r in Europe, will om the liability of emote members of ted with certainty.

ALENDAR.

ascertaining the

subtract the mean ice from the mean

h. 4 12	m 21 4	P.M.
4	17	

7 47 л.м.

Quebec, Halifax, ble of Semi-diurnal ubtracted from, or ng.

contains the hour ks twelve o'clock. one second. The and its supposed or in the meridian, or y of the motion of of the successive easure an interval in the average of mean Sun, having Hence, when it is in Sun. The true about the 15th of The difference A Sun-dial gives ı by it.

ay: the difference to one minute.

Coronto: the time g, when she rises r minutes in error or Quebec; and it

every day.

elow the horizon, ime of beginning THE PLANETS.—The hour of meridian passage, right ascension and declination of each of the Planets, is given for the 1st and 15th of each month. (m signifies morning.)

THE POLE STAR.—The time when the Pole Star is on the meridian, is given for the 15th of each month, being the hour when it is due north. U. signifies Upper Culmination—L. signifies Lower Culmination. The greatest elongation of the Pole Star from the meridian, varies with the latitude of the place: it is about 2° 4' at Toronto, 2° 8'.5 at Montreal, increasing at the rate of about 1'.5 for every degree of latitude between 40° and 50° . To find the hour when it is on the meridian on any other date, multiply 3m. 56.5s. by the interval in days,—add the product, if for a date before the 15th; subtract it, is form a date after the 15th.

ECLIPSES OF JUPITER'S SATELLITES, visible in Canada, are given. A telescope with a magnifying power of forty, is sufficient for observing these phenomena.

SEMI-DIURNAL ARCS.—This table is useful for determining the times of rising and setting of the heavenly bodies. Enter the table with the declination of the object: under the proper column for the locality will be found half the time which the object remains above the horizon, which is to be subtracted from the time of its meridian passage, if the time of rising is required, or added, for the time of setting.

Example.—Required the time of rising for the Planet Jupiter, at Montreal, July 1, 1848. Declination of Jupiter, 21° N.

Ch

Corresponding to which we find the semi-diurnal arc		7 32 0 34	
Jupiter rises	5	2	m

METEOROLOGICAL.—On the first page of each month is given the mean temperature for Upper and Lower Canada; to which is added the mean temperature of the South of England, for comparison of climate. The mean temperature of Toronto is derived from the records of Her Majesty's Magnetical Observatory, for the six years, 1841-46,—by permission of the Director,—and is the mean for the twenty-four hours. The mean temperature for Nicolet, on Lake St. Peter's, in Lower Canada, is derived from the register of the Rev. François Desauniers, for nine years, 1838-1846, published in the British American Journal of Medical and Physical Science, vol. iii. Nicolet is situated in latitude 64°14', longitude 72°19', and may be considered a middle point in Lower Canada; but the mean results are derived from observations at 6, A.M., and 3, P.M., only; and are, therefore, above the mean of the twenty-four hours. About 0°7. should be subtracted from each on this account. The mean temperatures for the South of England, are from observations by Sir T. Harris, at Plymouth, for five years, 1833-37; and are the means of the twenty four hours—the highest and lowest are, however, from another source, and are only approximate. We would gladly extend the interest of this table by adding the temperatures for Nova Scotia, New Brunswick, and the Island of Newfoundland, if in possession of authentic materials.

VARIATION OF THE COMPASS.

FROM THE RECORDS OF THE MAGNETICAL OBSERVATORY.

January	
.February	6.9
March	10.1
April	11.2
May	12.8
June	
July	
August	14.3
September	
October	
November	6.6
December	

The variation is least liable to fluctuations in the afternoon : it is near its mean value at 10, A.M., and 6 to 7, P.M.