

## METEOROLOGY

Very little attention has been paid to this subject within the last few years. With some difficulty I have obtained therometrical tables, kept 1,300 feet above the tide; and a barometric table for a few months, kept 980 feet above tide.

### NOTE OF METEOROLOGICAL MATTERS – THE GREAT ECLIPSE OF JUNE 16<sup>TH</sup>, 1806.

As this remarkable phenomenon occurred at a time when the population of the county was very limited, there are few persons now living here, or elsewhere for that matter, who can give a correct description of it. At it was a “thing of terror” to many of the people in those days, and for years was a topic of discussion, we append extracts from papers, books, etc., to show its appearance at other points as the same characteristic obscuration extended throughout the entire boundaries of Venango county, the eclipse being calculated to be total in such parts of New York, New England, Ohio, and Pennsylvania, as were situated between forty-one (41) degrees, thirty-five (35) minutes and forty-three (43) degrees, five (5) minutes north latitude.

Gen, Simon DeWitt, of Albany, in giving an account of the eclipse, observed: “Fortunately on the morning of that day, the atmosphere was very clear. The eclipse being at 9 hours, 5 minutes, 12 seconds, A.M.; beginning of total obscuration was 11 hours, 8 minutes, 6 seconds; the end of total darkness, 12 hours, 33 minutes, 8 seconds; length of total eclipse, 4 minutes, 5 seconds.”

At Pittsburg, many were troubled as to whether or no the end of all things had come. Some hitherto hardened sinners besought the Almighty to forgive them their past transgressions. Sermons were preached on the Sunday precious (15<sup>th</sup>) and the text, “repent ye for the kingdom of Heaven is at hand,” used on that occasion with peculiar prophetic fervor, was duly appreciated on the morrow. This occasion, like many others, illustrated the old saying:

“When the devil is sick, the devil a monk would be,  
But when the devil got well, devil monk was he.”

At Philadelphia, a total obscurity suddenly turned the day into night. Business ceased, and the sounds of merriment and bustle of the crowded streets were hushed.

In the city of New York, a sudden and dismal gloom overspread the face of nature; the thermometer indicated a fall of the quicksilver, eighteen degrees, and the atmosphere sensibly cooler. Not a cloud was to be seen.

An old settler in speaking to the writer in regard to this subject, said: “I thought the day of judgment was at hand and I was scared. The chickens went to roost and everything was as still as night.” Another remarked: “I was working on the mountain, and all of a sudden it became so dark that I could not see my way down the ravine. I waited and waited, it seemed to me a whole day before the sun shone again.”

A Cooperstown (N. Y.) writer says: “The atmosphere at this place, on Monday last, was serene and pure. The sun was majestically bright, until fifty minutes past nine o’clock A.M., when a little dark spot was visible about forty-five degrees to the right of the zenith. The shade increased until fifteen minutes past ten, when stars began to appear, and the atmosphere exhibited a gloomy shade. At twelve minutes past eleven, the sun was wholly obscured, exhibiting the appearance of a black globe, or screen, with light behind it, the rays only of which were visible, and which were too feeble to occasion sufficient life to form a shade. Many stars now appeared, though less numerous than are usually seen in clear evenings. There was now ‘darkness visible,’ a sort of blackish, unnatural twilight. The fowls retired to their roosts, and the ‘doves to their windows.’ The birds were mute, except the poor whip-poor-will, whose notes partially cheered the gloom. The dew descended, and nature seemed clad in a sad, somber, and something like a sable livery.

“At fourteen minutes past eleven, a little bright point appeared to the left of the sun’s nadir, similar to the focus of a glass when refracting the rays of the sun. Suddenly a segment of the circle of that glorious orb emerged, and seemed to say ‘*sit lux*,’ and was immediately obeyed, ‘*lux fuit*,’ as quick a thought. A small pin would be discovered on the ground. A more wonderful and pleasing phenomenon can hardly be conceived. The doves left their retirement; the whip-poor-will’s melody ceased; and the face of nature again smiled. But some stars were still visible, and Venus displayed her beauty until twelve o’clock. At forty minutes past twelve, the sun shone in full splendor, and in turn eclipsed the moon and other heavenly luminaries by its glorious effulgence.”

Rev. Dr. Nott, President of Union College, in his account, says: "At the instant the last ray was intercepted, and the obscuration became total, a tremulous, undulating shadow, a kind of indescribable, alternate prevalence and intermixture of light and shade struck the earth, and played on its surface, which gave to the most stable objects the semblance of agitation. It seemed as though the moon rode unsteadily in her orbit; and the earth seemed to tremble on its axis. The deception was so complete, that I felt instinctively, and in spite of the instincts of my reason to the contrary, a tottering motion. Some who were present, I observed, took hold of whatever was near them for support, while others leaned forward, and insensibly flung themselves into an attitude which indicated that they found it difficult to stand. \*

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"The scenes described at the commencement of the total obscuration, re-appeared when the first rays of the sun were reappearing; the same apparent agitation of the surface of the earth; the same apparent struggle between light and darkness; the same separation between light and shade into distinct and alternate arches, and the same motion reversed; for now the arches of light seemed to crowd those of shade inward; and the whole movement was from the horizon towards the centre, which continued about the same time, and disappeared in about the same manner, as above described."

#### THE ECLIPSE OF THE SUN MAY 2, 1846.

"This remarkable phenomenon which took place on Saturday last, was not visible here until it passed the middle, thirteen minutes past twelve o'clock, noon, after which it was visible, except occasionally obscured by flying clouds, until it passed off. Its duration was two hours and fifty-four minutes.

During the remained of the present century, there will be but five eclipses central, in any part of the Atlantic states, viz: those of May 25, 1854, and September 29, 1875, annular in Massachusetts; and that of October 19, 1865, in the Carolinas; whilst those of August 7, 1869, and May 28, 1900, will be total in North Carolina and Virginia, - *Pa. Tel.*

"Mr. Asa Smith, of New York, who has made due calculations respecting the eclipse, says:

"The first appearance of this eclipse since the creation of the world, (according to Sacred Chronology,) was in the year 1041, January 14, old style, when the moon's shadow just touched the earth at the South Pole; it has appeared every nineteenth year since, and at every return the moon's shadow passed over the earth from west to east a little further to the north, until the year 1756, March 2d, when the centre of the moon's shadow passed a little north of the earth's centre, (the moon being five minutes nineteen seconds from her descending node,) which was its thirty-eighth periodical return. The present eclipse will be its fifty-third periodical appearance. It will appear again in 1864, May 6<sup>th</sup>, but will be invisible in the United States.

"It will also appear in 1882, May 16, at seven o'clock, 41 minutes, 36 seconds, in the morning, when the sun will be almost totally eclipsed; it will continue to appear every nineteenth year, until 2441, May 17, at one o'clock, 43 minutes, in the morning when the moon's shadow will just touch the earth at the North Pole, which will be its seventy-seventh periodical and last appearance until the expiration of 12,492 years, when it will come on again at the South Pole, and go through a similar course. The moon's penumbra will first strike the American continent in Mexico, on the coast of the Pacific ocean; it will pass a northeast direction over Texas, West India Islands, northern part of South America, United States, cross the Atlantic ocean, and disappear in the West of Europe at the setting of the sun."

#### 1816 – COLD WEATHER.

The year 1816 is memorable for extreme cold weather. There were frosts in every month, and the harvest of wheat and potatoes were nearly a failure. The corn crop was destroyed at each planting, and the general gloom settled over the community. The farmers wore overcoats in the harvest field, and the weather was "decidedly cool" during the year. The snow was unusually deep in the winter of 1815-'16, and for nearly three months the river was closed by ice. The flood of the spring in height and destructive power, was nearly equal to that of 1806.

1835.

[From the Intelligencer.]

MR. COCHRAN – The following was the state of the thermometer on the days mentioned below, viz:

Sunday, Feb. 8, 1835, mercury nearly all day 6 below zero.

Monday, 9<sup>th</sup>, at sunrise . . . . . 16 below “

Tuesday, 10<sup>th</sup>, “ . . . . . 13 below “

Wednesday, 11<sup>th</sup>, “ . . . . . 12 below “

Thursday, 12<sup>th</sup>, “ . . . . . 10 below “

Monday as above at 16 being the coldest morning for upwards of twenty years according to my own observations.

WM. COMMELLY.

February 12, 1835.

## A PROPHECY IN 1835.

[From the Falmouth English Packet.]

## THE APPROACHING COMET.

Lieutenant R. Morrison, of the Royal Navy, has published a most interesting work upon this magnificent phenomenon which is expected to be seen in the course of the year 1835, between the months of May and August, in the constellation of Ursa Major. Lieutenant Morrison states that it will be far more splendid than the one of 1811; some writers affirm that “it will afford a degree of light equal to a full moon, that its tail will extend over 40 degrees,” and when the head of the comet reaches the meridian its tail will sweep the horizon. The author says:

“Relying on the corrections of our principle of cometary influence, we venture to predict that the summer of 1835 will be remarked for its intense heat, which may be expected to destroy the harvest in some parts of the world. That year will be noted for earthquakes and volcanoes, and other similar phenomena. The end of 1835, or early in 1836, may be expected to be remarkable for some one or more extensive earthquakes. The winter of 1836 or – ’37, will bring a frost such as has not been equaled for at least 20 years. The parts of the earth which we anticipate will suffer most, are those situated to the north of Asia, and some parts of the southern hemisphere, such as China. Those parts of the earth in the vicinity of volcanoes are always subject to the electrical Phenomena of earthquakes, because the frequent internal changes which the combustion creates, must necessarily produce a derangement of electricity. And while the comet is near the earth, overcharged with electricity, if there be any internal cavity of the earth deficient of that fluid, it will rush into the earth at that spot. This we take to have been the cause, in 1456 near Naples, when the sudden rendings of the earth destroyed 40,000 human beings.”

1836.

The summer of 1836 was nearly as cold as that of 1816. There were frosts in every month in that year; there were one hundred and seventy-eight days of east wind and rain, and the only summer weather occurred in the first fourteen days of September, when the mercury in the thermometer ranged up to ninety degrees.

1859.

The great frosts of June 5<sup>th</sup> and 12<sup>th</sup> – 1859 – are worthy of mention. “The wheat and rye were just in blossom, and there was every prospect of a bountiful harvest. But these frosts smote the fields as with the besom of destruction. The evening before, nature smiled, like Eden almost, with beauty and the prospect of plenty; but on the Sabbath morning, the fields were blasted, as though the breath of the Sirocco had swept over them. A deep and heavy gloom settled over the community. The question of bread became exceedingly practical, and the fear arose that multitudes of our citizens would be obliged to leave their homes for a warmer sky and a more genial atmosphere. But the danger passed over. Corn was plenty in Egypt, means were found for purchasing it, and the next year brought good crops.”