

and seldom continues more than three or four weeks without interruption. This change from the warmer to the colder current, is owing to the sun being now in the opposite hemisphere. No doubt, we have seen several years without this counter current, owing probably to the strength of the south-western one, which in our latitudes carried all before it in 1856. But since last year the counter-current has given signs of re-appearance, and, being unable to force the dominant current, it has made its way by a circuitous route through the whole of Southern Europe, and been accordingly severely felt at Constantinople.—*Times*.

— THE LATE COMET.—A document has been issued from Harvard University, relating to the recent comet which attracted the vision of the whole human race.

This celestial visitor, which slipped so gracefully along its invisible line in space, was some 240,000,000 miles from us at the time of its discovery in June, and it was then travelling at the rate of 65,000 miles an hour. This velocity constantly increased as the grand phenomenon approached the sun; and like the swelling dimensions of the illusive phantasmagoria, it seemed daily to expand in bulk as we surveyed its filmy outlines. Its maximum velocity was nearly 130,000 miles an hour, excelling the speed of the planet Mercury. This was at its perihelion point. 52,000,000 miles seems to have been the measure of its distance from us October 11, or some 4,000,000 nearer the earth than it approached the sun. The difference between its aphelion and its perihelion velocity seems to be the difference between 480 miles and 128,000 miles in an hour. The difference between its remotest and its nearest solar distance is 14,244,000,000, or nearly eight times the distance of the planet Uranus. This immense reach, however, would hardly carry it into another system, when the nearest fixed star is billions of leagues from us. Its period of orbital revolution is about twenty or twenty-five centuries.

The size of its nucleus varied as well as its speed. That ranged from two thousand miles diameter when about 140,000,000 miles from us, and only 500 miles when less than one third that distance. The intensity of its light was deeper at its smaller phase.—That nucleus evolved a number of luminous envelopes, which in aggregate formed a beautiful amphitheatre to the spectator at the Cambridge Refractor. To smaller glasses these concentric arches were conglomerate, and formed a hood-halo, or brilliant bow over the nucleus. Indeed, the halo appeared larger than a semicircle, even nearer the sweep of an entire circle. It certainly closed in, until the dark axis prevented its further penetration or progress toward the formation of a whole periphery.

On the 10th of October its train extended over 50,000,000 miles in length and exhibited a spread of 10,000,000, in width. Both these dimensions varied; the length shrank to 10,000,000, and the breadth narrowed to 1,500,000. Faint steamers also darted from or flashed forth occasionally at an inconceivable rate of velocity, sometimes to the remoteness of 50,000,000 miles.

—ECLIPSES IN THE YEAR 1859.—There will be six eclipses this year, two of the moon and four of the sun, as follows:

1. A partial eclipse of the sun, February 2d, invisible in the United States.
2. A total eclipse of the moon, February 17th, early in the morning, visible throughout the United States.
3. A partial eclipse of the sun, March 4th, invisible in the United States.

A partial eclipse of the sun, July 20th, in the afternoon. This eclipse will be very small, lasting only a few minutes, and occurs about an hour before sunset. Visible in the Eastern, Northern and middle States.

5. A total eclipse of the moon, August 13th, invisible in the United States.

6. A partial eclipse of the sun, August 28th, invisible in the United States.

—WHEN EASTER COMES.—It will be interesting to learn that Easter, which will be on the 24th of April this year, last fell on that day in 1791, and will not fall on the same date again till 2011. Since the introduction of the Gregorian Almanac this has only been the case in the years 1639, 1707 and 1791. The period in which Easter can fall, reaches from the 22nd of March (earliest date) to the 25th of April (latest date,) leaving thirty-five different days for the celebration of this festival. In this century Easter will fall only once (1886) on the latest date, the 25th of April.

—BARON HUMBOLDT.—At the late funeral of Varnhagen Van Ense, a well known European patriot, were gathered all the literary notabilities of Berlin, and prominent among them was the venerable Humboldt. His grief

was affecting. Varnhagen was his intimate friend—had been so for fifty years. One by one the old man's friends are dropping off, until it seems as if he will be kept to walk alone toward the deep waters of the river of death. He says publicly that the conviction has seized him that he is to die in 1859, and his failing strength makes it but too evident that before many months the sad prophecy must be fulfilled. Still he labors cheerfully upon his great life work, and wishes only for strength to finish it, and complete his earthly task.

## X. Departmental Notices.

### PUBLIC SCHOOL LIBRARIES.

"Township and County Libraries are becoming the crown and glory of the Institutions of the Province."—*Lord Elgin at the Upper Canada Provincial Exhibition, September, 1854.*

The Chief Superintendent of Education is prepared to apportion *one hundred per cent.* upon all sums which shall be raised from local sources by Municipal Councils and School Corporations, for the establishment or increase of Public Libraries in Upper Canada, under the regulationsided prov according to law. Prison Libraries, and Teachers' County Association Libraries, may, under these regulations, be established by County Councils, as branch libraries.

### SCHOOL MAPS AND APPARATUS.

The Chief Superintendent will add one hundred per cent. to any sum or sums, not less than five dollars, transmitted to the Department by Municipal and School Corporations on behalf of Grammar and Common Schools; and forward Maps, Apparatus, Charts, and Diagrams to the value of the amount thus augmented, upon receiving a list of the articles required. In all cases it will be necessary for any person, acting on behalf of the Municipality or Trustees, to enclose or present a written authority to do so, verified by the corporate seal of the Corporation. A selection of articles to be sent can always be made by the Department, when so desired.

### PRIZES IN SCHOOLS.

The Chief Superintendent will grant one hundred per cent. upon all sums not less than five dollars transmitted to him by Municipalities or Boards of School Trustees for the purchase of books or reward cards for prizes in Grammar and Common Schools. Catalogues and Forms forwarded upon application.

### POSTAGE REDUCED ON TRUSTEES' RETURNS.

The Hon. Postmaster General has recently issued the following circular notice to Postmasters in Upper Canada; "The Half-Yearly School Returns made by School Trustees to the Local Superintendents of Schools, may, though the printed form be partly filled up with the names of the pupils and the days of attendance, in writing, be transmitted by Post, in Canada, as printed papers, at one halfpenny each, *to be prepaid by Stamps.*"

### SCHOOL REGISTERS.

School Registers are supplied gratuitously, from the Department, to Grammar and Common Schools Trustees in Cities, Towns, Villages, and Townships by the County Clerks—through the local Superintendents. Application should therefore be made direct to the local Superintendents for them, and not to the Department. Those for Grammar Schools will be sent direct to the head Masters.

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☞ All communications to be addressed to Mr. J. GEORGE HODGINS, Education Office, Toronto.