

REMARKABLE PHENOMENA

Prof. Mather, who observed the barometer at Fort Wilkins, Copper Harbor, $47^{\circ} 30'$ north lat., during the prevalence of one of these remarkable disturbances which are peculiar to all the Upper Lakes, remarks:—"As a general thing, fluctuations in the barometer accompanied the fluctuations in the level of the water, but sometimes the water-level varied rapidly in the harbor, while no such variation occurred in the barometer at the place of observation. The variation in the level of the water may be caused by varied barometric pressure of the air on the water, either at the place of observation, or at some distant point. A local increased pressure of the atmosphere at the place of observation, would lower the water-level where there is a wide expanse of water; or a diminished pressure, under the same circumstances, would cause the water to rise above its usual level."

In the summer of 1854, according to the Report of Foster and Whitney, made to Congress in 1850, "an extraordinary retrocession of the waters took place at the Saut Ste Marie. The river here is nearly a mile in width, and the depth of water over the sandstone rapids is about three feet. The phenomena occurred at noon; the day was calm but cloudy; the water retired suddenly, leaving the bed of the river bare, except for the distance of about twenty rods where the channel is deepest, and remained so for the space of an hour. Persons went out and caught fish in the pools formed in the rocky cavities. The return of the waters was sudden, and presented a sublime spectacle. They came down like an immense surge, roaring and foaming, and those who had incautiously wandered into the river bed, had barely time to escape being overwhelmed."

Rising and Falling of the Waters of Lake Michigan.

[From the *Chicago Tribune*, May 28, 1861.]

One of those singular oscillations in the Lakes, or "Inland Seas," which have been observed occasionally from the time of the exploration of the Jesuit Fathers, was witnessed yesterday in Lake Michigan. A variety of signs, such as the mirage of the distant shore, unusual depression of the barometer, and a sudden rise of the temperature from a cool, bracing air, to a sultry heat, indicated an unusual commotion in the atmospheric elements. About eleven o'clock A. M., when our attention was first called to the phenomena, the waters of the lake had risen about thirty-one inches above the ordinary level, and in the course of half an hour they again receded. Throughout the whole day they continued to ebb and flow at intervals of fifteen or twenty minutes, and

the current between the outer and inner breakwater, near the Illinois Central Railroad House, was so great at times that a row-boat made little or no headway against it. The extreme variation between high and low water was nearly three feet. The wind all day was off shore (from the southwest), the effect of which was to keep down the waters instead of accumulating them at this point. About eight o'clock in the evening it veered suddenly to the northwest, and blew a violent gale, accompanied by vivid electrical displays. This morning (Monday) we hear of telegraphic lines prostrated, of persons killed by lightning, &c., while the lake, although agitated, exhibits none of the pulsations of yesterday.