

"In the upper portions of the city—on the Cape, in the Citadel, and in St. Lewis suburbs—the shock seems to have been most severe. In the Lower Town and St. Roch's, however, it was felt with sufficient force to send thousands of persons into the streets to enquire if another explosion had taken place, if the gas works at Orleans wharf, Palais, had blown up, or if a portion of Cape Diamond had given way and crushed the houses in Champlain street. All these surmises were indulged in at the moment. That with regard to the gas works, however, grew into a rumor that spread like wildfire, and hundreds ran or drove towards the Palais to find that it was unfounded. This rumor was doubtless strengthened by the fact that many persons fancied that they perceived a gaseous smell immediately after the shock. But the absence of anything like the loud report which characterizes an explosion seems to have led most people to attribute it at once to its true cause.

"There were none of the signs of the elements which usually herald the coming of earthquakes in southern latitudes. The sky was cloudless at the time, the weather clear and agreeable, with what mariners would call a "stiff breeze." The wind prevented the effect of the earthquake from being noticeable on the river, although some observant persons say that the surface of the water appeared darker than its ordinary color while the concussion lasted."

The *News* adds the following:—"The shock was so sudden that to those who were within doors it appeared as if the chimney-wall or roof of their own or their neighbor's house had given way and was tumbling down. At the Artillery Barracks, the men ran from their rooms into the square and up towards the magazine, fully convinced that another explosion had taken place. On the citadel, too, where we are told the shock was most violent, the men ran in terror from their bomb-proof rooms into the square, and crowded the ramparts to see where the explosion had occurred.

"We learn that in the ship-yards at St. Roch's, the ships on the stocks waded to and fro. Some persons say they distinctly saw the river rise in some parts to a height of nearly ten feet, and that it receded almost immediately."

Mr. Herbert Williams writes to the *Quebec Chronicle* as follows, from Harvey Hill Mines, under the date of Thursday April 21: "At 1.15 p. m., yesterday, a smart shock of an earthquake was felt in this district, lasting from ten to fifteen seconds. It was also perceived by some of our miners, who were at the time working at a depth of 180 feet below the surface. The undulation at this place, as nearly as I could judge, seemed to travel from southwest to northeast, the wind blowing at the time from the northeast. At 6.40 p. m., we had a brilliant flash of lightning without its usual accompaniment of thunder; the sky at the time was perfectly clear, the wind blowing strong from the northeast. As you will, I doubt not, receive many communications from different parts of the Province, it may be interesting to learn the time of its appearance at different places. Hence I send you the above facts of its occurrence here."—*Canadian Naturalist*.

"In August, 1859, I exhibited to the American Association at Springfield, Mass., specimens of what was regarded by me as an organic form externally resembling *Stromatocentrum*, and found in the Laurentian limestone of the Ottawa. These were described by me in the *Canadian Naturalist* for that year (vol. iv. p. 300), and afterwards figured in the *Geology of Canada* p. 49. In 1863, similar forms were detected by the Geological Survey, in the serpentine-limestone of Grenville, sections of which we have prepared and submitted for microscopic examination to Dr. J. W. Dawson. He finds that the serpentine, which was supposed to replace the organic form, really fills the interspaces of the calcareous fossil. This exhibits in some parts a well-preserved organic structure, which Dr. Dawson describes as that of a Foraminifer 'growing in large sessile patches after the manner of *Carpenteria*, but of much greater dimensions, and presenting minute points which reveal a structure resembling that of other foraminiferous forms, as for example *Calceolina* and *Nummulites*. Figures and descriptions will soon be published by the Geological Survey.

"Large portions of the Laurentian limestones appear to be made up of fragments of these organisms, mixed with other fragments which suggest comparisons with crinoids and other calcareous fossils, but cannot be distinctly determined. Some of the limestones are more or less colored by carbonaceous matter, which Dr. Dawson has found to exhibit under the microscope evidences of organic structure, probably vegetable.

"In this connection, it may be noticed that Mr. Sterry Hunt, in a paper presented to the Geological Society of London in 1858, (see also Silliman's *Journal*, [2], xxxvi, 296,) insisted upon the presence of beds of iron-ore, metallic sulphurets, and graphite in the Laurentian series as "affording evidence of the existence of organic life at the time of the deposition of these old crystalline rocks."

Dr. Dawson has proposed for this fossil the name of *Eozoon Canadense*, under which it will shortly be fully described.—*Idem*.

—In that useful journal of intercommunication between astronomers the *Astronomical Register* for March, is a letter from Mr. Nasmyth, containing his original paper on the willow leaf shaped objects on the sun, the existence of which, except as rarities, has been doubted by some other able observers. Mr. Nasmyth says a telescope of very considerable power and defining capacity is necessary. Mr. Dawes has seen the

mottled aspect of the solar surface with a 2 $\frac{1}{2}$ -inch glass, and a power of 60. He finds, with a 6 or 8-inch telescope, and high powers, that the surface is chiefly composed of luminous masses of all shapes, imperfectly separated by rows of darker spots. Anything like Mr. Nasmyth's willow leaves he finds very rare, and only found in the vicinity of large spots in their penumbra. Mr. Nasmyth, in the letter alluded to, says they are scattered over the surface, and lie in all imaginable directions. He says he considers the penumbra to be a true secondary stratum of the luminous envelope revealed by the partial removal of the outer and luminous envelope. When a solar spot is mending up, he sees the willow leaves bridging it across. Mr. Dawes sees the spots under such circumstances bridged over by luminous masses like stray straws from a plat. Since the subject was discussed at the Astronomical Society some weeks ago, the objects in question have been seen at Greenwich with the great equatorial and a smaller instrument, the result being the confirmation of Mr. Nasmyth's statement, with a slight modification. The mottled appearance of the sun is now affirmed to be produced by a multitude of bodies like rice grains, rather than willow leaves.—*Intellectual Obs.*

—The *Archives des Sciences* for March contains an interesting account of the views of Clausius on oxygen. He considers that ordinary oxygen consists in atoms united two and two, and active oxygen in single, or disunited atoms. The two atoms which constitute a molecule of ordinary oxygen he regards in opposite electric states. Referring to Mr. Soret's opinions, Mr. Clausius observes that they coincide with his own, as his reasoning is not affected by the supposition that ozone is formed of elementary atoms not united in pairs, which may combine with molecules of non-decomposed oxygen as soon as they become free.—*Id.*

LITERARY INTELLIGENCE.

—A Boston correspondent of the *Cincinnati Gazette* is responsible for the following:

"I heard the other day of a *bon mot* made by Longfellow, the poet. Young Mr. Longworth, a millionaire of your city, being introduced to him, some one present remarked upon the similarity of the first syllable of the two names. 'Yes,' said the poet, 'but in this case I fear Pope's line will apply:

"Worth makes the man, the want of it, the fellow."

ADVERTISEMENT.

THE JOURNAL OF EDUCATION

AND

"LE JOURNAL DE L'INSTRUCTION PUBLIQUE."

The price of subscription to each of the above journals is ONE DOLLAR per annum. Teachers FIFTY CENTS.

These journals are devoted to Education, Science and Literature, and contain monthly summaries or reviews of current events. They were very favorably noticed by the Jury of the Educational Department of the London International Exhibition in 1862, and obtained a First Class Medal.

N.B.—Editors of Newspapers publishing this Advertisement will be entitled to one of the seven volumes of either journal for each insertion, two insertions entitling them to two volumes, &c. The year to which any required volume refers should be indicated.

The Department has for sale various series of the above Journals, handsomely bound, at the following prices. one journal, boards \$1.10; cloth, gilt, \$1.25. Both journals (English and French), boards \$2.00. Complete series of one journal, forming seven volumes \$7.00: half-price to Teachers, or if for the use of Colleges, Literary Institutions or Parish Libraries, \$5.00. Those requiring complete series should make early application at the Education Office, as the number remaining on hand is very small—the journals for 1857 being nearly all disposed of.

The circulation of the French journal reaches 3000 copies, of the English 1500. A good proportion is sent abroad, the remainder being very equally distributed throughout Eastern Canada.

No advertisement can be inserted unless having reference to Education, Science, Literature or the Fine Arts. Rates of advertising, 7 cents per line for the first insertion and 2 cents each subsequent insertion.

Any one sending us twenty new subscriptions will receive a complete collection of the journal.