

**"THE EQUINOCTIAL STORM" EXPLODED.**

*"Prove all things—hold fast to that which is good."*

Among the many errors that have been allowed almost undisturbed possession of the public mind, perhaps for centuries past, few are more common than the belief in equinoctial storms: and as we shall presently show, few notions are more destitute of support either from science or actual observation. Our attention has been called to this subject for eight or ten years past, owing to the occurrence of the agricultural fairs in the month of September, and the objection which would invariably be made against holding a fair during the week when the equinox would occur, on account of the supposed probability of bad weather.—But on observation, we have noticed that from the 20th to the last of September was, if any thing, more commonly fine weather than any other period; hence we discarded the popular doctrine of equinoctial storms.

At the meeting of the Board of Agriculture in Cincinnati last spring—the time for the State Fair being under discussion—this "equinoctial storm" theory was strongly defended; and knowing that Dr. Ray, of Woodward College, had for many years kept an exact daily Record of the weather, we have requested him to favor us with the result of his observations upon this point. The following communication is his answer, and we think it is conclusive; but if any important facts or arguments are adduced on the other side, the Doctor has the daily records and will give them:

**Equinoctial Storms.**—Is the weather, at that period of the year denominated the Autumnal Equinox, [Sep. 23,] generally stormy, or of a more unfavorable character than at other periods?

This question is proposed in reference to the Northern and middle States; though what is true in regard to them, cannot vary materially in the Southern States.

In reply to this question, it may be observed, that popular opinion has long since decided in the affirmative. The time when the "sun crosses the line" is, in the estimation of numerous individuals, a very important astronomical event, and quite worthy of being celebrated with storms of wind and rain, and a general disturbance of the atmosphere.

The "line" [equator] is also regarded as some great physical development, like the mountain ridge, encircling the earth. In regard to popular opinion, it is only necessary to observe that it is a very unsafe guide, both with regard to the existence of facts, and the causes of phenomena, but especially the latter.—There are, however, two methods of answering the question, both of which we shall briefly notice.

**First.** Is there anything at the period of the equinox, in the particular relation of the great operating causes, that has a tendency to produce an unusual state of the weather? In reply to this it may be said, we have the equinox. And pray, what constitutes the equinox? Simply the fact that the sun has no declination, or for a moment of time [and only a moment] is vertical at some point of the imaginary line on the earth's surface, called the equator. But the sun is always vertical to some point on the earth's surface; can it then be supposed that the mere fact of its being vertical at a certain point equally distant from the poles, shall have such a due influence as to conjure up vapors, storms, winds and rain, as if nature designed, by raising a great commotion in the atmosphere, to celebrate one astronomical period, while others, equally important, so far as the earth is concerned, are permitted to pass by unheeded and unsignalized? Thus the periods when the earth passes through the aphelion and perihelion points have an important relation to the

climate of the earth, and to the seasons of the year; but as they are not generally so well known as the period of the equinox, they have not been furnished with storms to celebrate their advents.

**Second.** What is the testimony of recorded observations? To this I reply, no writer on meteorology that I have consulted, makes any mention of such a phenomenon as in common parlance is denominated an equinoctial storm. I refer particularly to Kaemtz, Daniol, Howard, and Ferry, all of whom in their respective works treat of the subjects of rain, winds, and storms. One of these [Kaemtz] furnishes tables of the number of storms occurring at different places during each month of the year; but at no place did the greatest number of storms occur either in September or October. Now it can hardly be supposed, if such a phenomenon as an equinoctial storm existed, that it would have entirely escaped the observation of men whose lives were devoted to the collection of facts pertaining to the science of meteorology, and reasoning from them.

My own observations extend through a period of 15 years, but the records of 1835, except the abstract, are not now to be found, so that I can only refer to them since that period. During this period of fourteen years, ten of these equinoctial days were either clear, or fair and pleasant days; while two, though partly clear, were more than one half cloudy; and two only were entirely cloudy and partly rainy.

But those who maintain that there is usually a "bad spell of weather" at or near the equinox, may wish to know how many such spells happen within some given period, of which the equinox was the middle. For the satisfaction of such I would state, that by taking a period of one month, that is, about two weeks before and two weeks after the equinox, we have had five bad spells of weather, while on nine of the years there was no weather that could be called unpleasant.

From these data it would seem, that if a great public meeting were to be held in the month of September, it would be advisable to fix it for the 23d—the very day of the equinox!—as the probabilities are very strong [6-7] that it would be a dry day, and pretty strong [5-7] that it would be fair, that is, more than half clear; while the probability that it would be wet is very small [1-7].

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**Ohio Cultivator.**

**ARTIFICIAL MAHOGANY.**—The following method of giving any species of wood, of close grain, and the appearance of mahogany in texture, density and polish, is practiced in France, with such success that the best judges are incapable of distinguishing between the imitation and the mahogany. The surface is first planed smooth, and the wood is then rubbed with a solution of nitrous acid. One ounce of dragon's blood is dissolved in nearly a pint of spirits of wine; and one third of an ounce of carbonate of soda, are then to be mixed together, and filtered, and the liquid in this thin state, is to be laid on with a soft brush. This process is to be repeated, and in a short interval afterward the wood possesses the external appearance of mahogany. When the polish diminishes in brilliancy, it may be restored by the use of a little drawn linseed oil.

**STEEL BY ELECTRICITY.**—Dr. Wall, of London, has discovered and patented a process for manufacturing steel and iron through the agency of electricity, which promises to cheapen immensely the cost of their production, and at the same time improve the quality of the metal. It has been tested at several of the leading iron furnaces of Maryland and Virginia, with the most satisfactory results.