possible descriptions of similar phenomena may have escaped my notice, yet I am of opinion that the magnificent spectacle presented by the heavens last night will form a new record in the annals of meteorology. Doubtless it was carefully watched at our Observatory. * * * Can it be that it was one of Nature's most wonderful means of restoring an equilibrium of electritity between the poles?—*Leader, 10th April.*

5. STRIKING PHENOMENON AT GODERICH.

On Tuesday afternoon last, from four o'clock until sundown, many of our citizens had the gratification of witnessing a singularly beautiful atmospheric phenomenon. At the time mentioned, there was a long thin streak of dark cloud stretching along near the horizon, over the lake, when by some peculiar refraction of the sun's rays, the whole line of the American coast opposite Goderich, about sixty miles distant, was rendered distinctly visible, part of he time to the naked eye. From Port Huron Lighthouse to Point-au-Barque, the Michigan shore hove in sight as an immense panoramic view. Lakeport, Burchville, Lexington, Barshanty, Port Sinclair, Forestville, and Buaretsville, with two large topsail schooners standing in for Point au-Barque, were quite distinct with the aid of a telescope; as were also the clearings and steam saw-mills. Beautiful our noble lake is at all times, but such an exhibition as we have attempted briefly to describe enhances its magnificence tenfold.—*Huron Signal, 17th April.*

6. METEOROLOGY IN LOWER CANADA.

Dr. Smallwood says that the comparative mildness of the month of January, 1863, is not altogether unprecedented in Lower Canada. Numerous observations, extending over a number of years, and recorded by numerous observers, have established the mean temperature of the month of January for Montreal at 14° 80 F.

The mean temperature for the past month was 21° 49. The thermometer from which this mean was deduced was placed in a somewhat enclosed situation at an altitude of about 50 feet above the mean sea-level, and 4 feet from the ground, the bulb being well protected from the radiation produced from the surface of the snow as well as from other objects, showing an increase of temperature of 6° 69 degrees above the established mean, which has been educed, as above stated, from a series of years.

The thermometer during the past month only read below zero on two days. The lowest temperature attained was —11° 0 (below zero,) and the highest reading 43° 2 degrees, showing a range of climatic difference of 54° 2 degrees.

The general range of the Barometer was somewhat high, and on the 10th indicated (after the usual correction for temperature) an altitude of 30 795 inches, the crest reached its maximum at 2 30 p. m. on that day.

In referring to some old meteorological records it is shown that the month of January, 1825, was very similar in temperature to the past month, for the winter of that year was very mild, and but little snow fell up to the 14th day. It was not until the 20th that the ice on the river in front of the city was formed, and on the 24th *traineaux* crossed to Longueuil, but it was not until the 5th of February that a crossing could be effected to St. Helen's Island.

On the 12th of March the channel at the current was formed, and extended on the 16th from Laprairie to Pointe aux Trembles, and on the 26th day (of March) an outward bound vessel left the Port for Montreal.

The year 1843 was remarkable for a mild winter; up to the 20th of January ploughing was done in many places, and some maple sugar was also made.

The years 1536—1745—1803—were also remarkable for mild winters.

7. HOW TO USE A BAROMETER.

The following are a few words of advice by a correspondent of *Chamber's Journal* in regard to taking care of the barometer. He says it is an invaluable fact, and too often overlooked, that the state of the air does not show the present, but coming weather, and that the longer the interval between the barometric signs of change and the change itself, the longer and more strongly will the altered weather prevail; so, the more violent an impending storm, the longer warning does it give of its approach. Indications of approaching change of weather are shown less by the height of the barometer than by its rising or falling. Thus, the barometer begins to rise considerably before the conclusion of a gale, and foretells an improvement in the weather, though the mercury may still stand low. Nevertheless, a steady height of more than thirty inches is mostly indicative of fine weather and moderate winds. Either steadiness or gradual rising of the mercury indicates settled weather, and continued steadiness with dryness foretells very fine weather, lasting sometime. A rapid rise of the barometer indicates unsettled weather; a gradual fall of one-hundredth of an inch per hour indicates a gradual change in the weather, and moderate rising of the wind; several successive falls, to the amount of one-tenth of an inch, indicates a storm eventually, but not a sudden one; and a gale if the fall continues. These storms are not dangerous, as they can be long foretold; but a sudden fall of one-tenth of an inch betokens the quick approach of a dangerous tempest. Alternate rising and sinking (oscillation) indicates unsettled and threatening weather. When the barometer sinks considerably, much wind and rain will follow—from the northward, if the thermometer is low for the season; from the southward, if high. For observing barometric changes, the barometer should be placed at the eye level, out of the reach of sunshine and of artificial heat, as of fires, and out of gusts of wind. It should be set regularly twice a day by a competent person. A card should be accessible close by, and on it should be registered the indication at each setting.

8. NATURAL BAROMETERS.

All things, animate and inanimate, are more or less manifestly affected by the weather, and the recognition of the degree and mode in which they are affected constitutes the collateral field for systematic research to which we have referred. A host of facts indicative of the influence of the weather upon different objects, and foreshadowing changes in its character, are familiar to popular observation, and their systemisation would alone constitute a work of no mean, and not a little curious interest. An old scar, a rheumatic joint, or corns, are oft as sensitive to approaching change of weather as a barometer. "Aches and corns," says Lord Bacon, "do engrieve (afflict) either towards rain or frost; the one makes the humors to abound more, and the other makes them sharper." Hitherto corns have commonly been looked upon as ills to be ashamed of rather than otherwise. But are they not susceptible of a certain degree of dignity? We should commend to the afflicted the consideration, whether a serious study of the varying sensitiveness of their evil in connexion with the barometer and thermometer, would not be as promising a question in physiology as many seemingly of more recondite character. When the husbandman sees the down of a colt's-foot, dandelion, or thistles, floating away in the absence of winds, he looks for rain; and the denizen of coasts knows that wet and broken weather is not far off, however promising the sky may be, when the long strips of seaweed lying high and dry on the beach, or hung behind the door, lengthen and become as flexible as wet leather. The landsman anxiously scans the sky and seeks shelter when he sees the heifers prick their tails, or his cattle leave their feeding and "back against the hedge." When ducks and drakes shake and flutter their wings as they rise, when young horses rub their backs against the ground, when sheep bleat and play or skip wantonly, when swine are seen to carry bottles of hay or straw to any place and hide them, when oxen lick themselves against the hair, when the lamps or candles sparkle, when soot falls down the chimney more than common, and when frogs croak, the prudent farmer expects rain; and the squire dons his overcoat and tucks his umbrella under his arm when he hears the crows unusually obstreperous, or feels the marble statue of his hall damp, or sees his family monument in the church covered with a clammy dew. The innkeeper shakes his head and predicts when his sign creaks louder than ordinary; and the stable-man and kitchen-maid know that wet is at hand, when the odor of the common sewer strikes disagreeably their nostrils. The tourist on the Welsh coast will be rejoicing in the glories of a cloudless day and the wondrous beauty of the ocean as it stretches away to the horizon, or breaks into surf upon the neighbouring cliffs; while the beachman who is listening to the ceaseless roar of the rushing water, will hear in it the first warning of a coming storm, and pray for the safety at sea.—*Social Science Review.*

9. NATURAL WEATHER INDICATOR.

Mr. L. S. Ullman, lately a resident in the State of Tennessee, has brought with him to Canada a very singular Natural Weather Indicator, which cannot be better described than by making an extract from an article on the subject, in the *Nashville Journal of Medicine and Surgery* for November, 1858.* The editor says:

"We requested Mr. Ullman to send specimens of his plant to several American *savans*, with a request that they should test its powers, and in the meantime to write out the circumstances which led him to its discovery, and every thing connected with it. Both of these requests Mr. Ullman has complied with, and we desire to

* Mr. Ullman is now a resident of Toronto, and can supply these Natural Weather Indicators for one dollar each. For list of Meteorological Instruments at the Educational Depository, Toronto, see page 64.