest hoar frost was in May. May 2nd is the date of the earliest latest frost on record.

Trees, and the maple above all, are one of the most practical tests of the earliness of a season, as warm bursts of weather rarely tempt them into untimely blossoms. A comparison of the blossoming of these trees in different parts of the province would reveal interesting variations in our own spring climate and on our various soils.—*Globe*.

Winnipeg Mud.

Since my arrival here a week ago we have had all sorts of weather, including a cold snap since April set in, when the mercury went down to some fifteen below zero. Just now, however, the temperature is moderate, and the snow and ice are melting in the streets at such a rate that the roadways and crossings are literally afloat with a black, shining fluid that looks not unlike stove-pipe varnish, but which while liquid is vastly more slippery, and when dry sticks much more tenaciously than the above-mentioned preparation. I need hardly add that I refer to Winnipeg mud. The city officials are taking vigorous measures to abate this nuisance, but the rapid rate at which the great masses of snow and ice are melting, and the facility with which this rich prairie soil mixes with the water combine to render almost impossible the task of keeping the streets in anything like passable condition.

CORRESPONDENCE.

Editor Bulletin.

COLUMBIA, Mo., April, 1882.

SIR:—Your predictions have had a remarkable fulfilment in this section of country, and people are beginning to realize the fact that there is some "method in your madness."

Respectfully,  
COLUMBIA MILLING CO.

Editor Bulletin.

MILWAUKEE, Wis., April, 1882.

SIR:—Your last predictions have helped your reputation very much in the mind of the general public.

Yours truly,  
Mang. Editor "THE EVENING WISCONSIN."

COLUMBIA, Mo., April 10, 1882.

Prof. H. G. Vennor.

DEAR SIR:—Not having received the April number of your valuable paper, we have become demoralized—what is the matter? After perspiring under 88° in the shade, last week, we are around borrowing overcoats this morning and "cussing" the man that took the stove down. Please send us the April number so that we may prepare for these changes.

Yours Respectfully,  
COLUMBIA MILLING CO.  
F. Pannell, Sec.

SYCAMORE, April 6, 1882.

Henry G. Vennor.

DEAR SIR:—I herewith hand you our programme for the celebration to be held in this city on April 26th, 1882. By furnishing us with a nice fair day you will greatly oblige, and should you ever happen this way we will allow you a weeks benefit.

A. J. THOMPSON, C. P.  
SYCAMORE, DeKalb Co., Ill.

The Weather and Railways.

OGDEN COLLEGE.

BOWLING GREEN, Ky, April 8, 1882.

Dear Sir:

There can be no doubt, I think, that the total amount of rainfall over the surface of the earth is invariable,—that a temporary excess in one region is accompanied by a compensating deficiency elsewhere. If it were true, therefore, that railways and telegraph wires changed in regard to rainfall the climate of desert places, it could be done only at the expense of other localities.

In my humble opinion, there is more plausibility in the theory that railways and telegraph wires, if not increasing the rainfall in certain regions, tend to make the rainfall more uniform throughout the year.

My attention was first called to the question during a residence in the northern prairie regions of Texas from 1873 to 1878. I went to Dallas after the completion to that town of two railways. Previously to that time there were two seasons in that portion of Texas, a wet season and a dry season. The winters and springs were always very wet, and the sum-

mers were, as a rule, rainless. This fact was claimed by old Texans and land agents as one of the greatest advantages of that country for wheat raising. I was told that farmers took their time in tying and threshing their harvested wheat, often letting it lie loose on the ground for weeks. But few vegetables were cultivated then except by irrigation, and as water was generally scarce in the summer, gardens so cultivated were few and far between. As a matter of fact, the old Texan believed it impossible to grow vegetables in that country on account of the dry summer, and so he troubled himself no more about the matter. I dare say, however, the case was not as bad as was supposed, in regard to gardens, and that the wish was father to the thought. Outdoor work in that country in the spring and summer was generally much avoided.

Now, excellent vegetables, and of great variety, are raised in that country—raised there in great profusion. How much this "change of climate" may be due to the influx of new energy, I will not pretend to say, but certain it is, I observed that the summer there was as hot as in many of the older states. The two seasons, during my residence there, the whole crop, although properly shocked, was greatly injured by excess of rain. Old farmers frequently spoke of a "great change in the climate," as regards rainfall.

Cultivation of the soil, it is claimed, exercises some influence on the precipitation of moisture, as well as do forests. The portion of Texas to which I refer is rolling prairie of "black waxy soil," and very fertile. Timber is scarce and is found generally only in the bottoms along the streams. There was, if anything, a decrease in the amount of timber by the increase of population; and the greater average in cultivation was hardly sufficient to account for so great a change as was claimed in the distribution of the rainfall.

Last summer, it is true, Texas suffered severely from one of her old-fashioned dry summers, but it is also true that at the same time a disastrous drought extended for months over a large portion of the United States.

Owing to the large number of railways now under construction within her domain, and the great variety of her soil and physical pattern Texas offers a fair field for thoroughly testing this question.

WM. A. OBENCHAIN.

An Old Letter concerning Philadelphia.

Philadelphia, 10th December, 1831.

The winter has set in here so suddenly that fire-wood has risen in a few days from six to twelve dollars a cord. To-day and yesterday are milder than it has been; the ice in the Delaware is still moving during part of every tide. There never were so many bad colds before in this place as now. It is supposed by some that 50,000 people are confined to the house with them. The banks and public offices find the utmost difficulty to get along from so many of their hands being confined at home. Out of a class of medical students, which consists of 100, only sixteen are attending the lectures; and it is said that the Legislature of New Jersey have adjourned on the same account.

This singular condition of things was attributed to "an unusually sudden and great change of temperature."