

ART. XVIII.—ON THE YELLOW SEDIMENT ON THE MARGIN OF POOLS AFTER RAIN.

To the Editor of the British American Journal.

Very many of your readers have, no doubt, observed the yellow sediment, commonly called sulphur, which is occasionally visible on the margin of pools after rain. It is remarkable that it is never seen except in the month of June. Probably the sulphurous or nitrous smell which is sometimes developed in rain, and which M. Liebig has proved to be occasioned by the real presence of nitric acid, may have had something to do with the popular notion, which is, however, sufficiently disproved by the circumstance mentioned above, that the phenomenon is confined to the month of June. From the absence of any notice of it among the Meteorological Records of the very valuable Annual Reports of the Regents of the University of the state of New York made to the Legislature, it may be inferred that it is not observed in that state. It has been suggested that the substance is the pollen of plants, then in flower, and carried into the air by ascending currents. It appears deserving of close observation, and I therefore beg to call the attention of your readers to it. I subjoin a list of the dates on which it has been observed at Toronto.

1840.....	26th June
1841.....	not observed
1842.....	30th June
1843.....	24th June
1844.....	17th June
1845.....	14th and 15th June
1846.....	1st and 18th June
1847.....	19, 21, and 22 June

J. H. L.

Toronto, 5th July, 1847.

ART. XIX.—METEOROLOGICAL OBSERVATIONS AT NICOLET.

By W. MARSDEN, Esq., M. D.

In the April number of your Journal, you say, "yet communications on physical subjects are still a desideratum; and we would earnestly call on our friends to record, in its pages, those matters of physical interest which must, when collectively considered, constitute a most important means of furthering our acquaintance with the physical development and resources of this important section of the British Empire." In furtherance then of your desire on this head, and with a view in some measure to supply that desideratum, I herewith enclose you a Meteorological Table, for the village of Nicolet, for nine years past, or from 1838 to 1846, both years inclusive, compiled from tables kept

by the Rev. Francois Desautiers, one of the professors of Nicolet College.

These tables contain only two daily observations, one at 6 a. m., and the other at 3 p. m.; whereas those for Montreal contain the results of three observations, viz.: at 7 a. m., 3 p. m., and 10 p. m.; but they have been kept with extreme regularity and precision. The minimum temperature, as we are aware, is before, at, or about sun-rise, and the experience of the Rev. Gentleman to whom I am indebted, proves that the lowest average is about 6 a. m., on which account he has adopted that hour for morning observations, and the maximum about 3 p. m.

The part of Nicolet whence these observations have been made, is situated about two miles south-east of the eastern outlet of the River Nicolet, near the debouche of Lake St. Peter, and about 10 miles S. S. West of Three Rivers, in the midst of a champaign country, to which cause the slight variation of temperature as compared with Quebec and Montreal is probably attributable.

The latitude I have set down $46^{\circ} 14' N.$, and is, I doubt not, correct, being the result of eighty different observations of my reverend friend; and the longitude $72^{\circ} 39' W.$, I think is very nearly correct.

My attention has been more particularly called to this object, from having perused with much satisfaction, Mr. Justice McCord's interesting communication in the May number of your Journal for 1845; together with its accompanying table of the mean temperature of Quebec. The remarks of that gentleman on this subject are so pertinent, that I will again refer such of your readers to them as take any interest in the matter, merely remarking, that Mr. Desautiers' tables embody all Mr. McCord's suggestions, having been kept most methodically and regularly throughout the intervening years from 1838 to 1846, the observations being made daily, and at fixed hours, and the means of the months and years being summed up; added to which, the instruments and philosophical apparatus used by him are generally of the very best description. It is to be regretted, however, that the barometer apparatus belonging to the Institution is very defective and imperfect, whereby we lose much valuable information.

I have already alluded to the comparatively slight variation of temperature here, and a reference to the table of the means of nine years, will show a variation of only $2^{\circ} 23'$;—the greatest mean in 1846 being $42^{\circ} 61'$, and the smallest in 1844 being $40^{\circ} 38'$, whereas, Mr. Justice McCord's tables, before alluded to, show a variation on ten years of $5^{\circ} 08'$, and the